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# From Neurodidactics to Language Teaching and Learning: The Emotional Approach

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**Abstract**—The latest findings in Neurodidactics in understanding learning processes are forcing a review of the methodological approaches underlying teaching practices, including those used in second language teaching. Therefore, drawing on the principles of Neuroscience, Didactics and Linguistics, a review of the central factors of language learning and acquisition is carried out. A new methodological approach to foreign language teaching based on emotions is proposed: the Emotional Approach. Next, the principles of the Emotional Approach are presented, and its most relevant theoretical and practical contributions are highlighted. These include the functioning of neural connections in second language learning and the critical role played by emotions in the teaching-learning processes. Finally, this study provides the theoretical bases necessary to elaborate future didactic proposals and experimental research on the postulates presented here. Implications for research and practice are also discussed.

**Index Terms**—second language instruction, neurodidactics, emotions, teachers education, teaching method innovations

## I. INTRODUCTION

Over the last decades, different methods and approaches to second language acquisition (SLA) have been proposed and are now widely accepted. Worthy of mention are, among others, Competency-Based Learning, Task-Based Learning, Content and Language Integrated Learning (CLIL), student-centred approach, process-centred approach, and, of course, the Communicative Approach, which the previous ones are closely interrelated (Chen, 2021; Debbag & Yıldız, 2021; Dvoryatkina et al., 2021; Ellis, 2009; Gallagher & Savage, 2020; Khong & Kabilan, 2020; Larsen-Freeman & Anderson, 2011; Lucas-Oliva et al., 2021; Richards & Rodgers, 2014). All of them are born from the advances of Theoretical Linguistics based on cognition and the postulates of Chomsky (1966), Hymes (1972) or Krashen (1983), and leave aside the neuroscientific advances. These advances reveal how language learning and acquisition function at the neural level and the actual relevance of the emotional factor to this process (Dewaele, 2015; Nguyen, 2018; Swain, 2013; White, 2018).

In this regard, Willingness To Communicate (WTC) (Kim & Pae, 2018) and Need For Cognition (NFC) (Makiabadi et al., 2019) have been proven to be emotion-related attitudes (Heydarnejad et al., 2019), which are critical for optimal target language development (Pishghadam, 2016). Thanks to advances in neuroscience, we can better understand how the brain processes learning and language acquisition. The interrelation of concepts from diverse disciplines is fundamental to understanding these problems according to developmental science (Gauvain, 2018; Hernandez et al., 2021) and intersectionality (Collins & Bilge, 2016; Midby et al., 2020). For this reason, we present a new interdisciplinary theoretical approach to second language teaching and learning based on the postulates of Neurodidactics and Linguistics.

## II. THEORETICAL FOUNDATIONS

### A. Neurodidactics and Second Language Acquisition

Neurodidactics has been defined from different perspectives; however, all definitions concur on two fundamental aspects: firstly, in commenting on the two sciences that constitute it, i.e. Neuroscience and Didactics; and secondly, that this new interdisciplinary science aims to propose objectives "not as a mere hybrid of the Neurosciences and the Educational Sciences, but as a new original composition" (De La Barrena & Donolo, 2009, p. 4).

Neurodidactics comprises multiple dimensions, which can be grouped around two main lines of research, differentiated by the perspective from which they are approached and the type of the main objective they pursue (Ansari et al., 2017; Carrillo-García & Martínez-Ezquerro, 2018; Di Gesù et al., 2014; Szűcs & Goswami, 2007; Willingham &

Lloyd, 2007). In our research, we have chosen to call *Neurodidactics from the Brain* (NfB) the line of research that aims to: a) understand the neural processes and brain transformations that take place when learning occurs or when there are problems for it to occur, and b) study the various reactions of the brain to certain stimuli to explain, first, what happens at the physiological level in the brain when learning occurs and, second, what stimuli activate neurotransmitters that favour or hinder the synapse (the connection between neurons) and, thereby, the creation of new neural networks. In contrast, we have named *Neurodidactics from the Classroom* (NfC) the line of research that aims to transfer to the classroom the discoveries made by NfB about brain processes during learning in order to study how these can be applied theoretically in methodological and curricular designs, or empirically in the classroom. The present study starts from the NfB and ends with a methodological approach assigned to the NfC.

### B. *Neurodidactics From the Brain*

Learning has often been defined as the ability to store information in order to be able to retrieve it when necessary to make associations or to apply it in performing an activity (skills and abilities) (Mora Teruel, 2017; Paz Illescas et al., 2019). In turn, from a neural perspective, learning consists of generating new neural networks (new memories) from the stimuli received in the interaction with the environment. The aforementioned implies transforming experiences in neural connections, which are strongly linked to memory (Di Gesù et al., 2014). This process causes transformations in the changing structure of the brain and occurs thanks to brain plasticity (Ibarrola, 2018). For learning to occur, new synapses must be generated, which means that a neuron has to communicate with other ones through a complex biochemical and electrical process, generating networks through which information is transmitted throughout the brain. These neural networks will become more efficient (forming more numerous or more direct connections) the more this information is used, i.e., with constant and continuous practice, regardless of whether this activation of memories results correct or mistaken from a linguistic perspective (Walker, 2017; Ibarrola, 2018; Saavedra et al., 2015; Squire & Dede, 2015).

However, it is not only the practice that influences the generation and proliferation of such networks, but also all the stimuli of the environment in which the learning takes place; in particular, the emotions that these stimuli arouse in the learner (Squire & Dede, 2015; Willis, 2021). Based on the specialized literature (Conte et al., 2019; Damasio, 2010, 2019; Goleman, 2018; Heydarnejad et al., 2019; Makiabadi et al., 2019), we define the concept of emotion as the reaction to external stimuli (from the environment) or internal stimuli (from the individual's memory or imagination) that automatically triggers the secretion in the brain of various chemical substances, which influence the activation of specific neural systems and affect the whole organism (including muscular and visceral alterations, among others). At first, this reaction happens unconsciously, although we can become aware of it (or rather, of the sensation it generates in us) once the brain's emotional process has been managed and developed.

### C. *Motivation and the Learning Process*

The influence of the emotional factor becomes evident when the force of attraction or rejection is activated in the brain. Inhibitory hormones and neurotransmitters are secreted when the brain detects and identifies unpleasant stimuli. Depending on the level of alertness, they hinder or even block the thalamocortical (between the neocortex and the thalamus) and corticocortical (between different areas of the neocortex) afferent and efferent connections (Saavedra et al., 2015). This action will activate reactive brain systems (as opposed to reflexive ones) and prevent the proper performance of cognitive functions and memory systems (Goleman, 2016). Stressful situations (which involve a rise in cortisol) are directly linked to cognitive blocking or the feeling of "going blank" (Willis, 2021). At peak levels of secretion of this *stress hormone*, this state of cognitive inefficiency, commonly referred to as "amygdala hijack", leads to a decrease of up to 50% in linguistic performance. In brief, the desired linguistic acquisition becomes impossible under stressful circumstances or the influence of unpleasant emotions (Ibarrola, 2018).

On the contrary, the brain reacts positively to pleasant stimuli, the experience of which favours learning. A correlation exists between the receptive attitude towards the stimulus (and towards learning) and the rise in the secretion of neurotransmitters in different superior areas of the brain that temporarily modify the way in which diverse neural networks operate (De La Barrena & Donolo, 2009). These modifications favour, streamline and promote synapses and the activation of other neurons, resulting in fast and efficient information processing, which is also pleasurable (Damasio, 2019; Willis, 2010).

It has been widely documented that one of the neurotransmitters with the most significant impact on this process and directly linked to the sensation of pleasure is dopamine. Specific actions have been shown to trigger a *dopamin booster* in the brain (Willis, 2010, 2021). Together with favouring neural synapses, this activity produces a vital sensation of pleasure and well-being and is connected to the sense of reward, thus playing an essential role in increasing motivation toward learning (Ibarrola, 2018; Saavedra et al., 2015; Willis, 2010, 2021). Proven dopaminizing activities include physical activity of one's preference, laughing, positive social interaction, achieving goals, well-done tasks, being read to, acting kindly, and being right (Willis, 2010, 2021). When high doses of dopamine flood the neocortex thanks to these actions, creativity, concentration, analytical skills, and general motivation to persevere increase, regardless of the complexity of the activity and the mistakes that may be made (Damasio, 2019; Willis, 2021). The increase of this neurotransmitter triggers concurrently the secretion of other neurotransmitters such as acetylcholine, "that increase your alertness, focus, memory, and prefrontal cortex executive functions" (Willis, 2010, p. 172) or serotonin, which is

secreted in states of relaxation and calm, is associated with contentment, and favours homeostasis and memory consolidation processes (Squire & Dede, 2015).

This correlation of neurotransmitter secretion forms the basis of what we call the D.A.S. Circuit (see Figure 1) (W. de Fox, 2013; Willis, 2021), based on the Dopamine Reward Cycle (Willis, 2021).

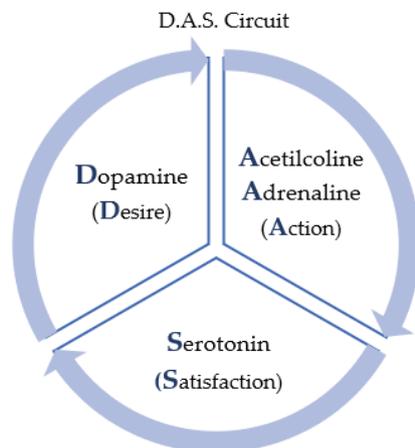


Figure 1 Diagram of the D.A.S. Circuit Operation (Own elaboration)

We secrete dopamine in response to the desire to know if a prediction is correct (initial learning process) and the potential reward for being right. This reward allows the brain to secrete acetylcholine, which promotes memorization, and norepinephrine (better known as noradrenaline), which keeps the brain focused and prepares the whole organism for action. Finally, in response to the satisfaction of a well-done job, the brain secretes serotonin, which regulates the organism, promotes its recovery (homeostasis), generates pleasant sensations of calm and relaxation and collaborates within the memory processes in the hippocampus. This pleasurable sensation will awaken in the brain the desire for the activity that has generated dopamine in the first place, thus giving rise to a virtuous circle. According to Willis (2010), "when dopamine is released during enjoyable learning activities, it actually increases your power to control attention and turn the learning into long-term memories" (p. 172).

#### D. Motivation and Emotion in Language Teaching and Learning

The motivational factor has been one of the most studied aspects concerning language acquisition in the last decades and has been investigated from a scientific perspective from the 20th century onwards (Rodríguez-Lifante, 2015). Bringing together existing definitions of the concept of motivation and relying mainly on Chournazidi (2016), Ibarrola (2013), Khong and Kabilan (2020), Mora Teruel (2017) and Paz Illescas et al. (2019), we venture to define it as the force, external or internal, conscious or unconscious, that drives us to carry out an activity, generating in its course a series of emotions that will propitiate the force of attraction towards the mentioned activity. Reinforcing this idea, Damasio (2019) refers to these impulses as "triggers or constituents of emotions, but not as emotions in the proper sense" (p. 346). Therefore, the concepts of motivation and emotion are often interrelated in teaching-learning contexts (both share an etymology related to "movement") and are also perceived as two feelings that sometimes seem to express very similar ideas. However, there is a differentiating nuance: motivation is what moves us to perform specific actions because we know that these will please us; emotion —closely related to motivation (Di Gesù et al., 2014, p. 23)— is the reaction generated in the brain that affects the entire organism by disposing it either toward or against those actions (Goleman, 2018).

According to the various neurodidactic and linguistic theories discussed above, the first motor for learning is the learner's interest and desire to approach knowledge and enjoy dealing with it, which is related to intrinsic motivation and depends directly on the emotions that the different stimuli generate in their brains. In other words, emotion is the key factor that decisively determines the success or failure of learning. Many studies have concluded that certain "positive" emotions are beneficial for learning and the acquisition or development of communicative competence in a second language (Ansari et al., 2017; Dewaele, 2015; Di Gesù et al., 2014; Jensen, 2010; Nguyen, 2018; Odendahl, 2021; Oxford, 2015; Rodríguez-Lifante, 2015; White, 2018). Even more numerous are those studies that also demonstrate the detriment of negative emotions such as anxiety or stress on the same point (Chournazidi, 2016; Delgado et al., 2018; Pedrosa & Martín, 2013; Salimzadeh et al., 2020; Suleman et al., 2021; Tsang, 2011; Willis, 2021).

Despite the vast literature demonstrating the critical influence of emotions on learning, the role of the emotional factor in SLA research has not received the necessary attention or, at least, not until very recently (Dewaele, 2015). Authors such as Dörnyei and Ryan (2015), Agudo (2018), Nguyen (2018), Xu (2018) or White (2018) express the need to incorporate the study of emotions in SLA research. However, there are currently no studies that translate these scientific advances into theoretical models that offer a solidly supported methodological framework and establish the

scientific bases that allow these advances to be applied in the classroom. For this reason, this paper offers a methodological approach to language teaching and learning that takes emotions as the starting point and basis for linguistic acquisition. This means that all decisions taken concerning the teaching-learning experience (like the attitude and role of teachers and learners, the strategies and dynamics carried out, or the types of materials and resources) will have to be considered in terms of the emotions we wish to foster and only in their favour.

### III. METHOD

In order to meet the proposed objectives, we framed our research methodologically under the parameters of what Bunge (2012, 2013) defines as formal science or formal true. According to the author, formal knowledge seeks to achieve external consistency, that is, to establish interrelationships between ideals and principles that, with a rational and logical consistency, provide answers from abstraction and generalization to facts of reality, generating new ideas. The contributions of this research correspond to the three principles that define formal knowledge: a) it is rational, defined by concepts, judgments, and reasoning; its starting point and endpoint are ideas; b) it is based on deductive inference, i.e., a set of rules is logically interrelated in order to produce new ideas; and c) these ideas are systematically organized, generating ordered sets of propositions, that is, new theories.

The theoretical review of this study is developed following the stages of the framework synthesis approach (Esterhazy et al., 2021; Gough et al., 2012, 2017).

Although the parameters of formal science govern the study, it also seeks to comply with one of the main characteristics of factual science: the knowledge offered by science is valuable (Bunge, 2013). In other words, "it is effective in providing tools" (Bunge, 2013, p. 26) that influence the facts of reality and constitute the basis of knowledge that will impact improving society.

### IV. THE EMOTIONAL APPROACH FOR LANGUAGE TEACHING AND LEARNING

The various aspects that define the teaching and learning experience are mainly determined by the teaching method on which the teacher has based his or her proposal. In turn, this is defined according to the theoretical principles of the methodological approach on which it is based (Larsen-Freeman & Anderson, 2011; Richards & Rodgers, 2014). This means that, to influence the teaching-learning process, it is necessary to access its root, which lies in the methodological approach. Based on the extensive existing literature (Dvoryatkina et al., 2021; Khong & Kabilan, 2020; Kim & Pae, 2018; López-Beltrán & Carlson, 2020; Midby et al., 2020; Zou et al., 2021), we define an approach as the set of principles, assumptions and beliefs about the language and its acquisition process, which constitutes the theoretical level of highest abstraction and enables various interpretations and realizations. These will be specified in the methods, which constitute the directly underlying theoretical level at which specific decisions are made regarding skills, content, strategies, etc. In short, the approach provides the philosophy and theoretical foundation for the conception of language and its acquisition, and the method defines these principles through the establishment of the objectives, contents and strategies that are specified in the syllabus and reflected in the procedures (Cerdas Ramírez & Ramírez Acosta, 2015; Richards & Rodgers, 2014).

#### A. *Theoretical Principles of the Emotional Approach*

The innovative aspect of the Emotional Approach is to assume that "just" involving the learner in communicative contexts through a challenge/problem/project/game/final task, etc. is not enough. The really important point consists in doing it in a way that activates the right emotions. Otherwise, the challenge/problem/project/game/final task, etc., will not have the desired effect. Thus, the teaching-learning method developed under the Emotional Approach parameters should follow the following main principle: all stimuli and learning proposals will be at the service of emotions, i.e., it is necessary to ensure an activation, management and maintenance of the emotions that foster learning. To this end, it is required to constantly evaluate whether the stimuli involved in the didactic proposal (including everything it entails) respect this basic principle or if it needs to be readjusted.

Although the Emotional Approach is undoubtedly applicable to any field of knowledge, in this paper, we develop the theoretical basis for its application in the teaching-learning of second languages (see summary in Table 1)). These theoretical bases offer the foundations for future methodological concretions of the proposed approach.

TABLE 1  
THEORETICAL PRINCIPLES OF THE EMOTIONAL APPROACH (OWN ELABORATION)

<b>Main Principle</b>	
All stimuli and learning proposals will be at the service of emotions: it is necessary to ensure an activation, management and maintenance of the emotions that foster learning. It is required to constantly evaluate whether the stimuli involved in the didactic proposal respect this basic principle or if they need to be adapted.	
<b>Linguistic principles</b>	<b>Didactic principles</b>
<ul style="list-style-type: none"> <li>– Language lies in neural connections.</li> <li>– Language is an interconnected set of inseparable structures and skills.</li> <li>– Error and feedback are an inherent part of the process of:               <ul style="list-style-type: none"> <li>○ self-construction of the scaffolding;</li> <li>○ interlanguage development;</li> <li>○ self-learning capability.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>– Emotions determine learning. Thus, teaching must:               <ul style="list-style-type: none"> <li>○ generate interest;</li> <li>○ awaken curiosity;</li> <li>○ pose modest and manageable challenges;</li> <li>○ eliminate stress.</li> </ul> </li> <li>– Unconscious learning is possible under the appropriate emotions.</li> <li>– Desire to communicate and to gain knowledge is required.</li> <li>– Declarative knowledge fosters procedural learning and favours an emotional state.</li> <li>– Genuine learning is discovered and constructed by the learner.</li> <li>– Authentic use of language is essential.</li> <li>– Action should be driven by dopaminizing tasks:               <ul style="list-style-type: none"> <li>○ social interaction;</li> <li>○ clear objectives and evaluation of progress;</li> <li>○ ongoing feedback;</li> <li>○ prediction-resolution of attainable challenges.</li> </ul> </li> </ul>

### B. The Conception of Language in the Emotional Approach: Theory of Language

The Emotional Approach is developed in line with the parameters of the Communicative Approach (Canale & Swain, 1980; Hymes, 1972; Widdowson, 1978), particularly with its strong interpretation, which claims that language must be used in order to learn it (Howatt, 1984). However, it offers an eclectic view on the conception of language and its acquisition, which can be summarized in three fundamental principles:

1. Language lies in neural connections. Language is conceived as the result of a series of neural connections created in the brain. Thus, the proposals should be designed to favour the creation of the aforementioned connections. In this regard, it finds some affinity with the cognitive model (Albashtawi, 2019) as well as with the functional model (Węsierski, 2021) or the interactional model (Brown & Lee, 2015; Węsierski, 2021).
2. Language is an interconnected set of inseparable structures and skills. The various language components complement each other; therefore, it is essential to develop all pragmalinguistic skills (oral and written expression and comprehension) in parallel.
3. Error and feedback are necessary for optimal linguistic acquisition. The error, and the feedback on it, are crucial to developing the interlanguage and the capacity for self-learning. Through error, learners can identify their shortcomings, and through self-correction, they will be able to develop their scaffolding and improve their understanding of how the language works (Corder, 1981; Toledo-Vega et al., 2021).

### C. The Conception of Language Teaching and Learning in the Emotional Approach: Theory of Language Learning

Regarding the Theory of Learning, the Emotional Approach also respects the postulates of the Communicative Approach but offers a broader perspective, influenced by Neuroscience and determined by the role of emotions in learning. This conception relates to the constructivist model (Dewey, 1986; Piaget, 1995, 2006; Vygotski, 1984) and particularly with the attention to individual factors (Chomsky & Krashen, 2021; Walker, 2017; Fitzpatrick et al., 2020). Seven fundamental principles summarize this conception:

1. Emotions determine learning. In order to learn, the right emotions must be aroused. For this purpose, it is necessary to generate interest (through the topics raised), awaken curiosity (using the power of the story), pose modest and manageable challenges, and eliminate stress (through emotional management and a thoughtful design of strategies).
2. Some unconscious learning is possible. With repeated exposure to language samples, the learner's brain may unconsciously acquire grammatical and lexical structures, mainly if the learner is in the *flow* (Csikszentmihalyi, 2008) and with the right emotional conditions.
3. The desire to communicate (WTC) and to know (NFC) is required. For learning to be complete and effective, it is necessary to generate in the learner the desire to communicate (express their thoughts) and to understand (know the content of the message).
4. Declarative knowledge fosters procedural learning, favours emotional state, provides confidence, and reduces stress.
5. Genuine learning is discovered and constructed by the learner. Negotiation of meanings, discovery learning, and consistent working with content through various strategies (multimodal text comprehension, writing, presentation, discussion, etc.) create stronger neural connections and, therefore, the acquired knowledge will be more accessible.

6. Authentic use of language is essential. To increase receptivity and foster motivation, real language samples should always be used in authentic communicative situations.
7. Dopaminizing tasks have to be the basis for action. The brain rewards positive social interactions, the feeling of progress, the achievement of goals and the possibility of making accurate predictions with rewarding neurotransmitters (dopamine). Thus, the teaching-learning process should: encourage social interaction, set clear objectives, evaluate progress, provide ongoing feedback and continuously offer the possibility of predicting or solving attainable challenges.

#### *D. The Role of Actors*

##### *(a). The Teacher Role*

Teachers working under the Emotional Approach must be aware of the learning culture of their students and respectful towards it. Through the different strategies within their reach, they should try to identify the profile of students they are teaching to adapt their proposals to their students' needs and avoid excessive estrangement or stressful situations. Teachers must remain in the background, giving the student the leading role, and assuming the functions of guide, linguistic and didactic advisor, manager of emotions and administrator of the tasks.

Taking the above into account, teachers will seek to fulfil the following functions:

1. Managing emotions and creating a cordial and relaxed classroom atmosphere, as close as possible to a social gathering of people with common interests, where students feel involved, free to express their thoughts and, most importantly, to make mistakes.
2. Provide feedback on their pragmalinguistic performance and give the necessary hints to encourage self-correction and discovery learning. More than solving doubts, teachers should offer learners the tools to solve them independently.
3. Select (or design) and administrate materials and tasks according to learners' interests and needs and the established curriculum.
4. Encourage interaction among students as well as with the teacher.
5. Conduct a constant assessment of the students' progress and pragmalinguistic needs, the emotional state and classroom atmosphere, and the teaching-learning experience itself, in order to adopt the required adjustments at any time and in any context (pace, complexity, learning style, subject matter, content to be emphasized, etc.).

##### *(b). The Learner Role*

Regarding the role of the learner, the Emotional Approach maintains the same position as in the previous point on the role of the teacher: it will be essential to attend to their personal and individual characteristics and avoid excessive strangeness or stressful situations. However, learning will be more effective if the learner assumes an active and protagonist role based on the following functions:

1. Take responsibility for their learning.
2. Actively participate in the negotiations raised (which may be about meanings, procedures, topics, content, etc.).
3. Engage in tasks and interact openly with peers and the teacher, taking risks and not being afraid for mistakes.
4. Adopt a positive attitude towards the target language, culture, and learning process.

## V. THEORETICAL CONTRIBUTION

The Emotional Approach proposed here draws directly from widely accepted approaches such as the Communicative Approach or the Natural Approach. However, it offers an eclectic and novel vision of language and its teaching and learning from an interdisciplinary perspective, bringing together Neuroscience, Didactics, and Linguistics.

This work provides a new methodological approach to second language teaching. The most remarkable aspect of this study is the inclusion of the neurodidactic perspective, traditionally ignored in linguistic research on SLA (Heller, 2018). The Emotional Approach adapts these advances in Neuroscience to the field of SLA and language teaching and offers a theoretical framework that will bridge the gap between these advances and the teaching practice. At its core, it provides new insights into the importance of emotion in second language acquisition, placing it at the centre of the learning process (Makiabadi et al., 2019). At the same time, it is closely related to other approaches, such as the Communicative Approach or the Natural Approach, whose postulates align with the Emotional Approach's main principle. Moreover, by focusing the learning process on emotions, the theoretical model presented here allows us to approach the learning process from a holistic perspective, centred on the learner's natural interests.

The theoretical principles of the Emotional Approach concerning language and its acquisition process are intimately linked to the functioning of learning at the neural level. The Emotional Approach understands that if language is a set of neural networks, teaching should promote the generation and efficacy of these networks (Di Gesù et al., 2014). In this process, certain pleasant emotions act as an enhancer, while other stressful or demotivating emotions will block cognitive processes and impede learning. Clearly, this is the most novel and significant aspect of the Emotional Approach and it contributes with a theoretical framework to build the links between Neuroscience, Didactics and Linguistics.

## VI. PRACTICAL CONTRIBUTION

From a practical perspective, the Emotional Approach proposes a dramatic change in the teaching practices implemented in the second language classroom. In addition to promoting social-emotional interaction, it proposes a shift in teaching focus, which should now be on generating and maintaining an optimal emotional state among students. Adequate feedback and emotional management in the classroom (both the teacher's own emotions and the learners' emotions) constitute for the Emotional Approach the main learning strategy.

Teachers implementing the Emotional Approach should pay attention to all the stimuli involved in the teaching-learning experience. This includes aspects such as the environment (classroom layout, scheduling, ventilation, acoustics, etc.), interpersonal relationships (among learners and between them and the teacher), the learner's inner world and sociocultural background, and the learning strategies themselves, which include resources, types of activities and tasks, etc. Although the teachers will have more control over this last point, they should pay attention to all the mentioned above types of stimuli, since they will also influence the generation of students' emotions. Learners' sociocultural environment merits particular attention. Within their possibilities, teachers should be aware of learners' sociocultural peculiarities and learning habits since proposing learning interventions too different from their habits or expectations may provoke an excess of estrangement that may trigger undesired emotions.

This has implications for the competencies required by teachers. To adequately apply the Emotional Approach, teachers must have an excellent capacity for observation, listening and empathy. They must have a critical spirit that allows them to constantly re-evaluate their teaching performance and undertake the necessary changes and readjustments to maintain the optimal emotional state. In this sense, they must also have high competence in emotional management.

## VII. FUTURE RESEARCHES

This study opens multiple lines of research in different directions. Future research may develop specific teaching-learning methods based on the Emotional Approach. This will put into practice the postulates validated here theoretically, allowing the development of research that may verify their validity also empirically. In addition, the Emotional Approach lays the foundations that allow designing concrete materials and strategies in which the theoretical principles may be adapted to different learning realities and contexts. To summarize, it opens innumerable possibilities for teachers and researchers to elaborate and evaluate their own second language teaching-learning proposals in accordance with the brain functioning.

It is common to find teaching proposals that focus on communication or content, offering learners a large amount of real and meaningful input from the beginning, and encouraging communicative interaction. However, it is worth questioning whether the topics and tasks awaken interest and curiosity, whether the work is based on dopaminizing tasks, whether the DAS Circuit is activated and, in short, whether an emotional state conducive to learning is favoured. In this regard, it is essential to highlight that the Emotional Approach invites to reflect on the adequacy of the different current methods and approaches regarding the functioning of linguistic acquisition processes at a neural level and offers the necessary tools to carry out this important assessment.

## VIII. CONCLUSIONS, LIMITATIONS AND IMPLICATIONS

With the Emotional Approach as a result of the theoretical analysis developed in this study, the proposed objectives have been met. In the first place, it has been found that emotion is the factor with a more significant impact on the learning process. Thus, it has been concluded that pleasant emotions favour attention, memory, motivation and, in short, learning and language acquisition. On the contrary, unpleasant emotions such as anxiety, stress or boredom block cognitive processes impeding learning. Secondly, a theoretical model for the teaching-learning of second languages has been designed to transfer the advances of Neuroscience to the teaching practice. The main didactic and linguistic principles of the Emotional Approach, supported by the solid interdisciplinary review of the different theories analysed, will contribute to developing more efficient and satisfactory teaching methods and proposals for language teaching and learning.

This research has to be considered within its limitations, since the theoretical model elaborated has been supported exclusively from an interdisciplinary theoretical perspective.

In conclusion, although further research in this field is needed, the Emotional Approach brings Neurodidactics closer to the teaching practice, provides a solid theoretical model that will allow teaching and learning languages according to the brain's functioning, and invites teachers and linguists to reflect on the suitability of the methods that are currently implemented.

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#### REFERENCES

- [1] Albashtawi, A. H. (2019). Improvement of EFL Students' Academic Reading Achievement Through the Cognitive Academic Language Learning Approach (CALLA). *Reading Psychology*, 40(8), 679-704. <https://doi.org/10.1080/02702711.2019.1658669>
- [2] Ansari, D., König, J., Leask, M., & Tokuhama-Espinosa, T. (2017). Developmental cognitive neuroscience: Implications for teachers' pedagogical knowledge. In S. Guerriero (Ed.), *Pedagogical Knowledge and the Changing Nature of the Teaching Profession* (pp. 195-222). OECD Publishing. <https://doi.org/http://dx.doi.org/10.1787/9789264270695-en>
- [3] Brown, H., & Lee, H. (2015). *Teaching by Principles. An interactive approach to language pedagogy* (4th. ed.). Pearson Education.
- [4] Bunge, M. (2012). The correspondence theory of truth. *Semiotica*, 188, 65-75. <https://doi.org/DOI.10.1515/sem-2012-0004>
- [5] Bunge, M. (2013). *La ciencia: su método y su filosofía* [Science: method and philosophy]. DeBolsillo.
- [6] Canale, M., & Swain, M. (1980). Theoretical Bases of Communicative Approaches to Second Language Teaching and Testing. *Applied Linguistics*, 1(1), 1-47.
- [7] Carrillo-García, M., & Martínez-Ezquerro, A. (2018). Neurodidáctica de la Lengua y la Literatura [Language and Literature Neurodidactics]. *Revista Iberoamericana de Educación*, 78(1), 149-164. <https://doi.org/10.35362/rie7813243>
- [8] Cerdas-Ramírez, G., & Ramírez-Acosta, J. (2015). La enseñanza de lenguas extranjeras: historia, teoría y práctica [Foreign language teaching: history, theory and practice]. *Revista de Lenguas Modernas*, 22, 297-316.
- [9] Chen, R. (2021). Fostering Students' Workplace Communicative Competence and Collaborative Mindset through an Inquiry-Based Learning Design. *Education Sciences*, 11(1), 1-13. <https://doi.org/10.3390/educsci11010017>
- [10] Chomsky, N. (1966). *Topics in the theory of generative grammar*. Mouton.
- [11] Chomsky, N., & Krashen, S. (2021). *A Historic webinar with Chomsky and Krashen: Modern Linguistics* (N. Belmekki (ed.)).
- [12] Chourmazidi, A. (2016). The Social Framework of Learning via Neurodidactics. *Creative Education*, 7(15), 2175-2192. <https://doi.org/10.4236/ce.2016.715215>
- [13] Collins, P., & Bilge, S. (2016). *Intersectionality*. Polity Press. Retrieved January 12, 2022, from <https://books.google.es/books?id=wWUnDQAAQBAJ>
- [14] Conte, E., Ornaghi, V., Grazzani, I., Pepe, A., & Cavioni, V. (2019). Emotion Knowledge, Theory of Mind, and Language in Young Children: Testing a Comprehensive Conceptual Model. *Frontiers in Psychology*, 10(September), 1-11. <https://doi.org/10.3389/fpsyg.2019.02144>
- [15] Corder, S. P. (1981). Error Analysis and Interlanguage. In *The Modern Language Journal*. Oxford University Press. <https://doi.org/10.2307/326720>
- [16] Csikszentmihalyi, M. (2008). *Fluir (Flow): una psicología de la felicidad* [Flow: The Psychology of Happiness] (13<sup>a</sup> ed.). Kairós.
- [17] Damasio, A. (2010). *El error de Descartes: la emoción, la razón y el cerebro humano* [Descartes' error: emotion, reason and the human brain]. Editorial Andrés Bello.
- [18] Damasio, A. (2019). *La sensación de lo que ocurre: cuerpo y emoción en la construcción de la conciencia* [The Feeling of what Happens: Body and Emotion in the Making of Consciousness]. Destino.
- [19] De La Barrena, M., & Donolo, D. (2009). Neurociencias y su importancia en contextos de aprendizaje [Neurosciences and their importance in learning contexts]. *Revista Digital Universitaria*, 10(4), 1-18. Retrieved February 2, 2022, from <http://www.revista.unam.mx/vol.10/num4/art20/art20.pdf>
- [20] Debbag, M., & Yıldız, S. (2021). Effect of the flipped classroom model on academic achievement and motivation in teacher education. *Education and Information Technologies*, 26, 3057-3076. <https://doi.org/https://doi.org/10.1007/s10639-020-10395-x>
- [21] Delgado, B., Aparisi, D., García-Fernández, J. M., Torregrosa, M., Estévez, E., Marzo, J., & Inglés, C. J. (2018). Academic goals and learning strategies in secondary education Spanish students with social anxiety. *Estudios de Psicología*, 39(1), 58-80. <https://doi.org/http://dx.doi.org/10.1080/02109395.2017.1407901>
- [22] Dewaele, J. (2015). On Emotions in Foreign Language Learning and Use. *The Language Teacher*, 39.3(July), 13-15. Retrieved January 19, 2022, from <https://www.researchgate.net/publication/281716361>
- [23] Dewey, J. (1986). Experience and education. *Educational Forum*, 50(3), 242-252. <https://doi.org/10.1080/00131728609335764>
- [24] Di Gesù, F., Seminara, A., Di Gesù, F., & Seminara, A. (2014). Neurodidáctica y la implicación de emociones en el aprendizaje. *LynX. Panorámica de Estudios Lingüísticos*, 11, 5-39.
- [25] Dörnyei, Z., & Ryan, S. (2015). The psychology of the language learner revisited. In S. M. Gass & A. Mackey (Eds.), *The Psychology of the Language Learner Revisited*. Routledge. <https://doi.org/10.4324/9781315779553>
- [26] Dvoryatkina, S. N., Zhuk, L. V., Smirnov, E. I., & Shcherbatykh, S. V. (2021). Didactic model of development of research activities of schoolchildren in a hybrid intellectual learning environment. *Perspectives of Science & Education*, 2(50), 278-292. <https://doi.org/https://doi.org/10.32744/pse.2021.2.16>
- [27] Ellis, R. (2009). Task-based language teaching: sorting out the misunderstandings. *International Journal of Applied Linguistics*, 19(3), 221-246. <https://doi.org/https://doi.org/10.1111/j.1473-4192.2009.00231.x>
- [28] Escorza Walker, J. (2017). Crear puentes entre neurociencia y educación [Building bridges between neuroscience and

- education]. *Contextos: Revista de Humanidades y Ciencias Sociales*, 37, 89-96.
- [29] Esterhazy, R., de Lange, T., Bastiansen, S., & Wittek, A. L. (2021). Moving Beyond Peer Review of Teaching: A Conceptual Framework for Collegial Faculty Development. In *Review of Educational Research* (Vol. 91, Issue 2). <https://doi.org/10.3102/0034654321990721>
- [30] Fitzpatrick, C. L., Hallett, D., Morrissey, K. R., Yıldız, N. R., Wynes, R., & Ayesu, F. (2020). The relation between academic abilities and performance in realistic word problems. *Learning and Individual Differences*, 83-84(101942), 1-9. <https://doi.org/10.1016/j.lindif.2020.101942>
- [31] Gallagher, S. E., & Savage, T. (2020). Challenge-based learning in higher education: an exploratory literature review. *Teaching in Higher Education*, 1-23. <https://doi.org/10.1080/13562517.2020.1863354>
- [32] Gauvain, M. (2018). From Developmental Psychologist to Water Scientist and Back Again: The Role of Interdisciplinary Research in Developmental Science. *Child Development Perspectives*, 12(1), 45-50. <https://doi.org/10.1111/cdep.12255>
- [33] Goleman, D. (2016). *El cerebro y la inteligencia emocional: Nuevos descubrimientos* [Brain and Emotional Intelligence: New Discoveries]. Ediciones B.
- [34] Goleman, D. (2018). *La inteligencia emocional: Por qué es más importante que el cociente intelectual* [Emotional intelligence: Why it's more important than IQ]. Penguin Random House.
- [35] Gough, D., Oliver, S., & Thomas, J. (2012). *An Introduction to Systematic Reviews*. Sage.
- [36] Gough, D., Oliver, S., & Thomas, J. (2017). *An Introduction to Systematic Reviews* (2nd ed). <https://doi.org/10.1002/9781118280249.ch19>
- [37] Heller, R. (2018). What we know (and think we know) about the learning brain: An interview with Tracey Tokuhama-Espinosa. *Phi Delta Kappan*, 100(4), 24-30. <https://doi.org/10.1177/0031721718815669>
- [38] Hernandez, E., Carmichael, K., & Dunsmore, J. C. (2021). Toward integrating research on parent-child emotion talk and linguistic theory: A spotlight on parents' (in)direct communication. *Social Development*, 30(1), 38-56. <https://doi.org/10.1111/sode.12472>
- [39] Heydarnejad, T., Ebrahimi, M. R., & Reza Adel, S. M. (2019). The influence of applying emotion based language instruction in teaching oral skills to EFL learners. *International Journal of Instruction*, 12(2), 275-288. <https://doi.org/10.29333/iji.2019.12218a>
- [40] Hita-Pedrosa, M. L., & Fernández-Martín, M. P. (2013). Anxiety L2 in context of early immersion. *Revista de Psicología y Educación*, 12(2), 151-165.
- [41] Howatt, A. P. (1984). *A History of English Language Teaching*. Oxford University Press.
- [42] Hymes, D. H. (1972). On communicative competence. In J.B. Pride & J. Holmes (Ed.), *Sociolinguistics. Selected Readings* (pp. 269-293). Penguin.
- [43] Ibarrola, B. (2018). *Aprendizaje excitante: neurociencia para el aula* [Exciting learning: neuroscience for the classroom] (5<sup>a</sup> ed.). SM.
- [44] Jensen, E. (2010). *Cerebro y aprendizaje: competencias e implicaciones educativas* [Brain and learning: competencies and educational implications]. Narcea Ediciones.
- [45] Khong, H. K., & Kabilan, M. K. (2020). A theoretical model of micro-learning for second language instruction. *Computer Assisted Language Learning*, 0(0), 1-24. <https://doi.org/10.1080/09588221.2020.1818786>
- [46] Kim, K. J., & Pae, T.-I. (2018). Social psychological theories and sustainable second language learning: A model comparison approach. *Sustainability*, 11(1), 1-18. <https://doi.org/10.3390/su11010016>
- [47] Krashen, S., & Terrell, T. D. (1983). *The Natural Approach*. Prentice Hall Ltd.
- [48] Larsen-Freeman, D., & Anderson, M. (2011). *Techniques and principles in language teaching* (3rd ed.). Oxford University Press.
- [49] López-Beltrán, P., & Carlson, M. T. (2020). How usage-based approaches to language can contribute to a unified theory of heritage grammars. *Linguistics Vanguard*, 6(1), 1-12. <https://doi.org/10.1515/lingvan-2019-0072>
- [50] Lucas-Oliva, I., García-Jiménez, J., & Torres-Gordillo, J.-J. (2021). Teaching Competencies of Pre-Service Spanish Language Teachers through the ECO method. *International Journal of Innovation, Creativity and Change*, 15(7), 516-535. <https://doi.org/10.53333/IJICC2013/15746>
- [51] Makiabadi, H., Pishghadam, R., Meidani, E. N., & Khajavy, G. H. (2019). Examining the Role of Emotionality in Willingness to Communicate: A Structural Equation Modeling Approach. *Revista de Psicodidáctica*, 24(2), 120-130. <https://doi.org/10.1016/j.psicod.2019.03.002>
- [52] Martínez-Agudo, J. D. D. (ed.). (2018). *Emotions in Second Language Teaching: Theory, Research and Teacher Education* (J. Martínez-Agudo (ed.)). Springer. [https://doi.org/10.1007/978-3-319-75438-3\\_11](https://doi.org/10.1007/978-3-319-75438-3_11)
- [53] Midby, D., Mugabonake, S., Shea, K., & Kayi-Aydar, H. (2020). Models and Theories of Second Language Motivation: English Language Teachers Respond. *TESOL Quarterly*, 54(4), 1112-1121. <https://doi.org/10.1002/tesq.595>
- [54] Mora Teruel, F. (2017). *Neuroeducación, solo se puede aprender aquello que se ama* [Neuroeducation, one can only learn that which one loves]. Alianza Editorial. <https://doi.org/9788420675336>
- [55] Nguyen, M. H. (2018). ESL Teachers' Emotional Experiences, Responses and Challenges in Professional Relationships with the School Community: Implications for Teacher Education. In J. de D. Martínez Agudo (Ed.), *Emotions in Second Language Teaching* (pp. 243-257). Springer. [https://doi.org/10.1007/978-3-319-75438-3\\_14](https://doi.org/10.1007/978-3-319-75438-3_14)
- [56] Odendahl, J. (2021). Embodied Cognition, affects and language comprehension: Theoretical basis and (literary-)didactic perspectives of a physically- emotionally grounded model of understanding. *Phenomenology and the Cognitive Sciences*, 20, 483-499. <https://doi.org/10.1007/s11097-020-09684-0>
- [57] Oxford, R. L. (2015). Emotion as the amplifier and the primary motive: Some theories of emotion with relevance to language learning. *Studies in Second Language Learning and Teaching*, 5(3), 371-393. <https://doi.org/10.14746/ssllt.2015.5.3.2>
- [58] Paz-Illescas, C. E., Acosta-Gaibor, M. P., Bustamante-Cruz, R. E., & Paz-Sánchez, C. E. (2019). Neurociencia vs. Neurodidáctica en la evolución académica en la Educación Superior [Neuroscience vs. neurodidactics in the academic evolution of higher education]. *Didasc@alia: Didáctica y Educación*, X(1), 207-228. Retrieved January 26, 2022, from

<https://dialnet.unirioja.es/descarga/articulo/7242010.pdf>

- [59] Piaget, J. (1995). Commentary on Vygotsky's Criticisms of Language And Thought Of The Child And Judgment And Reasoning In The Child. *New Ideas in Psychology*, 13(3), 325-340.
- [60] Piaget, J. (2006). Reason. *New Ideas in Psychology*, 24(1), 1-29. <https://doi.org/10.1016/j.newideapsych.2006.04.003>
- [61] Pishghadam, R. (2016). Emotioncy, Extraversion, and Anxiety in Willingness to Communicate in English. In A. Lokman, M. A. Fazidah Fariyah, I. Salahuddin, & A. Mohd Iskandar (Eds.), *5th International Conference on Language, Education, and Innovation (ICLEI)* (pp. 1-5). Infobase Creation Sdn Bhd. [www.icsai.org/iclei](http://www.icsai.org/iclei)
- [62] Richards, J. C., & Rodgers, T. S. (2014). *Approaches and methods in language teaching* (3rd ed.). Cambridge University Press.
- [63] Rodríguez-Lifante, A. (2015). Motivación, emoción y cognición en adquisición de segundas lenguas desde la perspectiva de la teoría de los sistemas complejos [Motivation, emotion and cognition in second language acquisition from the perspective of complex systems theory]. In Y. Morimoto, M. V. Pavón Lucero, & R. Santamaría Martínez (Eds.), *La enseñanza de ELE centrada en el alumno* (pp. 813-822). ASELE.
- [64] Saavedra, J., Díaz, W., Zúñiga, L., Navia, C., & Zamora, T. (2015). Correlación funcional del sistema límbico con la emoción, el aprendizaje y la memoria [Functional correlation of the limbic system with emotion, learning and memory]. *Morfología*, 7(2), 29-44. Retrieved January 16, 2022, from <https://revistas.unal.edu.co/index.php/morfologia/article/view/52874>
- [65] Salimzadeh, R., Hall, N. C., & Saroyan, A. (2020). Stress, Emotion Regulation, and Well-Being among Canadian Faculty Members in Research-Intensive Universities. *Social Sciences*, 9(12), 227, 1-37. <https://doi.org/10.3390/socsci9120227>
- [66] Squire, L. R., & Zola-Morgan, M. (1991). The brain and memory: a new synthesis. *Cold Spring Harbor Perspectives in Biology*, 42(1), 69-150. <https://doi.org/10.1101/cshperspect.a021667>
- [67] Suleman, Q., Syed, M. A., Khattak, A. Z., Kayani, K. M., Zaman, Z., & Khan, I. (2021). The Relationship between Emotional Intelligence and Occupational Stress among Secondary School Heads in Khyber Pakhtunkhwa, Pakistan. *International Journal of Innovation, Creativity and Change*, 15(7), 953-972.
- [68] Swain, M. (2013). The inseparability of cognition and emotion in second language learning. *Language Teaching*, 46(2), 195-207. <https://doi.org/10.1017/S0261444811000486>
- [69] Szűcs, D., & Goswami, U. (2007). Educational Neuroscience: Defining a New Discipline for the Study of Mental Representations. *Mind, Brain, and Education*, 1(3), 114-127. <https://doi.org/10.1111/j.1751-228x.2007.00012.x>
- [70] Toledo-Vega, G., Lizasoain, A., & Mena, L. (2021). Acquisition of Spanish by Haitian Secondary School Students in Chile. *The International Journal of Learner Diversity and Identities*, 28(1), 27-41. <https://doi.org/https://doi.org/10.18848/2327-0128/CGP/v28i01/27-41>
- [71] Tsang, K. K. (2011). Emotional labor of teaching. *Educational Research*, 2(8), 1312-1316. <http://www.interestjournals.org/ER>
- [72] Vygotski, L. (1984). Aprendizaje y desarrollo intelectual en la edad escolar [Learning and intellectual development at school age]. *Infancia y Aprendizaje*, 7(27-28), 105-116. <https://doi.org/10.1080/02103702.1984.10822045>
- [73] W. de Fox, S. (2013). El impacto de las emociones en el aprendizaje [Impact of emotions on learning]. In S. W. de Fox, J. Peire, M. E. De Podestá & A. Rattazzi (Eds.), *El cerebro que aprende. Una mirada a la Educación desde las Neurociencias* (pp. 109-132). Aique Educación. <https://doi.org/10.25058/20112742.380>
- [74] Węsierski, M. R. (2021). The manner of use, the uses and sub-uses of terms in social sciences: from the functional approach to natural language to applied semiotics and the philosophy of science. *Semiotica*, 2021(240), 23-39. <https://doi.org/doi:10.1515/sem-2021-0019>
- [75] White, C. J. (2018). The Emotional Turn in Applied Linguistics and TESOL: Significance, Challenges and Prospects. In J. de D. (ed. . Martínez Agudo (Ed.), *Emotions in Second Language Teaching: Theory, Research and Teacher Education* (pp. 19-34). Springer. <https://doi.org/10.1007/978-3-319-75438-3>
- [76] Widdowson, H. G. (1978). *Teaching language as communication* (1<sup>st</sup> ed.). Oxford University Press.
- [77] Willingham, D. T., & Lloyd, J. W. (2007). How Educational Theories Can Use Neuroscientific Data. *Mind, Brain, and Education*, 1(3), 140-149. <https://doi.org/10.1111/j.1751-228x.2007.00014.x>
- [78] Willis, J. (2010). *Learning to love math teaching strategies that change student attitudes and get results*. ASCD.
- [79] Willis, J. (2021). Stepping up Social-Emotional Learning to Reignite All Brains. *Kappa Delta Pi Record*, 57(1), 18-22. <https://doi.org/10.1080/00228958.2021.1851582>
- [80] Xu, Y. (2018). A Methodological Review of L2 Teacher Emotion Research: Advances, Challenges and Future Directions. In J. de D. (ed. . Martínez Agudo (Ed.), *Emotions in Second Language Teaching: Theory, Research and Teacher Education* (pp. 35-49). Springer. <https://doi.org/10.1007/978-3-319-75438-3>
- [81] Zou, D., Wang, M., Xie, H., Cheng, G., Wang, F. L., & Lee, L. K. (2021). A comparative study on linguistic theories for modeling EFL learners: facilitating personalized vocabulary learning via task recommendations. *Interactive Learning Environments*, 29(2), 270-282. <https://doi.org/10.1080/10494820.2020.1789178>

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# Identical Tones and the OCP in Èwùlù: An Optimality Account

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**Abstract**—The Obligatory Contour Principle (OCP) potentially acts as a constraint on adjacent identical tones. This is why, in tone languages, underlying /HHL/ and /LLH/ may surface as [HL] and [LH] respectively. Èwùlù (Igboid: West-Benue Congo, Nigeria), a relatively unknown small dialect, exhibits such OCP-motivated adjustments on adjacent identical tone structures. Adopting the Optimality Theory, this study accounts for the tonal modifications in order to complement the earlier findings in the literature that advance our understanding of how the OCP shops for adjacent identical tones in representations but may fail to do so due to attested structural exceptions in its tonology. Therefore, the study examines tonal patterns such as, juncture tone deletion, consecutive high and low tones, tonal affix, downstep and final high tone displacement. The findings showed that the OCP can be dominated by some higher-ranked constraints in the Èwùlù tonal grammar, like is the case in some languages. This study draws some theoretical implication. The Èwùlù tonal system provides further evidence that suggests the OCP is not universal; it is violable just like other constraints active in Universal Grammar.

**Index Terms**—Èwùlù, OCP, Optimality Theory, tonal patterns, tones

## I. INTRODUCTION

Tone languages characteristically avoid identical tones adjacent to each other, such as the sequences, high-high-low (HHL) and low-low-high (LLH) (see Leben, 1973; Goldsmith, 1976, 1990; Myers, 1997; Akinlabi & Liberman, 2000; Yip, 2002; Akpabio et al., 2021). Extensive works, particularly the ones on African tone systems, have shown that the languages typically modify the aforementioned tonal sequences phonetically by simplifying them as HL and LH respectively. Research findings, specifically those from Leben, and later Goldsmith (1976), establish that the constraint which deletes one of the identical tones is the Obligatory Contour Principle (OCP). Goldsmith states the principle thus: *Adjacent identical elements are prohibited*.

A lesser known, small Nigerian dialect named Èwùlù (Igboid: West Benue-Congo), with approximately fifteen thousand native speakers (Ezimechine 2014; Utulu 2015), exhibits some tonal changes similar to the OCP-induced tonal modifications documented in the literature. For instance, in the current Èwùlù data, tonal reductions/simplifications occur, where tautomorphic and heteromorphic input tonal sequence /HH/ and /LL/ are characteristically modified phonetically as [H] and [L], respectively. In this regard, we suspect that the simplification of the adjacent identical tones, in which one of two sequences of identical tones deletes from the representation may be triggered by the OCP. Until now, studies that explored such input duplicate tone structures with the aim to ascertain the motivation for their simplification, particularly from a constraint-based perspective in Èwùlù is nonexistent. Therefore, the objective of this present study is to explore a body of data from Èwùlù, which makes a theoretical contribution to our understanding of how the OCP as a constraint may, (i) prohibit identical tone structures in tonal languages, and (ii) become weakened to a point that it is unable to resolve similarity of tone structures due to some structural exceptions, thereby becoming dominated by some higher-ranked constraints.

To achieve the objective, this paper examines six tonal patterns in the Èwùlù tonal grammar we assume are implicated in the perceived ‘antics’ of the OCP effects on duplication of tonal structures. The tonal patterns are: Juncture Tone Deletion, Consecutive High Tones, Consecutive Low Tones, Tonal Affix, Downstep, and Final High Tone Displacement. To account for the tonal phenomena, we adopt the Optimality Theory (OT) proposed by Prince and Smolensky (1993) for analysis. Our adoption of the theory is hinged on its adequacy in accounting for OCP-induced tonal identity, and its capacity to generate some fundamental higher-ranked constraints to resolve some peculiar tonal identity problems the OCP fails to resolve. We examine both the existing and a new body of data that highlight such cases in the dialect.

This work is organised as follows: Section 2 reviews a few phonological literature that touch on the effects of the tonal OCP in three African languages, namely, Shona-Bantu, Igbo and Yoruba. Section 3 gives an overview of the Èwùlù tone system, its number of level tones, contour tones and distributions of the levels. Section 4 discusses the methodology, the source of the current data, and then states how the data are purposively categorised for the analysis. In Section 5, the paper briefly highlights the fundamentals of the Optimality Theory by listing the relevant faithfulness and markedness constraints required to capture the six Èwùlù tonal patterns.

Section 6 provides descriptive and theoretical analyses of the data adopting the framework of the OT. Finally, the article highlights the theoretical implication of the findings of this study in the light of researchers' earlier assumption of the OCP as a universal constraint, but is proven in the current data it is more a tendency than a principle.

## II. THE FUNCTIONAL EFFECTS OF THE OCP IN THE AFRICAN TONAL GRAMMARS: AN OVERVIEW

There are pieces of evidence from natural language data validate the function of the OCP as a constraint that adjusts adjacent identical tone structures to avoid its violations. The proofs come from some African and Asian tone systems. Specifically, the pieces of evidences come from the tone systems of three African languages, namely Shona-Bantu (McCarthy, 1986; Myers, 1997), central Igbo (Yip, 2002), and Yoruba (Akinlabi & Liberman, 2000; Yip, 2002).

### Bantu (Shona)

Relating to the OCP effect on tone, Yip (2002) shows that the disyllabic word *bángá* 'knife' in Shona-Bantu is underlying specified with doubly-linked H tone. However, in the sentence, *í-banga* 'it is a knife', Yip, following Myers (1997), explains that the doubly linked H is deleted. She suggests that the H tone deletion in the sentence is due to the H specified on the copula prefix, *í*, 'is', and that the elision of the doubly-linked H tone is triggered by the OCP to avoid its violation.

### Igbo (Central Variety)

In Igbo, Yip (2002) shows that the underlying L tone of the root, *zà* 'sweep', in the construction *zà-chà-fù-yì*, 'sweep-be clean-go out-NEG' is lost on the surface, where *zà-chà-fù-yì* becomes *za-chà-fù-yì*. Yip claims that the loss of the abstract L tone is due to the influence of two OT constraints, OCP and NONINITIAL, ranked in that order, thus, suggesting that the OCP is active in Igbo.

### Yoruba

Yoruba, a three-tone system, it is reported, exhibits structural changes made on some specific tonal domain (i.e., in the context where polarity applies) to avoid OCP violations. In the language, Yip (2002), citing examples from Akinlabi and Liberman (2000), draws the following polarity examples: *ó pa mí* 'he/she/it killed me' versus *ó kọ mí* 'he/she/it taught me'. Yip shows that the Yoruba object clitic, *mí* can be specified with a H tone or M tone (or sometimes a L tone), giving rise to, *mí* and *mi* respectively. She explains that the tone quality specified for the Yoruba object clitic, H or M, is determined by the tone of the preceding verb, in this case *pa* and *kọ*. Accordingly, *pa* takes a M tone if the object clitic is high-toned, whereas *kọ* takes a H tone if the object clitic is mid-toned. Consequently, due to the need to satisfy the OCP, the object clitic alternates between H and M. Also, the sensitivity of the language to the OCP effect accounts for the forms, *ó kọ yín* 'he/she/it divorced you-all' vs. *ó pa yín* 'he/she/it killed you-all', where the object clitic *yín* takes a H tone, since the preceding verbal tones are distinct tones, a L tone and a M tone respectively.

The examples illustrated above strongly justify the activeness of the OCP as a condition on identical tones in tone languages. In this study, we will show that the OCP is active too in Èwùlù. However, we will provide some counterexamples that suggest the OCP can be inactive due to some structure-specific patterns allowing some other competing constraints to dominate the OCP. The evidence of the activeness and inactiveness of the OCP in dealing with similarity of tonal structures, as this study will reveal, will crucially further expose its strengths and weaknesses, as previously shown in the literature (see particularly McCarthy, 1986; Myers, 1997; Odden, 1986, 1995). On exploring these two extremes is the main thrust of this work.

## III. THE ÈW Ù L Ù TONE SYSTEM: AN OVERVIEW

Èwùlù is a registered tone language with two level tones, the H tone and the L tone. In addition to these two levels is downstep, represented with the exclamation mark (!) (Utulu, 2015). Of the three levels, only the first two levels are overtly mapped on syllables composed of any of the nine phonemic vowels: /i/, /ɪ/, /e/, /ɛ/, /a/, /ɔ/, /o/, /ɔ/, /u/, which function as syllable nucleus/peak in the dialect. In addition to the vowels, five phonetic homorganic syllabic nasals [m], [ŋ], [n], [ɲ] and [ŋ] are specified for some tone, making them tone bearing units (TBUs) (Utulu, 2020a, 2020b). Essentially, the H and L levels may merge to derive surface falling (ˆ) and rising (˘) contour tones. In the next subsections, we will give an overview of the distributions of the three tonal phenomena and the contour tones.

### A. Level Tones

This subsection discusses the level tones attested in Èwùlù and their distributions at the word level. It also gives a brief description of how the rising and falling tones are derived phonetically from the H and L tones.

#### (a). The High Tone

Like in other tone languages, the Èwùlù H tone carries the higher F0 load relative to the downstepped H tone and L tone (Utulu, 2015; 2020a). Distributionally, the H tone can be found in the initial, medial and final positions in the word. The examples in (1) illustrate this fact.

## (1) High tone distribution

Initial position		Medial position		Final position	
a. /ɔ́fò/	‘prophecy’	b. /òkwók̀wò/	‘fowl’	c. /òfù/	‘one’
/òjù/	‘slave’	/ògúdè/	‘a name’	/èfó/	‘flesh’
/áḽì/	‘scorpion’	/òḽḽá/	‘ripping’	/àkú/	‘door’

## Sequences of H tones

d. /òḽòḽò/	‘bone’
/ńbííḽá/	‘bell’
/ńkíríká/	‘rickety’

In addition, we observe that some of these words have their H pitch distributed repeatedly on two or several syllables without intervening contrasting levels, a pattern that we will tackle in the analysis section.

## (b). The Low Tone

Though with a relatively lower F<sub>0</sub>, distributionally, the L tone like the H tone can be found in the initial, medial and final positions. Similarly, the L tone can be distributed consecutively on several syllables with no intervening contrasting levels, as (2) depicts:

## (2) Low tone distribution

Initial position		Medial position		Final position	
a. /ísé/	‘five’	b. /ńdùrì/	‘dove’	c. /òbì/	‘heart’
/ùḽḽù/	‘abundance’	/ókòlò/	‘okro’	/òḽḽì/	‘Iroko tree’
/àzò/	‘back’	/ákítí/	‘cheek’	/ógè/	‘time’

## Sequences of L tones

d.	
/ńdídì/	‘patience’
/òbòdò/	‘town’
/ńbòlò/	‘pebble’

A common behaviour of the H and L tones is that they may show two-way or three-way contrast in the otherwise homophones, such as *èkwà* ‘egg’, *ékwà* ‘cloth’, *ékwa* ‘cry’ (Utulu, 2015). More relevance to this study, however, is the implication of (1d) and (2d) to the subject of the OCP to be considered in Section VI.

## (c). The Downstep

Languages lacking the mid tone typically compensate for the gap by utilising a covert (floating) L tone referred to as (Non-automatic) Downstep (Clements & Ford, 1979; Pulleyblank, 1986; Clark, 1990; Liberman et al., 1993, among others). It may occur lexically or grammatically, giving rise to the labels: ‘lexical downstep’ and ‘grammatical downstep’, respectively. The context of operation of downstep is between two abstract consecutive Hs, in which the final H is the target. The downstepped final H characteristically lowers in pitch as a result of a progressive assimilatory effect of the intervening floating L tone. Like the central Igbo (and many other two-tone languages), the Èwùlù downstep is found between two consecutive right-edge grammatical Hs, with the format [... + H!H] (Utulu, 2015, 2020a).

However, the application of the Èwùlù lexical (word-based) downstep is restricted. As in (3), it is found exclusively in three-/poly-syllable words and never in two-syllable words. This, therefore, differentiates the variety markedly from the central variety, where word-based downstep typically targets bisyllabic words (e.g., *é!gò*, ‘money’ *á!g!ó*, ‘lion’, *ò!n!ó* ‘mouth’). In Èwùlù, the respective Igbo words are rather realised with sequences of two Hs, as in, *é!gò*, *á!gò*, *ò!n!ó* (Utulu, 2020c). Examples of lexical downstep in Èwùlù are shown in (3). Note – (n/a) is Not applicable.

## (3) Èwùlù Lexical downstep

	Initial position	Medial position	Final position	
			Applicable	
a.	n/a	n/a	[é!dè!ké]	‘blood’
b.	”	”	[ńkí!tá]	‘dog’
c.	”	”	[á!ḽò!kó]	‘shoe’
d.	”	”	[átó!lò]	‘sheep’
e.	”	”	[á!ní!ké]	‘axe’
f.	”	”	[á!wé!lé]	‘favour/luck’

In (3), it will be observed that the final high-toned syllables are downstepped. As we mentioned in the foregoing, the downstep process is traceable to an unspecified L tone. However, contrary to the pattern in (3), we observe that some specific trisyllabic items like the ones in (1d) do not attract downstep, for no obvious phonetic/phonological reason. Therefore, the examples in (1d) and (3a-f) seem to raise questions regarding the power of the OCP in regulating structures with consecutive identical tones. We will address the problem theoretically in the analysis Section.

In (3), it will be observed that two consecutive Hs in Èwùlù constructions may be subjected to grammatical downstep. At the grammatical level, as remarked earlier, the downstep typically targets the right edge of the phrase/clause. The postlexical tonal pattern is illustrated in (4) as follows:

## (4) Grammatical downstep

Basic form	Derived form
a. /ébé/ 'hawk'	[ísí é!bé] 'head hawk' 'hawk's head'
b. /óló/ 'work'	[ónò ó!ló] 'house work' 'work place'
c. /ófí/ 'thief'	[óné ó!fí] 'the one thief' 'a thief'

It is worth mentioning at this point that, in Èwùlù, lexical downstep does not contrast with H and L tones as may be found in some Igbo varieties. For example, in Onitsha-Igbo (see Williamson, 1986; Emenanjo, 1978) downstep may trigger lexical semantic contrast between words that are otherwise homophonous. This variety of the Igbo language does so by simply modulating the FOs of the three levels.

## B. Contour Tones

Phonologists (e.g., Akinlabi & Liberman, 2000; Ezenwafor, 2014) agree that the motivation of contour tones is the phonetic combination of two levels, H and L tones, particularly in registered tone systems. The formation of contours often results from the effects of the operation of some segmental rules which delete or desyllabify segments that bear either of the level tones. Once the segmental rules apply, the two levels would tend to segmentalise, thus becoming either a rising tone or falling tone, as demonstrated below.

## (a) The Falling Tone

Èwùlù has two domains in which the falling tone can be realised: (i) the word level, and (ii) the postlexical level. The two grammatical domains are illustrated in (5a & b) respectively:

## (5) The Èwùlù falling tone

a. Word-based falling tone			
i.	/ísí/	→	[ísí] 'six'
ii.	/èsáà/	→	[èsâ] 'seven'
iii.	/sáà/	→	[sâ] 'stop it!'
b. Postlexical falling tone			
i.	/ká/	+ /èfù/	→ [kêfù] 'surpass' 'body' 'be strong'
ii.	/sí/	+ /ìtè/	→ [sîtè] 'cook' 'pot' 'cook food'
iii.	/rí/	+ /òpà/	→ [rjòpà] 'eat' 'cock' 'eat cock'
iv.	/bú/	+ /òpà/	→ [bwòpà] 'slaughter' 'cock' 'slaughter cock'

Given the formation of the falling contour, it is clear that contours in Èwùlù are sequences of level tones realised phonetically on a single TBU. As (5a) and (5b) indicate, observe that the underlying heterosyllabic H.L sequence automatically turns to surface H-L contour tone. The falling tone [ˆ] is realised in the Èwùlù tonal grammar under the influence of two independent operating rules mentioned in the foregoing. First, it is realised under the influence of the V<sup>1</sup>-deletion rule, as in (a, i-iii) and (b, i-ii). Second, the falling tone is realised under the influence of the desyllabification rule, where /í/ and /ú/, as in (b, iii & iv) become [j] and [w] respectively. This latter rule is referred to as Glide Formation (Casali, 1995, 2011; Utulu, 2006, 2020b). In all cases, (whether vowel syncope, or glide formation is the rule operative in the grammar of the dialect) the stranded H tone naturally segmentalises with the following L tone to generate a surface falling tone.

## (b) The Rising Tone

Like the falling tone, the rising tone is phonetic. Its context is also at the lexical and postlexical levels. In the formation of the rising tone, the juncture L and H tones normally merge to derive the contour. This tonal pattern may occur in the affirmative verbs in (6a, i-iii), or in constructions, as the forms in (6bi-iv) show:

## (6) The Èwùlù rising tone

a. Word-based rising tone			
i.	/sí/	→	[sī] 'measure'
ii.	/gùú/	→	[gū] 'swim'
iii.	/lòó/	→	[lō] 'ruminate'
b. Postlexical rising			

i.	/tà/	+	/ázò	→	[tǎzò]
	‘chewed’		‘fish’		‘chewed fish’
ii.	/tè/	+	/ófé/	→	[tǒfé]
	‘cooked’		‘soup’		‘cooked soup’
iii.	/ìtè/	+	óǎǎ	→	[itǒǎǎ]
	‘pot’		‘fire’		‘hot pot’
iv.	/àni/	+	/ómá/	→	[ànǒmá]
	‘land’		‘beautiful’		‘beautiful land’

Because Èwùlù is a V<sup>1</sup> dominant dialect (Utulu, 2020a, 2020b), deletion of the first of two juncture vowel sequences is the norm. For this reason, we should expect that the first of the two boundary vowels in (6) would delete (and sometimes would desyllabify under the motivation of the glide formation rule that converts V<sup>1</sup>-bound /i, ɪ/ and /u, ʊ/ to [j] and [w] respectively and hence trigger contour tone formation. This, however, is usually not the case particularly if the consecutive tones affected by the segmental rules are identical. The observed exception is also of theoretical interest in this study.

#### IV. METHODOLOGY

The Èwùlù data for this study were drawn from two sources. The first body of the data was culled from Utulu (2015), Utulu (2020a), Utulu (2020b) and Utulu (2020c). The second set of data was gathered from two Èwùlù fluent, native speakers, a male and a female. The two sets of data were categorised into two: (i) word-based data, and (ii) phrasal-based data. We purposively gathered the two sets of data based on two different tonal patterns. The first set data consisted of samples with tone structures exhibiting adjacent ‘distinct’ tones. The second set incorporated samples with tone structures exhibiting adjacent ‘identical’ tones. We adopted this method of data stratification to highlight the morphophonological and syntactic environments under which the OCP effects may or may not apply in the Èwùlù tonal grammar. The environments where we expect the OCP effects to be active in the latter category of data thus informed our examination of the following tonal patterns: Boundary High Tone Deletion, Consecutive Lexical High and Low Tones, Tonal Affix, Downstep and final High Tone Displacement. In the OT analysis of the tonal processes, we assessed the strengths and weaknesses of the OCP in terms of its ability to compete with other conflicting constraints in the phonology.

#### V. THEORETICAL FRAMEWORK - OPTIMALITY THEORY

We adopt the framework of the standard Optimality Theory (OT) proposed by Prince and Smolensky (1993) for the analysis of the Èwùlù tone data. Our choice of the OT lends itself to the fact that the OCP, a principle which is central to the present study, is a constraint on outputs, given its ‘repair’ effects on input-output forms that otherwise violate it. With its basic two-way constraint formats, Faithfulness Constraint and Markedness Constraint, we assume the OT is an adequate model to account for the OCP-induced tonal phenomena, such as deletion and/or spread observed in the current data. The adequacy of the OT in handling phonological phenomena has been acknowledged by Yip (2002), who avers that, “The aspect of this theory that makes it so appealing to many phonologists is the universal nature of the constraints, which directly encode well-established cross-linguistic preference for particular classes of sounds and types of structures” (p. 79).

In this work therefore, we shall employ both the faithfulness constraints and markedness constraints to account for the six OCP-related tonal patterns mentioned in the preceding section. The faithfulness constraints adopted for the analysis are: IDENT-T, MAX-T, NOFUSION and \*DISASSOCIATE, while the markedness constraints assumed for the same purpose are: OCP, SPECIFY-T, NOLONGT and \*FLOAT (see McCarthy & Prince, 1993, 1995; Kager, 1999; Yip, 2002). The interpretation of the constraints is outlined in (7) as follows:

##### (7) Optimality Theory Constraints

###### **Faithfulness Constraints**

- i. IDENT-T - Every input tone and output tone are the same.
- ii. MAX-T - Every input tone has an output correspondent (No deletion of tone).
- iii. NOFUSION - Separate underlying tones must stay separate.
- iv. \*DISASSOCIATE – No removal of association lines.

###### **Markedness Constraints**

- i. OCP – Adjacent identical tones are prohibited.
- ii. SPECIFY-T – A TBU must be associated with a tone.
- iii. NOLONGT – A tone may be associated with at most one tone.
- iv. \*FLOAT – A tone must be associated with a TBU.
- v. NOCONTOUR – A TBU may be associated with at most one tone.

It should be noted that the relevance of these constraints is strictly based on the typology of the tonal patterns examined below (Note, for the reader and student with no basic knowledge in OT, please consult Kager, 1999; Yip, 2002).

## VI. TONAL ANALYSIS: A DESCRIPTIVE AND THEORETICAL ACCOUNT

In this section, we undertake both the descriptive and theoretical analyses of the six tonal patterns/processes already outlined in Section 4 in the subsections below.

A. *The Behaviour of Boundary Tones*

One intriguing aspect of the tonal patterns of some tone systems, particularly the Nigerian two-tone systems, is the ‘stability’ of tones despite the loss of their TBUs (or, as the case may be, the ‘deletion’ of tones for similar reason). Studies have shown that, in the course of deletion of a specified TBU, the H tone typically survives the TBU-deletion rule at the expense of the L tone. This kind of grammatical tone behaviour operative in the context where HL or LH sequence occurs, is common with the Edoid group of languages. The Urhobo language (Aziza, 2007) and possibly Emai, with attested exceptions (Egbokhare, 1990), are good examples.

However, at the other extreme are two-/three-tone languages that would rather preserve the H or the L regardless of the loss of its TBU (compare the case in (5) and (6), where the L like its H counterpart does not succumb to deletion but is rather preserved). Thus, in some Nigerian languages (Etsako and Yoruba inclusive), both the H and L tones would rather become stable and subsequently lead to contour tone formation, as the case in (5) and (6). Like Èwùlù, the Central Igbo is one well-known language that showcases tone stability (see Clark, 1978; Williamson, 1986; Goldsmith, 1990; Obianika, 2006; Utulu, 2018a, 2018b, 2019).

The stability of tone has long been observed by phonologists, prompting the suggestion that tone is an ‘autonomous’ prosodic property lacking segmental support. Indeed, it was this idea about tone and its ‘independent’ characteristics that advanced a non-linear phonological theory in the mid 70s, christened ‘Autosegmental Phonology’ (Goldsmith, 1976). The interesting stability of tone implicitly discussed in (5) and (6) is illustrated with additional structures in (8) as follows:

## (8) Tone stability

a.	/bì#á/	→	[bǎ]		
	‘come, affirmative’		‘flog’		
b.	/ò-gù-ù/	→	[ògù]		
	‘digging’		‘digging’		
c.	/àni/	+	/ókà/	→	[ànjókà]
	‘land’		‘maize’		‘maize land’
d.	/áfè/	+	/ótǎ/	→	[áfótǎ]
	‘cloth’		‘white’		‘white cloth’
e.	/òfú/	+	/àni/	→	[òfwàni]
	‘one’		‘land’		‘one land’
f.	/ádá/	+	/áfò/	→	[ádáfò]
	‘first female child’		‘a week day’		‘a name for first born female child’

In (8), it will be noticed that there occur the segmentalisation (conflation) of all the stranded L tones with the following H tones in (8a, c, d) and the conflation of all stranded H tones with the following L tones in (8b, e, f). As the patterns show, all the stranded tones specified on V<sup>1</sup> merge with the following tones sequel to the gliding or deletion of their respective TBUs.

Contrary to the tonal pattern in (8), there is a possibility for the same juncture tones to ‘defy’ the ‘stability effect’, as the examples in (9) show, even when the two segmental rules mentioned in the foregoing are operative in the grammar. This non-stability (i.e., deletion) effect happens if consecutive juncture tones, as in (9) are ‘identical’. The converse relations existing between (8) and (9) form the thrust of this subsection, which have implication for the functional effect of the tonal OCP. The non-stability effect on boundary tones is presented below:

## (9) Èwùlù boundary H tone deletion

a.	/fí#á/	→	[bjá]		
	‘come, affirmative’		‘flog’		
b.	/rí#ó/	→	[rjó]		
	‘beg’		‘beg’		
c.	/nú#é/	→	[nwé]		
	‘swallow’		‘swallow’		
d.	/nú#á/	→	[nwá]		
	‘came back’		‘came back’		
e.	/ótǎ/	+	/úkwú/	→	[ótǎúkwú]
	‘chair’		‘big’		‘big seat’
f.	/épná/	+	/úkwú/	→	[épnúkwú]
	‘eye’		‘big’		‘greed’
g.	/ónú/	+	/ómá/	→	[ónwómá]

- h. ‘neck’ /éǹá/ + ‘beautiful’ /úkwú/ → ‘nice voice’ [éǹúkwú]
- ‘eye’ ‘big’ ‘greed’
- i. /óló/ + /úkwú/ → [ólúkwú]
- ‘work’ ‘big’ ‘big project/task’
- j. /óǹé/ + /ómá/ → [óǹmá]
- ‘the one of’ ‘beautiful’ ‘beautiful one/person’

As (9) indicates, observe that, in all cases, the input juncture V<sup>1</sup>H tones are deleted, where /H#H/, /H+H/ sequences turn to a singleton [H]. Here, the first of the two boundary H tones is not preserved but lost, informing the tonal process we refer to in this works as *boundary/juncture tonal deletion*.

Following from the interesting tonal simplification process in (9), we assume that the ‘loss’ of the tone specified for the V<sup>1</sup> slot is triggered by the OCP effect. This is so because the OCP disallows adjacent identical tones thus, validating the statement in the introductory Section, ‘*adjacent identical elements are prohibited*’. However, we suggest that the curious paradox in (8), in which the juncture tones are preserved rather than deleted is informed by the occurrence of ‘distinct’ boundary tone sequences which satisfy the OCP. Thus, it makes sense here to argue that the strict observance of the tonal OCP in Èwùlù is hinged on ‘tonal adjacency’ and ‘tonal dissimilarity/similarity’ issues.

Below, we use the insight from the OT in tableaux (10A & 10B) to validate our assumption above, as we adopt the form in (9e), /ofjo ukwu/ ‘big seat’ for analysis, as follows:

(10A)	/ofjo ukwu/	OCP	MAX-T	SPECIFY-T	NOLONGT
	 H H H H				
a.	[ofjo ukwu]         H H H H	*!			
b.	→ [of-ukwu]         H		*		*

In the tableau in (10A), the candidate (b), a reflection of the output forms in (9), is the optimal candidate. This is so because it satisfies the higher-ranked constraints OCP which disallows adjacent identical tones. However, the candidate (a), which though incurs less violations of the existing constraints, loses out to candidate (b) for fatally violate OCP. Despite the fact that the winning candidate exhibits ‘tonal spreading’ which violates MAX-T, it satisfies the OCP which disallows any candidates (like candidate (a)) which display adjacency of identical tones.

However, with the case in (8), in which ‘tone stability’ is preferred to ‘tone deletion’, MAX-T would dominate the OCP. An OT analysis of this view is undertaken in (10B) taken the exemplar form, /àni ókà/ ‘maize land’ in (8c), as follows:

(10B)	/ani óka/	MAX-T	NOCONTOUR	SPECIFY-T	OCP
	 H H L L				
a.	[anj óka]         H H L L	*!			
b.	→ [anj óka]         H H L L		*		

In (10B), the optimal output is candidate (b), which dominates candidate (a). This is because the optimal candidate satisfies the faithfulness constraint, MAX-T which requires that no tone(s) should be effaced from representations. The ranking of faithfulness constraint over markedness constraints, i.e., MAX-T >> NOCONTOUR, SPECIFY-T, OCP, explains why the tonal deletion rule in (9) is intuitively inconceivable in (8), as far as the Èwùlù tonal grammar is concerned.

**B. Consecutive Lexical Hight Tones**

In the data available to us, some bisyllabic and trisyllabic words (11) have their TBUs take the same tonal quality, i.e., duplicated H tones specified on consecutive syllables throughout the utterance. The fact that the sequences do not alternate between Hs and Ls, as the examples in (3) and (4) naturally demonstrate caught our interested. The examples of consecutive high-tone syllables are shown below:

- (11) Word-based consecutive H tones in Èwùlù
- a. /íké/ → [íké] ‘strength’
- b. /ófú/ → [ófú] ‘twenty’
- c. /ódzì/ → [ódzì] ‘cola-nut’

- d. /ójí/ → [ójí] ‘cold’
- e. /émó/ → [émó] ‘laughter’
- f. /óβόβó/ → [óβόβó] ‘bone’
- g. /έΐΐΐ/ → [έΐΐΐ] ‘ant/snake’
- h. /άβόβó/ → [άβόβó] ‘leather’
- i. /έκωόκωó/ → [έκωόκωó] ‘paper’
- j. /έβόβά/ → [έβόβά] ‘a rash’

In (11), it will be observed that all the output forms retain the input H tone sequences, with no evidence of deletion, as was the case in (9). In principle, the occurrence of consecutive Hs, constrained strictly within the word in this case, violates the OCP. We recall that the OCP’s primary function is to disallow adjacent identical tones from occurring in a representation, and since the OCP appears to be inactive in the outputs in (11), we assume the OCP constraint must be dominated by some faithfulness constraints. We take the forms in (11a) and (11f) to validate our claim in the tableau in (12a) and (14d) respectively, as follows:

(12)	/ike/ H H	IDENT-T	NOFUSION	SPECIFY-T	OCP	*DISASSOC	NOLONGT
a.	→ [ike] H H				*		
b.	[ike] H	*!		*		*	
c.	[ike] H	*!	*				*

In the OT analysis in (12), candidate (a) which is an exact reflection of the input forms in (11, a-e) is the optimal of the three. In fact, its satisfaction of the higher-ranked constraint IDENT-T which candidates (b) and (c) fatally violate makes it the winner.

Nevertheless, on perceptual ground, if we assume the candidate (c) could potentially become the optimal candidate, capable of overriding the candidate (a), the OCP and SPECIFY-T must therefore dominate IDENT-T, NOFUSION, \*DISASSOCIATE, and NOLONGT. Our assumption is based on the tenets of the Autosegmental Theory. The theory recognises that sequences of identical tones ‘must’ be represented as ‘spread’ of a single tone (i.e., H spread) to sanction the OCP, following the theoretical assumptions of Leben (1973), Goldsmith (1976), and Yip (2002). An OT account of the proposed effect of spread on the forms in (11 a-e) would be that demonstrated in (13), as follows:

(13)	/ike/ H H	OCP	SPECIFY-T	IDENT-T	NOFUSION	*DISASSOC	NOLONGT
a.	[ike] H H	*!					
b.	[ike] H		*!	*		*	
c.	→ [ike] H			*	*		*

As (13) depicts, our re-ranking of the constraints, OCP>>SPECIFY-T, IDENT-T, \*DISASSOC makes the hitherto violable OCP constraint in tableau (12) become undominated in tableau (13).

Besides, we may account for the syllabically complex outputs in (11f-j) by adopting the constraints ranking in (12). Here we take the archetype form in (11f), /óβόβó/ ‘bone’ for analysis in (14), as follows:

(14)	$\begin{array}{c} /ə̀βə̀βə̀/ \\       \\ H H H \end{array}$	IDENT-T	NOFUSION	SPECIFY-T	OCP	*DISASSOC	NOLONGT
a.	$\begin{array}{c} \rightarrow [ə̀βə̀βə̀] \\       \\ H H H \end{array}$				*		
b.	$\begin{array}{c} [ə̀βə̀βə̀] \\   \\ H \end{array}$	*!		*		*	
c.	$\begin{array}{c} [ə̀βə̀βə̀] \\     \\ H H \end{array}$	*!		*	*	*	
d.	$\begin{array}{c} [ə̀βə̀βə̀] \\ / \ \ / \ \ / \\ H \end{array}$	*!	*				*

As (14) demonstrates, despite the fact that candidate (a), the perceptual correlate of candidate (d), violates the OCP, it yet won the competition. This is because it satisfies the more fundamental faithfulness constraint, IDENT-T.

However, the autosegmental ‘spread’ proposed in (13) allows us to rank markedness over faithfulness, that is, the ranking of OCP>>SPECIFY-T over IDENT-T>>NOFUSION, such that candidate (a), the winner in (14a) will now be dominated by the candidate (14d) and thus potentially becomes the winner, as in (15). The constraints re-ordering militating against IDENT-T>>NOFUSION (candidate (a)) in favour of the OCP (candidate(c)) is captured in (15) as follows:

(15)	$\begin{array}{c} /ə̀βə̀βə̀/ \\       \\ H H H \end{array}$	OCP	SPECIFY-T	IDENT-T	NOFUSION	*DISASSOC	NOLONGT
a.	$\begin{array}{c} [ə̀βə̀βə̀] \\       \\ H H H \end{array}$	*!					
b.	$\begin{array}{c} [ə̀βə̀βə̀] \\   \\ H \end{array}$		*!	*		*	
c.	$\begin{array}{c} [ə̀βə̀βə̀] \\     \\ H H \end{array}$	*!	*	*		*	
d.	$\begin{array}{c} \rightarrow [ə̀βə̀βə̀] \\ / \ \ / \ \ / \\ H \end{array}$			*	*		*

In (15), we will observe that candidate (d) as opposed to candidate (a) satisfies the higher-ranked constraint OCP, which the latter candidate fatally violated in (14a). Though candidate (15b) satisfies OCP, it is ruled out for violating the next higher-ranked constraints, SPECIFY-T and IDENT-T.

C. Phrasal Boundary Low Tones and Tonal Affix

In (9), we showed that one of two consecutive phrasal boundary H tones in Èwùlù normally undergoes deletion, because the sequences violate the OCP. In the case of two consecutive phrasal boundary L tones, as in (16), we expect that the same V<sup>1</sup>-deletion process would apply to resolve OCP violation. Surprisingly, this is not the case as no deletion applied. Rather, a floating H tone (also known as tonal affix, or tonal morpheme in the literature) is called up in the phonology to dislodge the first of the two L tones on the surface. Consider (16) as follows:

(16) Tonal affix (floating H tone) in Èwùlù

			<i>Float H tone</i>	
a.	/è̀βà/	+ /ò̀gò/	→ /è̀βà́ ò̀gò/	→ [è̀βò̀gò]
	‘bag’	‘farm		‘farm bag’
b.	/à̀bà/	+ /è̀ɲwè/	→ /à̀bà́ è̀ɲwè/	→ [à̀bè̀ɲwè]
	‘jaw’	‘monkey’		‘monkey’s jaw’
c.	/à̀ni/	+ /è̀wùlù/	→ /à̀ní è̀wùlù/	→ [à̀njè̀wùlù]
	‘land’	‘Èwùlù’		‘Èwùlù land’
d.	/̀ngàd̀zì/	+ /ò̀bí/	→ /̀ngàd̀zì́ ò̀bí/	→ [̀̀ngàd̀zìò̀bí]
	‘spoon’	‘king’		‘king’s spoon’
e.	/̀nkù/	+ /ò̀gàzù/	→ /̀nkù́ ò̀gàzù/	→ [̀̀nkùò̀gàzù]
	‘feather’	‘guinea fowl’		‘guinea fowl’s feather’
f.	/è̀bò/	+ /ì̀pè/	→ /è̀bò́ ì̀pè/	→ [è̀bwì̀pè]
	‘song’	‘mockery’		‘mocking song’

This type of tonal behaviour in (16) is prevalent in several two-tone languages of Nigeria (cf. Etsako: Edoid; Elimelech, 1976; Igbo: Hyman, 1975; Williamson, 1986; Anaang: Lower Niger Congo: Akpabio et al., 2021). Given the attested tonal affix in Èwùlù, we assume in this study it is employed to block (i.e., split) sequences of adjacent boundary Ls, without which the OCP would be violated. If this is necessarily true, the OCP must be ranked higher than \*FLOAT, SPECIFY-T, MAX-T and IDENT-T, as the tableau in (17) depicts. We take the form in (16a) for generalisation.

(17)	/ɛ̀pa ogo/	OCP	*FLOAT	SPECIFY-T	MAX-T	IDENT-T
a.		*!				
b.			*!	*		*
c.						*

The ‘splitting’ or the ‘intervening’ H floating effect, as candidate (b) displays in (17), allows it to be ‘faithful’ to the OCP. However, candidate (b) concedes defeat to its OCP-faithful counterpart, the candidate (c), with respect to the next higher-ranked constraint, \*FLOAT, which requires that a tone must be associated with a TBU. Of course, candidate (a) with consecutive Hs is the least harmonic of the three, having violated the higher-ranked constraint, OCP.

*D. Consecutive Lexical Low Tones*

Like consecutive H tones in (11, a-j), Èwùlù has lexical items with consecutive Ls. Such words contain between two and three syllables marked with consecutive L tones. This category of words is presented in (18):

- (18) Word-based consecutive H tones in Èwùlù
- a. /isi/ → [isi] ‘blindness’
  - b. /òpi/ → [òpi] ‘local flute’
  - c. /ùdù/ → [ùdù] ‘a type of musical instrument’
  - d. /ògò/ → [ògò] ‘favour’
  - e. /òpò/ → [òpò] ‘round worm’
  - f. /ògèdè/ → [ògèdè] ‘plantain’
  - g. /àkùkù/ → [àkùkù] ‘wind/breeze’
  - h. /àfífà/ → [àfífà] ‘bread’
  - i. /ògìrì/ → [ògìrì] ‘locust bean’
  - j. /òfìmìrì/ → [òfìmìrì] ‘sea’
  - k. /àpàkùtù/ → [àpàkùtù] ‘ideophone suggesting obesity’

In principle, from the perspective of the OCP effects, the tonal sequences (18) violate the OCP which disallows consecutive identical tones. An OT account of these OCP-violating sequences would look like the one already posited in (12), where faithfulness constraints outrank the OCP. We take the form in (19a) /isi/ ‘blindness’, for analysis, as follows:

(19)	/isi/	IDENT-T	NOFUSION	SPECIFY-T	OCP	*DISASSOC	NOLONGT
a.					*		
b.		*!		*		*	
c.		*!	*				*

In (19), IDENT-T which requires that the input tone structure be preserved in the output in conjunction with NOFUSION which requires that the underlying tone stays separate in the output licenses candidate (a), a perceptually similar candidate with candidate (c), as the winner. Candidate (c) loses out on the ground that it fatally violates the two higher-ranked faithfulness constraints that militate against spread.

However, bearing in mind the effect of SPECIFY-T influencing the treatment of Hs in (14), the ranking of the multisyllable morphemes in (18, f-k) would assume the same hierarchy. We take the example, /ògèdè/ ‘plantain’ in (18, f) as a case study in (20):

(20)	/ɔgɛde/ L L L	IDENT-T	NOFUSION	SPECIFY-T	OCP	*DISASSOC	NOLONGT
a.	→ [ɔgɛde] L L L				*		
b.	[ɔgɛde] L	*!		*		*	
c.	[ɔgɛde] L L	*!		*	*	*	
d.	[ɔgɛde] L	*!	*				*

Based on the current assumption that the OCP is potentially active in the Èwùlù tonal grammar, and given the functional effect of the constraint, SPECIFY-T, which sanctions tonal spread, we may therefore assume that the avoidance of repetition of the same tonal melodies via spread should be most preferred. On account of this, the OCP along with SPECIFY-T would have to dominate IDENT-T, as we demonstrated in (13) and (15). We exemplify the reordering of the ranking with the bisyllabic /isi/ ‘blindness’ in (21):

(21)	/isi/ L L	OCP	SPECIFY-T	IDENT-T	NOFUSION	*DISASSOC	NOLONGT
a.	[isi] L L	*!					
b.	[isi] L		*!	*		*	
c.	→ [isi] L			*	*		*

As can be seen, the candidate (c), which was the previously dominated in (19a) now becomes the winning candidate in (21), having satisfied the higher-ranked constraints, OCP and SPECIFY-T.

The same analytical procedure in (20), as in the case of (15d), will account for the optimality of candidate (d), the previous loser (20), in (22) as follows:

(22)	/ɔgɛde/ L L L	OCP	SPECIFY-T	IDENT-T	NOFUSION	*DISASSOC	NOLONGT
a.	[ɔgɛde] L L L	*!					
b.	[ɔgɛde] L		*!	*		*	
c.	[ɔgɛde] L L	*!	*	*		*	
d.	→ [ɔgɛde] L			*	*		*

We now turn to show how the OCP may influence ‘lexical downstep’, ‘grammatical downstep’ and ‘final H tone displacement’ in the following last two subsections.

*E. Downstepped High Tone*

*(a). Lexical Downstepped High Tone*

Recall that, in (3), we showed that downstep is attested in Èwùlù. The following items in (23) exhibit downstep operative in the word we earlier referred to as Lexical Downstep.

- (23) Èwùlù lexical downstep
- a. /òḃúlú/ → [òḃú!lú] ‘under(neath)’
  - b. /òkúté/ → [òkút!é] ‘stone’
  - c. /òtʃíʃá/ → [òtʃí!ʃá] ‘cockroach’

- d. /àbálá/ → [àbá!lá] ‘thunder’
- e. /ñfíkó/ → [ñfí!kó] ‘crab’
- f. /àbóábá/ → [àbóábá!á] ‘millipede’
- g. /ifélé/ → [ifé!lé] ‘shame’

It will be observed that, in all the cases, lexical downstep (23) driven by a covert L tone shops for final H tone. Consequently, we propose that the operation of the covert (floating) L tone between the two consecutive Hs is motivated by the OCP. Our argument here is hinged on the fact that, since OCP may be undominated other constraints such as NOLONGT, SPECIFY-T, the OCP will naturally rank higher than these two constraints. The ranking is demonstrated in (24) adopting the form (22a) /òḃú!lú/ ‘under(neath)’ for analysis:

(24)	/òḃulu/	OCP	NOLONGT	SPECIFY-T	IDENT-T
a.			*!		
b.				*	*
c.		*!			

In (24), candidate (b) is the most harmonic of the three candidates. The grammar’s preference for candidate (b) over candidate (a) and candidate (c) is the optimal candidate’s satisfaction of NOLONGT, and (b)’s violation of IDENT-T which ought to match it (the optimal candidate) with the abstract form.

(b). *Grammatical Downstepped High Tone*

It will be recalled that Èwùlù does not operate lexical downstep on bisyllabic words. However, at the grammatical level, two-syllable word with two consecutive H tones may attract downstep on the surface. This is on the condition that the disyllabic word is found at the right position of the phonological phrase. The examples in (25) illustrate this pattern: (25) Èwùlù grammatical downstep

		<i>Grammatical downstep</i>	
a.	/éṅá/ + /òṅwá/	→	[éṅó!ṅwá]
	‘eye’ + ‘sun’		‘face of the sun’
b.	/ókúwú/ + /ónó/	→	[ókúwó!nó]
	‘speech’ + ‘mouth’		‘utterance’
c.	/ézi/ + /ókúwú/	→	[ézi!kwú]
	‘real’ + ‘speech’		‘truth’
d.	/áfé/ + /ónó/	→	[áfó!nó]
	‘cloth’ + ‘mouth’		‘moustache’
e.	/ófú/ + /égó/	→	[ófúwé!gó]
	‘twenty’ + ‘money’		‘twenty (in currency)’
f.	/èfó/ + /ókúwú/	→	[èfó!kwú]
	‘body’ + ‘hot’		‘fever’

As (25) indicates, all the high-toned items in the second column are subject to grammatical downstep (grammatical floating L tone) in the output (third column). Since the same implementation of downstep at the lexical level takes place at the grammatical level, we assume the OCP is at work here as well. The intrusion of the phonetic downstep between two Hs is motivated to block sequences of two consecutive Hs which violate the OCP. An OT analysis will capture the patterns in (26), taking the abstract form, /éṅá òṅwá/ ‘face of the sun’ in (25a), as follows:

(26)	/éṅa òṅwa/	OCP	NOLONGT	*FLOAT	SPECIFY-T	IDENT-T
a.			*!			*
b.		*!				
c.				*		*

In tableau (26), the ranking OCP>>NOLONGT, \*FLOAT SPECIFY-T, IDENT-T makes the candidate (c) the most harmonic of the three candidates, fulfilling the condition that adjacent identical tones are prohibited. This faithfulness to the OCP is predicted by its observance of both the OCP and NOLONGT constraints. Though candidate (a) observes the OCP, it is relegated in the winning hierarchy due to spreading, which fatally violates NOLONGT. The least harmonic candidate (b), that which is faithful to the input structure and sanctioned by IDENT-T, is ruled out completely. This is because it fatally violates the higher-ranked, OCP.

*F. Final High Tone Displacement*

In our consideration of consecutive H tones, we have observed so far three possible tonal processes that may be deployed in the Èwùlù tonal grammar to resolve OCP violations. They are deletion, downstepping and spreading, the later process being possible due to the impact of SPECIFY-T. However, in relating to the forms in (25), some of our data in (27) show a rather bewildering pattern. In (27), we find that the final H tone preceded by another H tone, rather than downstep, is completely displaced by a L tone. The motivation for the Èwùlù preference of L tone to downstepped H tone in this context, as Utulu (2020a) opines, is not clear. The pattern is illustrated below, as follows:

(27) Èwùlù final high tone displacement

*Final high tone displacement*

- a. /ílé/ + /éwú/ → [íléwù]  
'tongue' + 'goat' → 'goat's tongue'
- b. /égó/ + /ínú/ → [égónnǔ̃]  
'money' + 'salt' → 'salt money'
- c. /ímí/ + /ánó/ → [ímjánò̃]  
'nose' + 'meat' → 'animal's nostril'
- d. /óná/ + /ísí/ → [ónǎsí]  
'sore' + 'head' → 'head sore'
- e. /ífě/ + /ónú/ → [ífónǔ̃]  
'something' + 'neck' → 'necklace'
- f. /óné/ + /ísí/ → [ónǎsí]  
'the one of' + 'head' → 'leader'

As (27) shows, across the board, the underlying final H tone alternates to a L tone. In central Igbo, and many other varieties of Igbo, downstep is typically the preferred process in this context. We might argue that the puzzling pattern (27) is a 'supplementary' tonal strategy Èwùlù deploys to avoid OCP violations. In (28), we demonstrate with the abstract form in (27a) /ílé éwú/ 'goat's tongue' to show how this unique pattern plays out in a constraint-based, OT model:

(28)	/íle éwu/	OCP	IDENT-T	SPECIFY-T	MAX-T	NOLONGT
a.			*		*	*
b.		*!				
c.		*!	*		*	

The prevailing 'stiff' competition between candidate (a) and candidate (b) in (28), i.e., between markedness and faithfulness, seems to be 'resolved' by the hierarchical ranking of OCP over IDENT-T. The candidate (b) violation of the higher-ranked constraint makes it a loser, thereby paving a way for the candidate (a) to become the most harmonic candidate. The candidate (c) is however ruled out, having violated the first two higher-ranked constraints. The inconceivable phonetic form \*[ílé éwú] (including the rest of the forms in (27)) would be a loser too on account of its violation of \*FLOAT, which candidate (a) does not violate.

VII. CONCLUSION

In this study, we have made an attempt through a theoretical description of a body of tonal data to complement the facts that have been established in existing tonological studies on the subject of the OCP, a constraint initially thought to act as an absolute condition on adjacent identical tones (e.g., McCarthy, 1986; Myers, 1997). We have done so by adopting the data (both the existing and fresh data) from a relatively unknown, small dialect referred to as Èwùlù (Igboid, West Benue-Congo: Nigeria). Using the Optimality-Theoretic model, we described some peculiar tonal patterns in the dialect. Also, we described some general tonal structures in the dialect that recur in Nigerian tone

systems, particularly the two-tone systems that advance our understanding of how the OCP functions as a universal filter on tonal duplication problems but may be violable due to some conflicting higher-ranked constraints that potentially dominate it. Given the attested tonal processes, in which, of the 14 tokens of OCP effects theoretically analysed in this study, 9 (64%) of them showed the OCP dominance over other conflicting constraints. The rest 5 (36%) cases exemplified the dominance of some relevant fundamental conflicting constraints over the OCP. The results of this study thus, crucially evoke Odden's (1995) assertion that, "The strongest possible version of the OCP... is that there may be a dispreference for adjacent identical tones; languages are free to express this dispreference by constraining lexical representations, by adding rules of tone fusion, or tone deletion, or by putting conditions on tone spreading rules. Ultimately, languages retain the option of doing nothing about OCP violations" (p. 464).

One vital revelation of this study, therefore, is its validation of the fact that the OCP is not inviolable. Its violability, as evidenced in the present data, reveals it is a soft, gradient constraint, just like other constraints active in Universal Grammar (Goldsmith, 1976, 1995; Odden, 1986, 1995, 2013; Frisch et al., 2004; Oostendorp, 2005; Akpabio et al., 2021, among others). In essence, the inviolability or violability of the OCP is subject to structure-specific tonal patterns, as much as it is to language-specific tonal structures.

## REFERENCES

- [1] Akinlabi, Akinbiyi and Mark Liberman. (2000). The tonal phonology of Yoruba clitics, In B. Gerlach and J. Grizenhout (eds.). *Clitics in phonology, morphology and syntax*. Amsterdam/Philadelphia: John Benjamins Publishing Company
- [2] Akpabio, Unwana, Olusanmi Babarinde, and George Iloene. (2021). A constraint-based analysis of obligatory contour principle in Anaang morphological constructions, *Journal of Language Teaching and Research*, 12 (3), 466-476.
- [3] Aziza, Rose O. (2007). Phonological processes and their effect on lexical tones in Urhobo. In Ozo-Mekuri Ndimele (ed.), *Nigerian languages, Literatures, culture and reforms: A festschrift in Honour of in Honour of Ayo Bamgbose*, 461-474, Port Harcourt: M & J Grand Orbit Communication Ltd and Emhai Press.
- [4] Casali, Roderic F. (1995). *Patterns of glide formation in Niger-Congo: An optimality account*. Los Angeles: UCLA and SIL, 1-17.
- [5] Casali, Roderic F. (1995). *Patterns of glide formation in Niger-Congo: An optimality account*, 2-18. Department of Linguistics, UCLA: UCLA and SIL.
- [6] Casali, Roderic F. (2011). Hiatus resolution. In Marc van Oostendorp, Colin J. Ewen, Elizabeth Hume, and Keren Rice (eds.), *The Blackwell Companion to Phonology*. Blackwell Publishing, Blackwell Reference Online.
- [7] Clark, Mary M. (1978). *A dynamic treatment of tone* (PhD dissertation). University of Massachusetts, Amherst.
- [8] Clark, Mary M. (1990). *The tonal system of Igbo*. Dordrecht: Foris.
- [9] Clements, George N., and K. Ford. (1979). Kikuyu tone shift and its synchronic consequences. *Linguistics Inquiry* 10, 179-210
- [10] Egbokhare, Francis O. (1990). A phonology of Emai (PhD thesis). University of Ibadan, Ibadan.
- [11] Elimelech, B. (1976). A tonal grammar of Etsako. *UCLA Working Papers in Phonetics* 35.
- [12] Emenanjo, Emmanuel N. (1978). *Elements of modern Igbo grammar*. Ibadan: Oxford University Press.
- [13] Ezenwafor, Chikelu I. (2014). Contour tones in Igbo: 'Where they come from'. *Theory and Practice in Language Studies*, 4(4), 661-667.
- [14] Ezimechine, Emmanuel O. (2014). *A history of Ewulu people of Delta State, Nigeria, From the earliest time up to 1960*. M.A. Dissertation, Ibadan: University of Ibadan.
- [15] Frisch, Stephen A., Janet B. Pierrehumbert, and Michael B. Broe. (2004). Similarity avoidance and the OCP. *Natural Language and Linguistic Theory*, 22, 179-228.
- [16] Goldsmith, John. (1976). *Autosegmental phonology*. PhD dissertation, MIT [Published 1979, New York: Garland].
- [17] Goldsmith, John. (1990). *Autosegmental and metrical phonology*. Oxford: Blackwell.
- [18] Goldsmith, John. (ed.) (1995). *The handbook of phonological theory*. Oxford: Blackwell.
- [19] Hyman, Larry M. (1975). *Phonology: theory and analysis*. Holt Reinhard Winston, New York.
- [20] Kager, René. (1999). *Optimality theory*. Cambridge: Cambridge University Press.
- [21] Leben, William (1973). *Suprasegmental phonology*. (PhD dissertation) MIT.
- [22] Liberman, Mark, Michael J. Schultz, Soonhyun Hong, and Vincent Okeke. (1993). The phonetic interpretation of tone in Igbo. *Phonetics* 50(3), 147-160.
- [23] McCarthy, John. (1986). OCP effects: Gemination and antigemination. *Linguistic Inquiry* 17, 203-263.
- [24] McCarthy, John, and Alan Prince. (1995). Faithfulness and reduplicative identity. In Jill Beckman, Laura Dickey, and Suzanne Urbanczyk (eds.) *UMOP 18: Papers in optimality theory*, 249-384. Amherst, GLSA, UMass [Also ROA, 60].
- [25] Myers, Scott. (1997). OCP effects in optimality theory. *Natural Language and Linguistic Theory* 15(4), 847-892.
- [26] Obianika, Chinwe. (2006). Autosegmental analysis of tone in Igbo associative constructive. In Ozo-Mekuri, Ndimele et al (ed.), *Language and economic reforms in Nigeria*, 259-274, Port Harcourt: M & J Grand Orbit Communication Ltd and Emhai Press.
- [27] Odden, David. (1986). On the role of the obligatory contour principle in phonological theory. *Language* 62, 353-583.
- [28] Odden, David. (1995). Tone: African languages. In John Goldsmith (ed.), *The handbook of phonological theory*, 444-475, Oxford: Blackwell.
- [29] Odden, David. (2013). Formal phonology. *Nordlyd*, 40 (1), 249-273.
- [30] Oostendorp, Marc. (2005). *Obligatory Contour Principle*. Unpublished Manuscript.
- [31] Prince, Alan., and Paul Smolensky. (1993). *Optimality theory: Constraint interaction generative grammar*. Rutgers University Cognitive Science Centre Report TR-2. Available at <http://rucss.rutgers.edu/publicationsreports.html>.
- [32] Pulleyblank, Douglas. (1986). *Tone in lexical phonology*. Reidel, Dordrecht.
- [33] Utulu, Don C. (2006). OCP effects: Elision and glide formation in Èwùlù. *Awka Journal of Linguistics and Languages*, 2, 109-118.

- [34] Utulu, Don C. (2015). Èwùlù tone system: A preliminary investigation. *University of Uyo Journal of Humanities*, 19(1), 106-125.
- [35] Utulu, Don C. (2018a). The patterning of segments and tones in Èwùlù compounding process. *International Journal of Humanities, Social Sciences and Education* 5(3), 1-10.
- [36] Utulu, Don C. (2018b). Hiatus resolution strategies and the obligatory contour principle: Èwùlù as a case study. *International Journal of Research in Humanities and Social Sciences* 5(3), 1-10.
- [37] Utulu, Don C. (2019). Vowel doubling in Urhobo: The case of loanword. *Journal of West African Languages*, 46(1), 32-46.
- [38] Utulu, Don C. (2020a). A description of some structures of (un)derived tones in Èwùlù nouns. *European Journal of Literature, Language and Linguistics Studies*, 4 (2), 36-51.
- [39] Utulu, Don C. (2020b). Syllable constraints, repair strategies and segmental processes in Èwùlù. *Sapientia Global Journal of Arts, Humanities, and Development Studies*, 3(4), 141-155.
- [40] Utulu, Don C. (2020c). Some structural patterns of Èwùlù lexical tones. *European Journal of Language Studies*, 7(1), 66-80.
- [41] Williamson, Kay (1986). The Igbo associative and specific constructions. In K. Rogers, H. van der Hulst, and M. Mous (eds.), *The phonological representation of suprasegmentals*, 195-208. Dordrecht: Foris.
- [42] Yip, Moira (2002). *Tone*. Cambridge: Cambridge University Press.

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# Social Roles as a Construct of Ecological Interaction: Diachronic Aspects

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**Abstract**—Ecolinguistics contributes to the understanding of how language serves to shape, nurture, influence, or destroy human relationships. Language is a part of the living world that allows directing the human activity. The focus of this study lies in researching of a human speech behavior, which displays the connection between the past, present and future of the humanity, and demonstrates the relationship between language, essence of life and human consciousness. The results of such interpretation find their presentation in the system of ideas concerning the world and, as a result, shape the principles of human interaction, which present a unique social and historical experience. The research material consists of dialogic fragments from fiction and film scripts of the XX and XXI centuries, which illustrate the changes in verbal and non-verbal behaviour of a discursive personality while implementing different social roles in the process of communication. The analysis of the differences in the speech repertoire of a discursive personality when performing various social roles is based on the principles of ecolinguistics, discourse theory and linguopragmatics. The methodological basis allowed to compare the rules of human interaction in the XX and XXI centuries and to project the direction of these changes in the human view of the world in future.

**Index Terms**—ecolinguistics, non-verbal behaviour, social role, speech repertoire, verbal behaviour

## I. INTRODUCTION

Language seizes the product of human cognition of the world and encrypts its cognitive engagement by its own tools, predetermining the growth and expansion of the human view of the world. The world picture is a dynamic cognitive framework, its author's universal view about the world, gained as a consequence of synthesizing the sensory background of cognition (Bondarenko et al., 2017). The expression of the ambient realm is included in linguistic units represented as a single part of the world's puzzle (Zhayvoronok, 2002, p. 53).

The ground of the world view comprises the phenomena of the surrounding reality, which are decrypted, consolidated and realized in individuals' and society's pictures and notions (Klochko, 2018, p. 48). Respectively, the framework of pictures and notions in the lingual world view shapes a versatile subject code that is generic to present and future generations (Skrynnik, 2021, p. 133). The linguistic world view reflects the connection between language, human being and human consciousness, and it can be treated as an interpretation of the past, present and future of the mankind.

Correspondingly, the ecolinguistic perspective to the study of natural languages is suitable in this way due to its holistic, interdisciplinary character and powerful explanatory potential (Pasynok et al., 2017, p. 130). The supposition of extended ecology (Steffensen, 2011) presupposes that ecolinguistics is enhancing by integrating validity and sense into ecological structures. As a consequence, it is argued that human ecology has acquired a profound and nonreversible sense. The term "sense-saturated" (Steffensen & Fill, 2014, p. 17) signifies that human being in particular eco-social surroundings interlinks with semiotic processes.

Ecolinguistic paradigm enables discourse to function as a source of shaping social relations and their product simultaneously (Shevchenko, 2015, p. 126–127). As a practical matter, discourse obtains the functions to stimulate the social evolution, which, in its turn, advances communicative competence, specifically, the validity of the utterance in a particular social context.

The **relevance** of the research is based on the study of the speech repertoire of the individual in the ecolinguistic perspective with a focus on diachronic comparison of the norms of human interaction in the XX and XXI centuries.

The **object** of research is presented by verbal and nonverbal communicative components, employed by a discursive personality while performing various social roles. The **subject** lies in the identification of pragmatic features and functions of verbal and nonverbal components in the interaction process used by discursive personalities while performing various social roles, in the diachronic aspect. **Research methods** are based on the speech analysis and traditional critical studies of discourse in the ecolinguistic dimension (Cowley, 2013; Steffensen & Fill, 2014; Stibbe, 2019). The **aim** of this study focuses on the analysis of the differences in the speech repertoire of discursive

personalities while performing different social roles in the institutional and everyday types of discourse, taking into account their diachronic changes.

## II. THEORETICAL BACKGROUND

The need for ecocontrol, which has been increasingly discussed in recent times (Panchenko, 2013, p. 374), can be applied not only to nature and environment, but also to predicting the language policy for regulating communication, and harmonious relations between communicators. When investigating the variability of speakers' verbal and nonverbal skills of interaction in ecolinguistic perspective in diachronic aspect, we find it expedient to consider them in the configurations of social roles in the marginal and peripheral zones of discursive environment (Soloshchuk, 2016) in institutional and everyday communication. Social roles vary throughout the life cycle of the individual, and, accordingly, change with the ephemerality of historical evolution. Diachrony in the linguistic sense is a conditionally vertical section of language, in which the object of linguistic analysis concerns the development of language at a certain historical stage (Giacalone et al., 2013). The speech characteristics of a discursive personality in the process of performing social roles under the institutional and everyday conditions of communication have its differences in different periods of historical development of society.

In the XX century, the social roles were characterized by a clear distinction between verbal and nonverbal speech arrangement in the institutional and everyday types of discourse, as evidenced by 78% of examples of the illustrative material (100% are examples of discursive fragments containing demonstration of changing of social roles for the historic period of the early XX century). With the help of verbal and nonverbal repertoire, speakers differentiate the performance of their roles in non-nuclear areas of the discursive environment, as well as demonstrate a clear transition from performing roles under institutional and everyday conditions and vice versa.

Status-role relations are clearly reflected in communication in the institutional discourse (Skrynnik, 2019, p. 158). Thus, under these circumstances behavioral norms are to be preserved (Morozova, 2018, p. 81). Taking into account the basic features of the ecological communicative strategy (Panchenko, 2013, p. 387–388), which are in general opt to save physical and emotional health, it can be stated that the basic principles of ecological communication are not to have a detrimental effect on human health and psycho-emotional state (Skrynnik, 2021, p. 133). Respectively, the non-ecological communication consists of communicative means, strategies and tactics which do not coincide with behavioral standards and harmony (Soloshchuk, 2016). That means that the ecological communication aims to preserve behavioral standards and principles of cooperation (Sedov, 2004) when interacting to any speech partner.

## III. RESULTS

In the example below, the discursive personality performing the social role of an attorney behaves politely and restrainedly under official business conditions. The attorney, as well as his partner, a judge, demonstrates adherence to the ecological strategy of communication with representatives of the peripheral zone of the discursive environment at the verbal level of interaction. Due to the non-verbal component, they can both open the veil that hides their true intentions, while remaining within the frames of courtesy:

(1) [*The scene of a trial in court*]

*Gilmer: [standing to object] Your Honor, I object. Mr. Finch is browbeating the witness.*

*Judge Taylor: [laughs outright] Oh sit down, Horace, he's doing nothing of the sort. If anything, the witness's browbeating*

*Atticus (Lee).*

Moral and ethical norms of communication are preserved with the help of polite direct addresses that emphasize the social status of the communicative partner (*Your Honor*), forms of polite refusal (*I object*), refusal is also performed with the help of a kinesic component (*standing to object*). The Judge shows his disagreement politely on the verbal level with the direct address (*Horace*) and explanation (*he's doing nothing of the sort*) but on the non-verbal level he expresses his ironic attitude more openly (*laughs outright*).

In today's world, in the XXI century, the boundaries between the performed social roles are less clear than in the XX century. Clear boundaries between the roles in non-nuclear areas of communication can be traced in 55% of examples of the illustrative material (100% are discursive fragments that demonstrate the change of social roles by a discursive personality during the historical period of the XXI century). The interlocutor's attention is drawn to both intensified and de-intensified use of nonverbal components, that is any deviation from the normative use of nonverbal components in certain stereotypical communicative situations attracts attention (Soloshchuk, 2006). And while communication in the XX century is characterized by the normative use of nonverbal components in non-nuclear areas of the discursive environment, in the XXI century intensified or deintensified use of nonverbal components is dominating, which are characterized by interaction with verbal components according to the principle of contradiction (Soloshchuk, 2006). If at the verbal level the observance of the principles of politeness and restraint is maintained, then non-verbal components, which are multifunctional in nature and can be interpreted in different ways depending on the communicative conditions, explicitly demonstrate the true intentions of the interlocutor:

(2) *BEN WHITTAKER: Hi, I'm Ben Whittaker. I received an e-mail about an interview for the Senior Intern Program*

*[kind of laughs at the idea].*

RECEPTIONIST: *Hey Ben, how's it goin'?*

BEN WHITTAKER: *It's goin' good. Real good. Thank you.*

RECEPTIONIST: *Excellent. Take a seat right around the corner and someone from Talent Acquisition will come get you.*

*[Ben thanks her]* (Meyers, 2014).

At the verbal level, the intern-speaker uses a polite form of explaining why he came to the office (*Hi, I'm Ben Whittaker. I received an e-mail about an interview for the Senior Intern Program*) but at the nonverbal level he demonstrates irony (*kind of laughs at the idea*). Ben Whittaker is 60 and he looks for a job in a modern company, this idea makes him feel embarrassed. The nonverbal component demonstrates the true psycho-emotional state of the speaker, but the double nature of the nonverbal component, when it is possible to pretend that one does not notice it or considers it irrelevant to the communicative process, allows to keep within the ecological norms of communication.

The tools for preserving the ecological strategy of communication and avoiding the contradictory vector of communication in XX century were nonverbal components:

(3) *"Dr. Burnham will come when it is possible," Adam said coldly. Then after a moment in which he met the resentment*

*and accusation, he said, "Governor, I think that it would be a good thing for you to lie down. To get some rest."*

*"No," the Boss said hoarsely, "no."*

*"You can do no good by not lying down. You will only waste your strength. You can do no good."*

*"Good," the Boss said, "good," and clenched his hands as though he had tried to grasp some substance which had faded*

*at his touch and dissolved to air.*

*"I would advise it," Adam said quietly, almost softly. Then he turned an inquiring glance upon Lucy.*

*She shook her head. "No, doctor," she almost whispered. "I'll wait. Too" (Warren, 1946, p. 398-399).*

Nonverbal components can implicitly hint at the communicator's indifference (*Adam said coldly*); weakness (*the Boss said hoarsely; clenched his hands as though he had tried to grasp some substance which had faded at his touch and dissolved to air*); resentment (*Adam said quietly; almost softly*); inquiry (*Then he turned an inquiring glance upon Lucy*); denial (*She shook her head; she almost whispered*), but did not report directly about his emotional or physical state and intentions.

The communicative processes in the XXI century are characterized by verbal expression of dissatisfaction, which can be expressed both implicitly and explicitly, but most often openly due to the transparency of everyday discourse:

(4) RICHARD BROWN: *Who are you, why should we know you, what do you want to do with your life?*

CLAIRE: *Okay. I'm Claire. I'm from Upstate New York. Why you should know me? I don't know. [chuckles] Yeah. I don't*

*know [shrugging] I guess because my uncle is the president of the school.*

RICHARD BROWN: *Ew. Henry Wright is your uncle?*

CLAIRE: *Yes.*

RICHARD BROWN: *I can't stand the fuck.*

CLAIRE: *[laughs] I don't really like him either.*

RICHARD BROWN: *That's very good to hear. I mean, he's so peach melba. Just slimy and...[makes his face]* (Roberts, 2018).

The speaker when performing the role of a teacher expresses his negative attitude to the school president openly (*I can't stand the fuck; he's so peach melba. Just slimy*). The non-verbal kinesic component is used to support the verbal expression (*makes his face*).

Implicit statements or non-verbal reflection under different communicative conditions can serve as mitigator marks for avoiding the transition of a communication process into a contradictory direction. Implicit statements are characteristic of different configurations of social roles in both institutional and everyday types of discourse. However, for everyday communication explicit statements are more characteristic, which is due to the "transparency" of the everyday discourse. The ability to operate the implicit statements is effective in obtaining the desired results if the ecological strategy is used.

Everyday discourse is characterized by free choice of verbal and nonverbal components. Such freedom of choice expands the boundaries of ecological communication. Violation of the principles of harmonious communication under everyday circumstances is a rather vague concept due to the high level of spontaneity of everyday communication. Only excessive violation of the norms of harmonious communication in everyday discourse can be considered non-ecological from the point of view of ecolinguistics. Verbal and nonverbal signals, words and actions must correspond to the meaning contained in them (Bibi, 2001); for example, it is unethical to break the communicative process by interrupting speakers before they have expressed their point of view, changing the subject when the other wishes to express a different idea, or nonverbally distract others from the topic under discussion.

Communication in everyday life in the XX and XXI centuries is also characterized by certain features. In the XX century, the use of polite forms and care for the emotional state of the partner are almost mandatory. It can be stated, using modern terminology, that much attention is paid to the ecological control of speech:

(5) *So we moved on through the corridor to the big lobby, where we would take an elevator up to his (the Boss') office.*

*Some of the men lounging along the corridor stepped back a little and said, "Howdy-do, Governor," or "Hi, Boss," but*

*the Boss only bowed his response to the greetings (Warren, 1946, p. 420).*

The communicative situation of "interaction of neighbors" in the time range "the XX century" is characterized by a general focus on cooperation, as evidenced by the constant use of polite direct addresses (*Governor; Boss*); phatic greetings (*Howdy-do, Governor; Hi, Boss*), kinesic (*the Boss only bowed his response to the greetings*) and proxemics (*Some of the men lounging along the corridor stepped back a little*) components for expressing politeness. The communicators present a cooperative-conformist type of a discursive personality.

The communication of the XXI century speakers is characterized by a lower degree of cooperation and a lower level of attention to establishing harmonious relations. The following example demonstrates deviations from the principles of ecological communicative strategy, because the general direction of the interaction can be described as more conflicting:

(6) *PHILLIPE: The neighbor keeps parking there. He thinks it's his space. [door alarm beeping] Not for much longer.*

*DRISS: How's it going?*

*PHILLIPE'S NEIGHBOR: [chattering on phone] What?*

*DRISS: Am I bothering you, Blondie? Want a coffee?*

*PHILLIPE'S NEIGHBOR: What?*

*DRISS: [muttering angrily] Come on. [taking him out of the car] Go on, read this!*

*PHILLIPE'S NEIGHBOR: "Keep free at all times."*

*DRISS: Louder!*

*PHILLIPE'S NEIGHBOR: [reading loudly] That's the way.*

*DRISS: [shouts and pokes a sigh] Read it all!*

*PHILLIPE'S NEIGHBOR: "Reserved parking."*

*DRISS: Get that into your thick skull and move! Go on, Blondie, piss off! (Nakache, Toledano, 2011)*

The interaction of modern communicators, which refer to the representatives of the peripheral zone of the discursive environment (Soloshchuk, 2016), is characterized by a lower level of politeness presented both verbally (*Come on; Go on, read this! Louder! Get that into your thick skull and move! Go on, Blondie, piss off!*) and nonverbally (*taking him out of the car; shouts and pokes a sigh*). The general direction of communication acquires a more contradictory direction than a cooperative one.

#### IV. CONCLUSIONS

Language, which is an instrument of human interaction, ensures the existence of humanity. Contacts between people are so diverse that even a natural language sometimes becomes inconvenient or insufficient for human interaction. The resourceful mind uses new tools that are more appropriate in such situations. In this case, the main thing is the new tool of interaction, the language moves to the background. Flexibility and the ability to adapt to different living conditions encourage humanity to seek new means of interaction with each other and with the environment.

Examining the speech behavior of communicators in their performance of various social roles in the aspect of diachrony, we observe a tendency to blur the boundaries of verbal and nonverbal performance of social roles played by a modern discursive personality and to modify the principles of the ecological communicative strategy. Verbal and nonverbal behavior in the performance of social roles under the institutional and everyday conditions of communication of the XX century are characterized by a clearer organization and order in comparison with the XXI century. Current trends in globalization and the rapid pace of development of the society have a direct impact on communicative habits of speakers of various range.

At the present stage of human development there is a tendency to strive for conciseness in speech. Simplification of speech means is observed at the level of direct addresses (disappearance of honorary addresses and respectful and polite expressions), reduced forms of courtesy statements. In this case, nonverbal components play a greater role in understanding the emotional state of the partner and his communicative aspirations. That is, the reduction of the speech repertoire of a modern discursive personality leads to the expansion of his nonverbal passport. Nonverbal communication is becoming a new tool that makes interaction more effective and, at the same time, short-lived. This, in turn, requires communicators to be competent in treating the non-verbal passports of interlocutors. After all, maintaining the physical and emotional health of the addressee and his communicative partners under the conditions of institutional communication is the key to successful negotiations and maintenance of partnerships. The use of ecological communicative strategy in everyday discourse prevents from creating conflict situations and promotes the cooperative development of communication.

The **perspective** of further research gives an opportunity to study the speech repertoire of a discursive personality in a wider time range, taking into account gender and cultural factors.

## REFERENCES

- [1] Bibi, S. A. (2001). Obucheniiye tsennostyami cherez soderzhaniye predmeta “Kommunikativnyye issledovaniya” [Learning values through the content of the subject “Communicative Research”]. *Siberia. Philosophy. Education: Scientific and journalistic almanac*, 4, 77–94.
- [2] Bondarenko, Ye. V., Martyniuk, A. P., Frolova, I. Ye. & Shevchenko, I. S. (2017). *Kak narisovat' portret ptitsy: metodologiya kognitivno-kommunikativnogo analiza yazyka [How to draw a portrait of a bird: methodology of cognitive-communicative analysis of language]*. In I. S. Shevchenko (Ed.), KhNU named after V. N. Karazin.
- [3] Cowley, S. J. (2013). Bio-ecology and language: a necessary unity. *Language Sciences*. [https://www.academia.edu/9040704/Bioecology\\_and\\_language\\_a\\_necessary\\_unity?auto=download](https://www.academia.edu/9040704/Bioecology_and_language_a_necessary_unity?auto=download). Retrieval time: 20.04.2020.
- [4] Fill, A. & Mühlhäusler, P. (2001). *The Ecological Reader. Language, Ecology and Environment*. Continuum, London.
- [5] Giacalone Ramat, A., Mauri, C. & Molinelli, P. (2013). *Synchrony and Diachrony: A dynamic interface*. Philadelphia, Pennsylvania: John Benjamins North America, 17–18.
- [6] Klochko, S. O. (2018). Movna osobystist' Nel'sona Mandely u ploshchyni ekolinguistyky ta psyholinguistyky [Nelson Mandela's linguistic personality in the field of ecolinguistics and psycholinguistics]. *Transcarpathian philological studies*. Uzhhorod National University, 44–51.
- [7] Lee, H. *To kill a mockingbird*. <https://www.cbsd.org/cms/lib/PA01916442/Centricity/Domain/1611/trial%20script%20TKM.pdf> Retrieval time: 22.08.2018.
- [8] Meyers, N. (2014). *The Intern*. <http://www.ivanachubbuck.com/wp-content/uploads/2012/02/The-Intern-Ben-Patty-Entire-Screenplay.pdf>. Retrieval time: 02.08.2018.
- [9] Morozova, I. I. (2018). Stereotypizatsiya personazhnogo movlennya [Stereotyping of personal speech]. *Visnyk of KhNU named after V. N. Karazin. Foreign philology*, 87, 77–84.
- [10] Nakache, O. & Toledano, E. (2011). *The Intouchables*. [https://sublikescript.com/movie/The\\_Intouchables-1675434](https://sublikescript.com/movie/The_Intouchables-1675434) Retrieval time: 02.08.2018.
- [11] Panchenko, N. N. (2013). Ekologichnost' komunikatsii skvoz' prizmu dostovernosti informatsii [Environmental friendliness of communication through the prism of information reliability]. *Emotivnaya lingvoekologiya v sovremennom komunikativnom prostranstve [Emotional linguistic ecology in modern communicative space]*. VGSPU “Peremena” Publishing House, 387–388.
- [12] Pasyuk, V. G., Morozova, O. I. & Samokhina, V.O. (2017). Ekolinguistychnyj pidhid do analizu inozemnykh mov ta pedagogichnogo protsesu yih navchannya v ukraïns'kykh vyshah [Ecolinguistic approach to the analysis of foreign languages and the pedagogical process of their learning in Ukrainian universities]. *Yakisna movna osvita u suchasnomu globalizovanomu sviti: tendentsiyi, vyklyky, perspektyvy [Quality language education in the modern globalized world: trends, challenges, prospects: materials of the I All-Ukrainian scientific-practical conference]*. Sumy: SSU, 128–132.
- [13] Roberts, W. (2018). *The Professor*. [https://sublikescript.com/movie/The\\_Professor-6865690](https://sublikescript.com/movie/The_Professor-6865690) Retrieval time: 13.01.2019.
- [14] Sedov, K. F. (2004). *Dyskurs i lichnost': evoliutsiya komunikativnoy kompetentsii [Discourse and personality: the evolution of communicative competence]*. Labyrinth.
- [15] Shevchenko, I. S. (2015). Sootnosheniye informativnoy i faticheskoy funktsii kak problema ekolinguistyky [The ratio of informative and phatic functions as a problem of ecolinguistics]. *Kognitsiya, komunikatsiya, diskurs [Cognition, communication, discourse]*, 10, 114–132.
- [16] Skrynnik, J. (2019). Variativity of a speaker's verbal and non-verbal behavior in English business discourse. In E. Bernardez, J. Jablonska-Hood, K. Stadnyk (Eds.). *Cognition in context. New insights into language, culture and the mind*. Berlin: Peter Lang GmbH Internationaler Verlag der Wissenschaften, 64, 153–161.
- [17] Skrynnik, Yu.S. (2021). Tolerance in ecolinguistic perspective. *Movni ta kontsetual'ni kartyny svitu [Linguistic and conceptual pictures of the world]*, (3) 70, 131–147.
- [18] Soloshchuk, L. V. (2016). Neverbal'ni komponenty komunikatsiyi v ekolinguistychnomu aspekti [Nonverbal components of communication in the ecolinguistic aspect]. *Movni ta kontsetual'ni kartyny svitu [Linguistic and conceptual pictures of the world]*, 55, 328–335.
- [19] Soloshchuk, L.V. (2006). *Verbal'ni i neverbal'ni komponenty komunikatsiyi v anglomovnomu dyskursi [Verbal and nonverbal components of communication in English discourse]*. Kharkiv. Konstanta.
- [20] Steffensen, S. V. (2011). *Beyond mind: an extended ecology of languaging*. *Distributed Language*. John Benjamins, Amsterdam, 185–210.
- [21] Steffensen, S. V., Fill, A. (2003). Ecolinguistics: the state of the art and future horizons. *Language Sciences*. <http://dx.doi.org/10.1016/j.langsci.2013.08.003>.
- [22] Steffensen, S.V., Fill, A. (2014). Ecolinguistics: the state of the art and future. *Language Sciences*, 6–25. DOI: 10.1016/j.langsci.2013.08.003
- [23] Stibbe, A. (2019). Building an ecocivilisation through language. The 4<sup>th</sup> International Conference on Ecolinguistics. *The books of abstracts*, p. 20. [https://ice-4.dk/wp-content/uploads/2019/08/BoA\\_ICE-4.pdf](https://ice-4.dk/wp-content/uploads/2019/08/BoA_ICE-4.pdf). Retrieval time: 05.04.2020.
- [24] Warren, R. P. (1946). *All the King's Men*. Harcourt, Brace and Company.
- [25] Zhayvoronok, V. V. (2002). Problema kontsetual'noyi kartyny svitu ta movnogo yiyi vidobrazhennya [The problem of the conceptual picture of the world and its linguistic reflection]. *Culture of the peoples of the Black Sea region*, 32, 51–53.



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# Constructing Carcinogen Risk in Scientific Discourse Through Ideological Conflict: A Cognitive Pragmatic Analysis

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**Abstract**—With the increasing rates of cancer worldwide, a great deal of scientific discourse is devoted to arguments and statements about cancer and its causes. Scientists from different fields try to seize any available chance to warn people of the risk of consuming and exposing to carcinogens that have, unfortunately, become essential parts of modern life. The present paper attempts to investigate the proximization strategy through which scientists construct carcinogen risk to enhance people's preventive actions against these carcinogens. The paper targets the construction which depends on producing the conflict between the values of the people themselves and the contrasting values assigned to carcinogens. To achieve this aim, Cap's (2013) cognitive pragmatic theory of proximization is employed for analysis. The theory is a component of three proximization strategies: spatial, temporal and axiological. Of these three proximization strategies, axiological proximization strategy is applied to a corpus from scientific discourse. To arrive at more objective results, the analysis procedure is both qualitative and quantitative. Mathematical calculations are performed through corpus linguistics using Anthony's AntConc (2019) corpus linguistics software. Eventually, the paper has arrived at certain conclusions that reveal the way actors (producers of scientific discourse) utilize axiological proximization strategy to portray carcinogen risk as a means for promoting people to take preventive measures.

**Index Terms**—axiological proximization, carcinogen, cognitive pragmatics, proximization theory, scientific discourse

## I. INTRODUCTION

Cancer represents a universal and public health issue. It is the main cause of the majority of death cases around the world. About 9.6 million death cases have been recorded in 2018. According to Arafa et al. (2020), it is expected that, "by 2030, there would be a 1.8 fold increase in cancer incidence" (p. 638). A great deal of cancer cases are caused by carcinogens which are everywhere in the environment. The term carcinogen (noun) was formed in 1853 from the Latin word *carcinoma* (from Greek *karkinoma*) which means "malignant tumor, cancer" and the suffix *-gen* which means "something produced," or "thing that produces or causes" (Carcinogen, 2008). Carcinogens can promptly penetrate human bodies through food, air, radiation, water, make up products, smoking, etc. Thus, for Pohanish (2002), a carcinogen is a material or a mixture of various materials "causing the promotion or initiation of malignant or benign neoplasia (cancer) in humans or animals" (p. 12).

Cancer and carcinogen issues are mainly the interest of scientific discourse which is the kind of discourse that constructs knowledge linguistically. The kind of knowledge in scientific discourse stems from fields like medicine, chemistry, physics, biology, pharmacy, ecology, etc. Knowledge about these disciplines is textualized through linguistic resources. To identify knowledge structure, one needs to examine language that expresses knowledge (Hao, 2020). Scientific discourse is different from other kinds of discourse. Wei and Yu (2019) believe that scientific discourse displays very formal language that depends on its "ideographic function, textual function and interpersonal function" (p. 948). Wei and Yu (2019) list a number of genres that are related to scientific discourse such as "scientific writings, scientific papers, experimental reports, scientific and technological information materials, introduction of scientific and technological trends and operating procedures of experiments, etc" (p. 948). Scientific discourse is simply the contextualized text used by scientists or those engaged in science. It has certain grammar, pronunciation and spelling forms that are close to those found in almost all kinds of discourse. It has general vocabulary with a considerable number of specialized or familiar terminologies that are utilized in specialized ways (Yore et al., 2004).

Scientific discourse is a discourse of conflict where scientists argue over whether plausible explanation may be extracted from the collected data (Harris, 1997, cited in Hanauer, 2006). Within scientific settings, research is legislated in the framework of discourse which converts raw data to scientific arguments and theoretical positions that are evidentially supported (Prelli, 1989, cited in Hanauer, 2006). It is obvious that conflict and argumentative tendency are

salient features of scientific discourse. In scientific discourse on carcinogens, these two features may operate together to create an amalgamation of ideological conflict between the values of people who are susceptible to cancer and the opposed values of carcinogens which bring harm to people. Such ideological conflict is established in discourse to enhance awareness of the risk of consuming or exposure to carcinogens. Enhancing awareness is linguistically achieved through proximizing the ideological conflict to people in order to construct risk and crisis. Proximization in general and axiological proximization in particular operate in a way that attempts to convince people to take preventive actions against the substances that people have long thought to be environmental friendly and essential parts of life.

The present paper aims at finding out the way the ideological conflict is achieved in English scientific discourse on carcinogen risk. Considerable scientific discourse resources have tackled the issue of carcinogen risk. Hence, the paper is after finding out the means that scientific discourse relies on to construct carcinogen risk through arguing the ideological conflict of values between people themselves and the carcinogens which have become inseparable part of human life.

To achieve this aim, Cap's (2013) theory of proximization is employed. It is a theory within cognitive pragmatics that adopts three proximization strategies for threat and crisis construction: spatial, temporal and axiological proximization strategies. Axiological proximization strategy, in particular, has been employed for the analysis of the data since it represents the linguistic tool to construct the gathering ideological conflict to achieve threat and crisis construction.

For better solid results, the paper adopted a mixture research procedure of qualitative and quantitative analysis. Cap's (2013) axiological proximization strategy (as part of proximization theory) is employed for both qualitative and quantitative analysis. In the quantitative part, mathematical calculations are performed through corpus linguistics. Anthony's AntConc (2019) software is employed for the corpus analysis. AntConc can be freely downloaded from the web page <http://www.laurenceanthony.net/software/antconc/>.

The corpus is user created rather than readymade web corpora. The sub-genres for the corpus include scientific reports presented by scientific associations or institutes (governmental and non-governmental), news reports on scientific facts, scientific articles presented in online periodicals and those presented by medical and ecological webpages. The texts have been extracted from electronic sources. The internet provides a robust source for texts related to different genres and different kinds of discourse. Thus, people are now able to achieve both better understanding and more information from the internet which provides important assistant for people (Wu & Qian, 2011). Then, the texts have been converted to Word.doc files; a file for each text (article). Ultimately, the software AntFileConverter has been used to convert the Word.doc files to txt. format to be processed by AntConc. AntFileConverter can be downloaded for free from <http://www.laurenceanthony.net/software/antconc/>. The corpus consists of 56410 tokens.

## II. COGNITIVE PRAGMATICS AND PROXIMIZATION

If pragmatics is concerned with the study of meaning-in-context (Levinson, 1983), Gallai (2019) thinks that cognitive pragmatics can be viewed as comprising "the study of the cognitive principles and processes involved in the construal of meaning-in-context" (p. 51). Cognitive pragmatists focus on the inferential chains which are crucial to understand the interlocutor's intention in communication. The starting point is the utterance together with the mental representations behind the comprehension of different cognitive phenomena as cognitive processes (Gallai, 2019).

The main concern of cognitive pragmatics is the mutual relation between pragmatics and cognition. Since pragmatics is concerned with contextual meaning, Schmid (2012) states that cognitive pragmatics "focuses on the cognitive aspects of the construal of meaning-in-context" (p. 3). Though this is true for both production and comprehension of language, Bara (2010) believes that it mainly attempts to provide an answer to the question which pragmatics also attempts to answer: What are the required cognitive processes and abilities which enable humans to find out "what can or must be said" to arrive at "what is meant" and arriving at "what is meant" depends on "what is said"? (p. 1). Thus, cognitive pragmatics is "the study of the mental states of people who are engaged in communication" (p. 1). Schmid's (2012) conception of cognitive pragmatics is more specific than Bara's (2010) because the former emphasizes the construal of meaning rather than communication. In addition, Schmid's (2012) conception is more general because, rather than focusing on mental states, it focuses on cognitive aspects in general.

For pragmatists, cognitive pragmatics is not a hybrid discipline of cognitive linguistics and pragmatics. Rather, pragmatics is viewed to be cognitive all along. This fact is apparent in some of the classics in pragmatics literature such as Grice's (1975) implicatures and the way they are formulated and Searle's (1975) ten steps that lead partners (text receivers) to the interpretation of indirect speech acts. Sperber and Wilson's (1985) book *Relevance: Communication and Cognition* and the cognitive and communicative principles proposed within the Relevance Theory provide a further piece of evidence to support this fact. It is obvious that classical pragmatic theories have produced a number of approaches that fall within cognitive linguistic frameworks. These approaches can be categorized as cognitive pragmatic ones, although the term *cognitive pragmatics* has not so far been applied to them (Gallai, 2019).

Cognitive linguistics has offered evidence-based tools for many of its main claims by adopting data from experimental psychology and neuroscience. Unlike pragmatics, cognitive linguistics does not have a systematic theory to account for indirect meaning. For Cap (2013), pragmatics has important theoretical contributions within the notions

of “communicative intention, effect, utterance and discourse context, implicature and inference” (p. 8). Recently, it has adopted quantitative and experimental methods to account for social and sociopolitical aspects of discourse (Cap, 2013).

Methodologies of cognitive linguistics provide the conceptual structure for the study of Discourse Space (DS) related theories (Chilton, 2014). Such DS theories include Werth’s (1999) Text World Theory (TWT), Levinson’s (2003) theory of spatio-temporal frames of reference, Chilton’s (2004) Deictic Space Theory (DST) and Cap’s (2013) proximization theory. Cap’s (2013) theory depends on Paul Chilton’s cognitive-linguistic contributions which theorize DS and present a model of spatial, temporal and modal conceptualizations together with applications to political discourse. For DS theories, Chilton (2014) assures that positioning is like a backbone for the performance of these theories within texts in general. Positioning is “the conceptual process whereby some entity is cognised as located at some position relative to some reference point” (p. 52). Defining positioning, Hart (2018) states:

Positioning is a broad strategy which concerns where we situate ourselves within the conceptualisation and where other actors and actions are located relative to this position. It thus incorporates distancing and proximation strategies and can be spatial, temporal, social, epistemic and axiological (pp. 82- 83).

Positioning is related to the grammatical constructions which are affected by the arrangement of the mental spaces as regions of conceptual space. It is also related to stretches of text that are affected by the construction of the discourse world inside the DS. Positioning strategies depend on the cognitive ability of forming points of view. These strategies are conceptually realized in the deictic organization and the shift in the points of view (Hart, 2018).

In processing any kind of discourse, Chilton (2004) says that people position entities around them in the world by locating “these entities in relation to themselves along ... three axes, space, time and modality” (pp. 57- 58). For Cap (2018), the spatial dimension is primary since conceptualizations within the remaining dimensions occur in spatial terms. The conceptualization of time occurs through motion in space, and the conceptualization of modality occurs in terms of distance. Thus, modality conceptualization is “a metaphoric extension of the binary opposition between the close of the remote” (p. 93). The three dimensions are originally related to the deictic center that includes the symbolic *Self* (I, we, etc.). The other processes and entities occur in relation to “ontological spaces defined by their coordinates on the space (s), time (t) and modality (m) axes” (p. 93). This way, the conceptualization of the ontological configurations (activated by a text) becomes possible.

### III. THE CONCEPT OF PROXIMIZATION

Proximization is a new notion in linguistics. The verbal forms “proximise” and “proximising” are first found in Chilton (2004). The nominal form “proximization” was proposed by Cap (2005) who used it to refer to “an organized, strategic deployment of cognitive-pragmatic construals of/ in (originally, political) discourse” (cited in Cap, 2013, p. 5). Since then, “proximization has developed into a cognitive-linguistic, pragmatic, as well as a critical discourse analytic concept which accounts for the symbolic construal of relations between entities within the Discourse Space (DS)” (Chilton, 2005, cited in Cap, 2013, p. 5). It deals with the symbolic shift in which the peripheral elements in the DS are construed as central elements within the deictic center of the Space.

Many thematic domains and theoretical frameworks have employed the explanatory power of proximization. Chilton’s (2004) DST and Levinson’s (2003) spatio-temporal frames of reference are essential reference models for many later works that attempted to redefine and revise the original framework of conceptual shifts towards the deictic center in linguistic (both lexical and grammatical) terms. Most of these later works use the concept of proximization to determine particular linguistic items that construe the shifts in imposing worldviews. With regard to proximization, Cap (2018) states:

[P]roximization is a discursive strategy of presenting physically and temporally distant events and states of affairs (including ‘distant’ adversarial ideologies) as increasingly and negatively consequential to the speaker and her addressee. Projecting the distant entities as gradually encroaching upon the speaker-addressee territory (both physical and ideological), the speaker seeks legitimization of actions and/or policies she proposes to neutralize the growing impact of the negative, ‘foreign’, ‘alien’, ‘antagonistic’, entities (p. 97).

Cap (2020) considers proximization to be a discursive strategy of constructing crisis, conflict and threat. It relies on “the movement dynamics of entities positioned in Discourse Space” (p. 281). It is concerned with the physical and temporal presentation of distant events and states of affairs (including distant and adversarial ideologies) in relation to the actor (text producer) and his/ her partner position within the deictic center of the DS (Cap, 2020).

Cap (2006) has proposed the term *proximization* to analyze patterns of coercion in the US anti-terrorist rhetoric following 9/11. Since then, it has been used in various discourse domains. However, it has been most commonly employed in political discourse studies to investigate crisis construction and war rhetoric, anti-migration discourse, political party representation, construction of national memory, and designing foreign policy documents (Cap, 2020).

For Cap (2013), proximization is an end rather than a means and it is of a pragmatic nature in that it is concerned with certain discourse goals where it (proximization) is identified. Proximization is related to issues of representation that are addressed by Chilton (2004) within cognitive linguistics. A theory of proximization needs first to derive linguistic forms from cognitive categories (such as space or time) to propose directions in which these linguistic forms could be applied in DS. Therefore, there is a sense of interdisciplinarity which goes in two directions. First, there is interdisciplinarity between the pragmatic approach and the “upward” cognitive approach. Second, interdisciplinarity

exists between the pragmatic approach and the “downward” configurations of lexico-grammatical forms that perform proximization and the changes in these configurations that result from (extralinguistic, geopolitical, social,) context. Corpus approaches are needed to measure these changes in word counts (Cap, 2013).

#### IV. THE THEORY OF PROXIMIZATION

Proximization theory relies on the original concept of proximization which, as Cap (2020) states, acts as an operation of forced construal that evokes “closeness of the external threat in order to solicit legitimization of preventive measures” (p. 281). The spatio-temporal-axiological (STA) proximization model proposed by Cap (2013) encompasses the strategic deployment of particular lexico-grammatical choices that are derived from the cognitive categories of space, time and value. These cognitive categories suit the demands of a dynamic temporally-extensive context. Thus, the model depends on interdisciplinary research program that involves cognitive, pragmatic, critical and corpus-based approaches (Cap, 2013).

The most innovative part of proximization theory (the part which is missing from the works that try to reconcile cognitive vs. pragmatic perspectives) is the account of the lexico-grammatical data. The lexico-grammatical choices are vital because they lead to the linguistic establishment of the deictic center and the deictic periphery. Accordingly, they help maintain symbolic construals whereby the peripheral entities cross the distance in DS to penetrate the deictic center (Cap, 2013).

The lexico-grammatical patterns (together with the way they coincide with the extra-linguistic changing context in an extensive time interval) depend on a set of cross-disciplinary premises. It goes along with the cognitive concept of DS in terms of both its offline static pre-existence and its online dynamics of new meaning construction through conceptualization. It lines up with cognitive metaphoric schemas. Moreover, proximization theory sets linguistic representations for mappings and mental representations to pragmatically accomplish certain aims. The dynamic nature of the social and political context considers these aims as the frame of legitimization. The lexico-grammatical choices combine the cognitive, pragmatic and social theoretical inputs to maintain time spans. The proportions of choices that reflect the spatial, temporal and axiological categories are in continuous change. Therefore, these changes reveal the shifting status of space, time and value dimensions (Cap, 2013).

The threat advances from DS-peripheral entities which are considered to be outside-deictic-center entities (ODCs) (carcinogens). The ODCs are conceptualized as crossing the Space to invade the inside-deictic-center (IDC) entities (people). The IDCs usually consist of both actors and partners (text producers and text receivers). Such a strategy aims at showing the negative representation of the ODCs which are considered threatening and harmful to the IDCs which are positively represented. Both actors and partners (interlocutors) are within the scope of the IDCs. The negative representation raises fear and evokes preventive measures. Accordingly, the basis for motivating public approval is constituted to enhance the preventive action (Cap, 2020). The threat has a spatio-temporal and ideological nature. Hence, proximization can be considered in three aspects: spatial, temporal and axiological.

#### V. AXIOLOGICAL PROXIMIZATION

Cap (2013) defines axiological proximization as follows:

Axiological proximization is a forced construal of a gathering ideological conflict between the “home values” of the DS central entities, IDCs, and the “alien”, antagonistic values of the ODCs, which occupy the conceptual periphery of the DS. The IDC-ODC conflict either will, or (at least) may, lead to a physical clash, that is the materialization of the ODC ideological threat within the IDC space (p. 94).

This definition marks two distinct kinds of axiological proximization. The first involves high likelihood and it functions independently of the other proximization strategies (spatial and temporal proximization). This kind often compensates for the absence of the construals forced by spatial proximization and temporal proximization strategies. The second kind involves lower likelihood (or a probability that is less explicitly expressed) and it co-works with the spatial proximization and temporal proximization strategies. The two kinds differ in the linguistic manifestations employed. Therefore, they also differ in the degree of the pre-emptive action which they may enhance (Cap, 2013). Axiological proximization strategy mainly reflects the proximization operations that force high likelihood of the ODC-IDC clash because the other instances of axiological proximization “cannot perform legitimization compensatory function, crucial to the design of the spatial-temporal-axiological (STA) model as a whole” (p. 119).

Since axiological proximization is concerned with the values of the opposing (center vs. periphery) physical entities in the DS (IDCs vs. ODCs), categories 1 and 2 of axiological proximization denote a corresponding ideological opposition. The first two categories are stated by Cap (2013) as follows: “(1) Noun phrases (NPs) construed as IDC positive values or value sets (ideologies)”;

“(2) Noun phrases (NPs) construed as ODC negative values or value sets (ideologies)” (p. 119).

For Cap (2013), juxtaposing “the IDC-positive and the ODC-negative values” is a precondition for the construal of the latter (p. 119). The ODC-negative values (carcinogen values) represent the threat that motivates the ODC (people) physical impact. Such symbolic transfer “from the ideological premise to the physical act” is the essence of axiological proximization that enhance its status as a strategy of proximization (p. 119). This way, it determines the final, third and

most important category of the axiological proximization strategy which Cap (2013) states as: “(3) Discourse forms no longer than one sentence or two consecutive sentences involving linear arrangement of lexico-grammatical phrases construing materialization in the IDC space of the ODC negative ideologies” (p. 120).

Concerning the conceptual shift, category 3 involves a complex sequential scenario which consists of two parts: the “abstract-ideological” part and the “concrete-physical” part. The “ideological” part portrays an abstract and distant vision of conflict between the IDC values and the ODC antagonistic values. Therefore, the ideological part ‘unfolds to link with the other, “physical” part, which transforms the ODC ideological antagonism into a concrete, physical threat’ (p. 120). What is essential to this transformation is a continuous “change in the conflict probability levels: the ideological part subsumes a remote possibility of the IDC/ODC conflict, while the physical part turns that possibility into a high probability” (p. 120). Such symbolic progression explains why the third category consists of phrases in linear arrangement (p. 120).

Table (1) summarizes the lexico- grammatical manifestations for the three categories of the axiological proximization strategy as follows:

TABLE 1  
AXIOLOGICAL PROXIMIZATION STRATEGY (CAP, 2013, P. 121)

Category	Lexico- grammatical manifestation within the discourse space
1	Noun phrases (NPs) construed as IDC positive values or value sets (ideologies)
2	Noun phrases (NPs) construed as ODC negative values or value sets (ideologies)
3	Discourse forms involving linear arrangement of lexico-grammatical phrases construing materialization in the IDC space of the ODC negative ideologies

As for the treatment of pronominal substitutes for NPs in the STA strategies, Cap (2013) admits that, in proximization theory, pronominal substitutes might not always be included in the categories and, thus, do not count. The justifications he provides is that, first, in comparison with spatial proximization strategy, a proximization strategy may include “fewer NPs in the capacity of category descriptors and, thus, the pronominal substitutes can be provided explicitly” (p. 118).

## VI. ANALYSIS AND DISCUSSION

Axiological proximization in scientific discourse presents a forced construal of an ideological conflict that exists between the “home values” of people as IDCs, and the antagonistic, “alien”, values of carcinogens as ODCs. The IDCs occupy the conceptual center of the DS and the ODCs occupy the conceptual periphery of the DS as shown in figure (1):

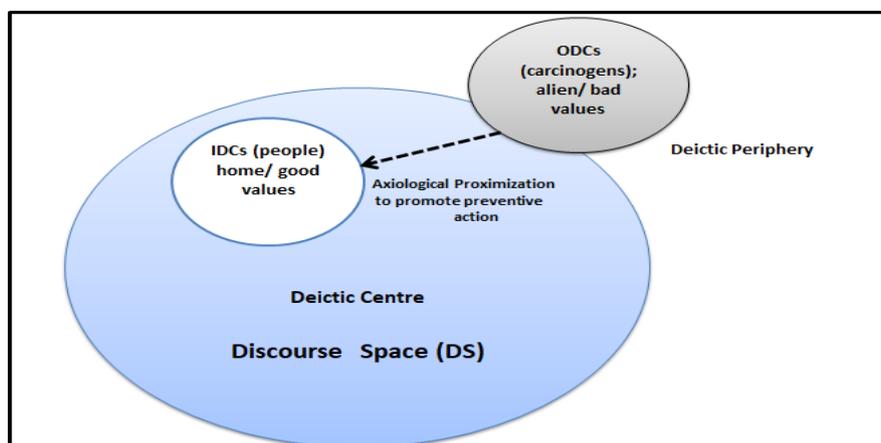


Figure 1 The Axiological Proximization of Carcinogen Risk (adopted from Cap, 2020, p. 282)

The strategy of axiological proximization consists of three categories. In category 1, the lexico- grammatical tools are NPs that are construed as IDC positive values or value sets (ideologies). In the second category, the NPs are construed as ODC negative values or value sets (ideologies). The results of analyzing the first and second categories are put in one table (table 2) since the two categories utilize the same lexico- grammatical tools to construe ideological conflicts (though with different attitudes). This way, confusion and possibility of inaccuracy can be avoided as much as possible.

The corpus analysis of these categories has been done by surveying the word list of the corpus to look for NPs that suggest positive IDC ideologies and negative ODC ideologies. Next, the concordance of each suspected NP has been thoroughly checked to assign and calculate the related instances. The File View tool has also been used in many instances for a double check.

Both categories 1 and 2 can employ NPs or single- word nominals as lexico- grammatical tools. Such tools are *health factors* and *healthy lifestyle* for the IDCs and *chronic inflammation* and *contaminated groundwater* for the ODCs. In the analysis of the corpus, the identification of the lexico- grammatical tools which establish categories 1 and

2 depends on the denotative meaning of the NPs since the paper deals with scientific discourse where information is presented in a straightforward manner rather than adopting figurative language where connotative meaning is expressed. The results are presented in table (2):

TABLE 2  
THE STATISTICAL RESULTS OF ANALYZING CATEGORIES 1 AND 2 OF THE AP STRATEGY

NPs of positive values for IDCs	Frequency	NPs of negative values for ODCs	Frequency
Health+ (benefit(s)/ body/ factors)	161	Risk(s)+ (factor(s))	464
safety	36	Disease(s)	76
Healthy+ diet/ people/ lifestyle/ weight/ choices/ behavior/ adults	22	Death(s)	72
		prevention	62
		Toxic+ chemicals/ environment/ bases/ effect/ etc.	40
		Problem(s)	34
		Virus(es)	29
		Damage(s)	29
		Concern(s)	29
		contamination	23
		Impurity/ impurities	20
		Chronic+ inflammation/ injury/ infection/ inhalation	19
		Harmful+ chemicals/ ingredients/ substances/ ultraviolet rays/ solar radiation/ etc	18
		Contaminated+ groundwater/ water/ soil/ bases/ equipment/ wheat	17
		inflammation	15
		infections	14
		toxins	14
		warning	14
		Dangerous+ agents/ microbes/ toxicity/ chemicals/ compounds levels	13
		Illness(es)	12
		pollution	10
		Infectious+ agents/ flatworm	9
		Tumour(s)	9
		Inflammatory+ process/ nature/ medications/ results/ compounds/ drugs/ bowls	8
		Harm(s)	8
		mutations	6
		injuries	5
		Suffering	4
		Danger	4
		pollutants	4
		toxin	4
Total instances	219	Total instances	1085

While categories 1 and 2 provide well- demarcated phrases, category 3 involves a symbolic transition from the ideological premise to the physical act. Thus, category 3 is the essence of axiological proximization and it is the most important category in the axiological proximization strategy. It is essential here to recall this category as stated by Cap (2013): “(3) Discourse forms no longer than one sentence or two consecutive sentences involving linear arrangement of lexico-grammatical phrases construing materialization in the IDC space of the ODC negative ideologies” (p. 120). Cap (2013) provides elaborative formula for this category in the form of a four phraseological paradigm saying:

- (1) NP denoting ODC value(s) followed by or combined with (2) VP denoting a remote possibility of the ODC-IDC conflict followed by (3) VP denoting a close probability of the ODC-IDC conflict followed by or combined with (4) NP denoting physical consequences of the ODC-IDC conflict (p. 120).

For illustrative purpose, example (1) exemplifies the formula above:

1. The damaging effect of the US invasion (*NP of ODC value*) has not yet been estimated (*VP of remote possibility of ODC-IDC conflict*), but it may harm the socio- economic situation (*VP of close probability of ODC-IDC conflict*) leading eventually to socio- economic negative consequences (*NP of physical consequences of the ODC-IDC conflict*).

However, such instances as (1) have not occurred in the corpus. Cap (2013) assures that adjacent VPs (such as *has not yet been estimated*) can be accomplished by VPs of different cases and tenses depending on the corpus under investigation. Some of the alternatives can be metaphoric expressions. Hence, Cap (2013) provides other flexible discourse forms for this category since some “fillers” (NPs and VPs) do not collocate and may not occur with some fillers of other paradigms. In such cases, the fillers may occur on their own rather than being “a part of the four-part structure” (p. 121). Such flexible discourse forms have actually occurred in the corpus as shown in the following example instance (2):

2. [I]t has to be noted that stress coping strategies may lead to increased **smoking, drinking, eating, and use of drugs, and thereby increase the risk of cancer** (<https://osha.europa.eu/en/themes/work-related-diseases/work-related-cancer>)

In (2), *smoking, drinking, eating, and use of drugs* are all materializations related to IDCs, but they reflect the negative ideologies of ODCs.

The corpus analysis of this category has been conducted by investigating the structures where NPs that nominate ODCs and the NPs of negative values for ODCs (already identified in table 2) occur. This process has been performed by inserting the related NP in the search box in AntConc and then hitting the start button to display the concordances where the NPs exist, as shown in figure (2) for the ODC *powder* (a suspected carcinogen):

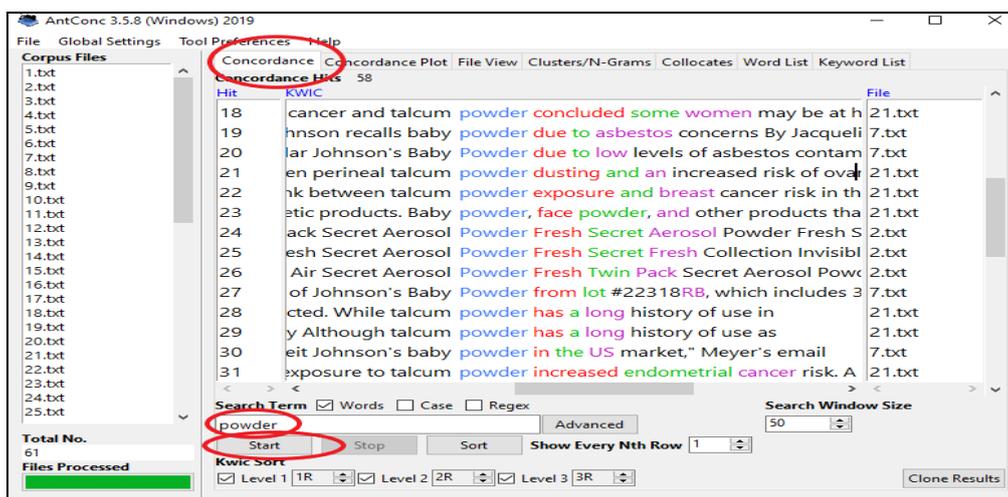


Figure 2 The Concordances of the ODC Item "powder"

Accordingly, the structures where the ODC negative values and the ODCs themselves exist are displayed to search for any conceptual shift from abstract ideological part to concrete-physical part. The results of analyzing this category are presented in table (3):

TABLE 3  
THE STATISTICAL RESULTS OF CATEGORY 3 OF THE AP STRATEGY

ODC NPs and NPs of negative values for ODCs	Example instances	Frequency
Exposure	Experts evaluate several types of evidence, including studies of cancer in humans, studies of cancer in animals, sources of exposure and mechanisms (what is known about how the substance can cause cancer).	65
Factor(s)	When many studies all point to a similar association between a potential risk factor and an increased risk of cancer....	41
Risk*	Several risk factors can increase your chance of developing cervical cancer.	39
Meat(s)	Both red and processed meats are associated with a higher risk of cancer.	37
Alcohol	The risk of developing cancer increases with the amount of alcohol a person drinks.	33
Chemicals	Emphasizing that it has been known that chemicals cause mammary tumors in rodents, Rudel said that very few of these chemicals are studied in women.	30
Asbestos	[T]alc is often found in close proximity with asbestos, a hazardous substance that's known to cause inflammation and lung cancer.	26
Radiation	Talk with your doctor if you think you may be at risk for cancer because you were exposed to radiation.	19
Tobacco	People who use smokeless tobacco (snuff or chewing tobacco) have increased risks of cancers of the mouth	18
(Talcum) powder	But studies of women who are already diagnosed with ovarian cancer may sometimes find a potential connection between talcum powder use and ovarian cancer.	17
Drug(s)	[I]t has to be noted that stress coping strategies may lead to increased smoking, drinking, eating, and use of drugs, and thereby increase the risk of cancer.	15
coffee	[W]e don't really know about coffee and ... which are also classified as possibly carcinogenic.	14
Smoke*	Both smoke and high-temperature cooking of certain meats are known to be carcinogenic.	12
Food(s)	However, cooking with charcoal can create carcinogens in some foods.	11
Compound(s)	That's because these foods may contain carcinogens, or compounds that cause cancer.	10
Ranitidine	[I]t's suspending the sale of Zantac and other over-the-counter ranitidine medications due to concerns they might contain a substance that can cause cancer.	10
Medication(s)	More common heartburn medications have been recalled due to the presence of an impurity that might cause cancer	10
Cigarette(s)	This adds to growing concerns about the health risks of e-cigarettes.	9
Toxi*	But while the chemical is a known potential toxin and carcinogen in its industrial form, the link between consuming it in food and developing cancer is much less clear.	9
Factor(s)	Besides chemicals ... biologic factors many more factors and conditions have been identified that could cause cancer ....	9
Sanitizer(s)	An online pharmacy analyzed hundreds of brands of hand sanitizer and found some contained high levels of the carcinogen benzene.	7
Dioxane	Researchers are starting to focus on dioxane, a potential carcinogen that's starting to show up in tests of tap water.	7
Diabetes	Some foods can increase your risk of type 2 diabetes and obesity, which are associated with certain types of cancer.	6
Gas*	Gasoline ... are among the largest sources of mammary carcinogens in the environment ....	5
Sunscreen(s)	Johnson & Johnson ... recalled some ... sunscreens after it detected low levels of the carcinogen in the products.	5
charcoal	Grilling with charcoal ... is associated with creating carcinogens and increasing your risk of cancer.	5
Marijuana	More specifically ... a class of organic compounds found in marijuana, are responsible for the resulting carcinogens ....	5
bacon	Experts concluded that every 50-gram portion of processed meat daily (that's two slices of bacon) increases the risk of bowel cancer by 18%.	5
Tattoo	One in five tattoo inks in Australia contain carcinogenic chemicals	4
polycyclic aromatic hydrocarbons (PAHs)	Grilling creates carcinogenic polycyclic aromatic hydrocarbons (PAHs) When meat juice drips onto coals and other hot surfaces, it causes flames and smoke.	4
Metformin	Type 2 diabetes drug metformin recalled due to contamination with possible carcinogen	3
Pollution	Air pollution is one of the many causes of climate change as well as breast cancer.	3
Zantac	[P]harmaceutical company Sanofi announced it was undertaking a voluntary recall of Zantac due to the concerns about the potential cancer-causing chemical.	3
Obesity	People with obesity may have an increased risk of several types of cancer, including cancers of the breast....	2
Total instances		498

Although axiological proximization is the most essential proximization in Cap's (2013) theory, it is the shortest in that it consists of three categories only. The results of analyzing the three categories are all put in table (4) which displays the distribution of the axiological proximization strategy categories in the corpus:

TABLE 4  
THE DISTRIBUTION OF THE AP STRATEGY CATEGORIES IN THE ENGLISH CORPUS

Category	Lexico- grammatical tools within the discourse space	Total instances	Percentage of instances
1	Noun phrases (NPs) construed as IDC positive values or value sets (ideologies)	219	12.1%
2	Noun phrases (NPs) construed as ODC negative values or value sets (ideologies)	1085	60%
3	Discourse forms involving linear arrangement of lexico-grammatical phrases construing materialization in the IDC space of the ODC negative ideologies	498	27.7%
Total instances		1802	100%

The statistical results presented in table (3) are represented in the graphic representation in figure (3):

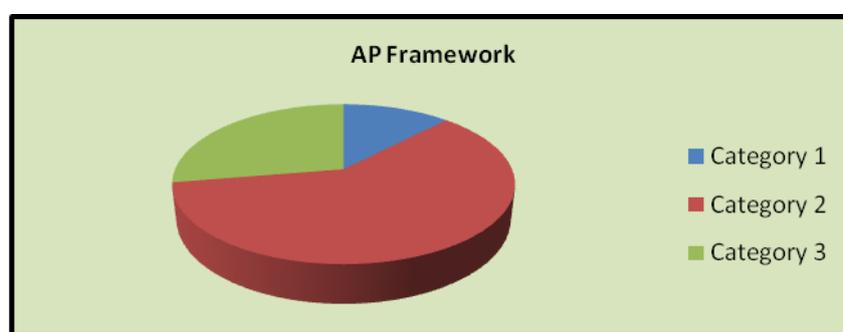


Figure 3 Distribution of Axiological Proximization Strategy Categories

According to the rates of distribution of the axiological proximization strategy categories in the corpus, the categories can be arranged on a scale of three ranks as presented in table (5):

TABLE 5  
THE RANKS OF THE AXIOLOGICAL PROXIMIZATION STRATEGY CATEGORIES IN THE CORPUS

Category rank	Category NO.	Lexico- grammatical tools within the discourse space	Total instances	Percentage of instances
1st	2	Noun phrases (NPs) construed as ODC negative values or value sets (ideologies)	1085	60%
2 <sup>nd</sup>	3	Discourse forms involving linear arrangement of lexico-grammatical phrases construing materialization in the IDC space of the ODC negative ideologies	498	27.7%
3 <sup>rd</sup>	1	Noun phrases (NPs) construed as IDC positive values or value sets (ideologies)	219	12.1%

## VII. CONCLUSIONS

Apparently, axiological proximization is achieved by the three categories which have all been employed in the corpus; none of the categories scored zero frequency. However, the categories show different rates of distribution; as shown in table (4). Accordingly, they take different ranks as shown in table (5). Hence, the following conclusions can be identified:

1. The strategy shows dominance of category 2 (NPs construed as ODC negative values) and, thus, category 2 (with 1085 instances; 60% of the total instances) comes in the first rank. These results agree with Cap's (2013) results of analyzing anti- terrorist discourse. Thus, constructing carcinogen risk through ideological conflict is mainly achieved through informing the partners with the negative values and features of these carcinogens to create a negative reaction against them. Eventually, people might take preventive actions and stay alarm of possible carcinogenic attack. The prevalence of category 2 in the corpus grants the scientific discourse a more straightforward feature and establishes more convincing arguments. The negative values assigned to the ODCs are mostly depicted in NPs with physical denotation where referents are mostly physical associations or consequences of the exposure to or the consumption of ODCs. Such NPs are *illness(es)*, *pollution*, *infectious+ agents/ flatworm*, *tumour(s)*, *inflammatory+ process/ nature/ medications/ results/ compounds/ drugs/ bowls*, *harm(s)*, *mutations*, *injuries*, *suffering*, *danger* and *pollutants*.

2. The second rank is taken up by category 3 (498 instances; 27.7%) where the conceptual shift from the abstract ideological part to the concrete physical part is constructed. Hence, the corpus demonstrates a state of balance between

presenting the negative values of the ODCs and the ways these values shift physical danger that threatens the IDCs. In other words, the conceptual shift presented in category 3 rationalizes the negative values (of the ODCs) presented in category 2.

3. Both parts of the complex sequential scenario of shift are mostly physical since the topic under investigation deals with the harmful physical entities (carcinogens) that physically attack human bodies leading to physical damage. Conflict, in this case, is brought into being due to two-sided physical clash between the IDCs who struggle to maintain well-being and the ODCs that strive to ruin IDCs.

4. Category 1 (NPs construed as IDC positive values) has scored the lowest frequency (219 instances; 12.1%) in the corpus. However, these results do not indicate any negative attitude towards the IDCs. Rather, the scarcity of the IDCs and their positive values in the corpus are natural since the texts of the corpus aim at forming the legitimization of prevention actions against the ODCs and their negative effects (values). In other words, it is outside the domain of interest of the corpus to praise people (as IDCs). Thus, category one is the least well-grounded category to maintain axiological proximization.

Eventually, from a cognitive pragmatic perspective, the partners of scientific discourse on carcinogen risk seem to make their choice of category fit with the mental states that are common in this case for both actors and partners. Both actors and partners have common attention in that they are after consciously producing and receiving information about carcinogens. They also share the same belief and motivation about the negative impact of carcinogens. Such shared mental states (about the negative effect of carcinogens) control the text and gears axiological proximization towards the heavy reliance on producing as much carcinogenic negative values (category 2) as possible and towards the construal of the shift from these negative values towards the carcinogenic harm as a physical impact (category 3).

#### REFERENCES

- [1] AntConcFileConverter. Retrieved December 8, 2021, from <http://www.laurenceanthony.net/software/antconc/>
- [2] Anthony, L. (2019). AntConc. Retrieved December 8, 2021, from <http://www.laurenceanthony.net/software/antconc/>
- [3] Arafa M. A.; Rabah D. M. & Farhat K. H. (2020). Rising Cancer Rates In the Arab World: Now Is the Time for Action. *East Mediterr Health J.* 26(6):638- 640. <https://doi.org/10.26719/emhj.20.073>
- [4] Bara, B. G. (2010). *Cognitive Pragmatics: The Mental Process of Communication*. Cambridge: Cambridge University Press.
- [5] Cap, P. (2005). Language and Legitimization: Developments in the Proximization Model of Political Discourse Analysis. *Lodz Papers in Pragmatics* 1, 7–36.
- [6] Cap, P. (2006). *Legitimization in Political Discourse: A Cross-disciplinary Perspective on the Modern US War Rhetoric*. Newcastle: Cambridge Scholars Press.
- [7] Cap, P. (2013). *Proximization: The Pragmatics of Symbolic Distance Crossing*. Amsterdam: John Benjamins.
- [8] Cap, P. (2014). Applying Cognitive Pragmatics to Critical Discourse Studies: A Proximization Analysis of Three Public Space Discourses. *Journal of Pragmatics*, 70, 16- 30.
- [9] Cap, P. (2018). Spatial Cognition. In J. Flowerdew and J. Richardson (Eds.) *The Routledge Handbook of Critical Discourse Studies* (pp. 92–105). London: Routledge.
- [10] Cap, P. (2020). Representation, Conceptualization and Positioning in Critical Discourse Analysis. *International Review of Pragmatics*, 12, 272–294.
- [11] Carcinogen. (2008). *Webster's New World Medical Dictionary*. New Jersey: Wiley Publishing, Inc.
- [12] Carcinogen. Retrieved November 11, 2021, from <https://www.etymonline.com/word/carcinogenic>
- [13] Chilton, P. (2004). *Analysing Political Discourse: Theory and Practice*. London: Routledge.
- [14] Chilton, P. (2014). *Language, Space and Mind: The Conceptual Geometry of Linguistic Meaning*. Cambridge: Cambridge University Press.
- [15] Gallai, F. (2019). Cognitive Pragmatics and Translation Studies. In R. Tipton, & L. Desilla (Eds.) *The Routledge Handbook of Translation and Pragmatics* (pp. 51- 72). London: Routledge.
- [16] Grice, H. P. (1975). Logic and conversation. In P. Cole & J. Morgan (Eds.), *Syntax and Semantics 3: Speech Acts* (pp. 41–58). London: Academic Press.
- [17] Hanauer, D. I. (2006). *Scientific Discourse Multiliteracy in the Classroom*. London: Continuum.
- [18] Hao, J. (2020). *Analysing Scientific Discourse From a Systemic Functional Linguistic Perspective: A Framework for Exploring Knowledge-building in Biology*. New York: Taylor & Francis.
- [19] Hart, C. (2018). Cognitive Linguistic Critical Discourse Studies. In J. Flowerdew and J. Richardson (Eds.) *The Routledge Handbook of Critical Discourse Studies* (pp. 77–91). London: Routledge.
- [20] Levinson, S. C. (2003). *Space in Language and Cognition: Explorations in Cognitive Diversity*. Cambridge: Cambridge University Press.
- [21] Pohanish, R. P. (2002). *Sittig's Handbook of Toxic and Hazardous Chemicals and Creinogens*. New York: William Andrew Publishing.
- [22] Schmid, H. J. (2012). Generalizing the apparently ungeneralizable. Basic ingredients of a cognitive-pragmatic approach to the construal of meaning-in-context. In Schmid, H. J. (Ed.), *Cognitive Pragmatics* (pp. 3- 22). Berlin: De Gruyter Mouton.
- [23] Searle, J. R. (1975). Indirect speech acts. In Cole, P & Morgan, J. (Eds.), *Syntax and Semantics 3: Speech Acts* (pp. 59- 82). London: Academic Press.
- [24] Sperber, D. & Wilson, W. (1985). *Relevance: Communication and Cognition*. Oxford: Blackwell.
- [25] Wei, M. & Yu, G. (2019). On the Characteristics of Scientific Discourse and Translation. *Theory and Practice in Language Studies*, 9 (8), 946-950. DOI: <http://dx.doi.org/10.17507/tpls.0908.08>
- [26] Werth, P. (1999). *Text Worlds: Representing Conceptual Space in Discourse*. Harlow: Longman.

- [27] Wu, Y & Qian, X. (2011). A Study on the Promotion of English. *Theory and Practice in Language Studies*, 1(4), 432-434.
- [28] Yore, L. D., Florence, M. K., Pearson, T. W., Weaver, A. J. (2006). Written Discourse in Scientific Communities: A Conversation with Two Scientists about their Views of Science, Use of Language, Role of Writing in Doing Science and Compatibility between their Epistemic Views and Language. *International Journal of Science Education*, 28 (2-3), 109-141.



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# The Effect of Pre, While, and Post Listening Activities on Developing EFL Students' Listening Skills

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**Abstract**—Listening is important in communication since it takes up 40-50 percent of overall communication time, while speaking takes up 25-30 percent, reading takes up 11-16 percent, and writing takes up around 9 percent (Mendelsohn, 1994). This study focuses on Pre, While, and Post Listening Activities which assist EFL students in developing their listening abilities at the graduate level. The current study was conducted using a pre-test and post-test equivalent group method. This study enlisted the participation of 60 female students. The researcher devised an assessment test to examine the level to which the participants' listening abilities had progressed. This test was given to the participants twice: a pre-test before the experiment and a post-test after the experiment. A pre-test was given to all the participants to make sure that the individuals in the experimental and control groups had an equal level of knowledge about the listening competency under evaluation. The post-test was given after the experiment. The data were analyzed using the Statistical Package for Social Science (SPSS). The independent sample t-test was employed by the researcher to determine the significance of the difference in mean scores between groups at the 0.05 level. The quantitative data analysis and evaluation of the mean scores of the two groups on the post-test demonstrated that learners who were exposed to pre-listening, while-listening, and post-listening activities outperformed the learners in the control group. Also, qualitative analysis was done by interviewing the students and recording their responses to the implementation of the experiment.

**Index Terms**—effect, pre-listening, while-listening, post-listening, EFL Students

## I. INTRODUCTION

### A. What Is the Listening Skill?

Listening is a process in which individuals focus on a particular region of sensory input, build meaning from passages, and relate what they hear to existing knowledge, according to O'Malley et al. (1989). Hearing is a complex mechanism that enables humans to comprehend spoken words, according to Rost (1994). Anderson and Lynch (1988) describe listening as the means of instantaneous oral creation, the copying of uttered forms. To completely comprehend the message, listeners take in the information as well as actively evaluate it. The purpose of listening comprehension is for pupils to be able to discuss and write about what they have heard. The authors stress that the "mental model" that is produced as a representation of a spoken message is the result of our combining fresh information from what we just heard with our past knowledge and experience. Listening, according to Buck (2001), is an active means of developing meaning by applying knowledge to the incoming sound, which includes both linguistic and non-linguistic information.

### B. Importance of Listening Skill

Listening is a fundamental ability, along with speaking, reading, and writing, that is used in daily communication. It's crucial since it's the first skill people learn or acquire, and it's the most widely used communication skill. Listening is a crucial part of communication; it is estimated that listening accounts for 40-50 percent of overall communication time, whereas speaking accounts for 25-30 percent, reading accounts for 11-16 percent, and writing accounts for roughly 9 percent according to Mendelsohn (1994). He also adds that listening comprehension though has long been a neglected

and under-taught component of English in many EFL programs; it is now widely recognized as a far more significant skill in EFL courses. Nunan (1998) found that listening is a process of actively analyzing and building meaning from both verbal and nonverbal signals. As a result, labeling listening as a passive skill is deceptive. This misunderstanding may stem from the fact that pupils appear to do little more than sit quietly in a language lab, listen to pre-recorded talks, and respond to questions regarding the oral stimulus. As a result, it is evident that listening is not as "passive" as initially assumed, as it demands a range of sophisticated activities on the learners' part. Listening, thus has gotten a lot of attention lately since the need for listening skills among EFL English language learners is increasing.

### *C. Teacher's Role in Teaching Listening*

Gardner and Lambert (1972) assert that in order to engage students, teachers must convey content in a vibrant and engaging manner. Teachers should also identify activities and employ a variety of tactics. Brown (1994) believes that the teacher should assist students to create a schema for what they will listen to before class. Rost (1994) states that language teachers should provide different types of assistance to their students to help them enhance their listening skills. Communicating with learners in the target language, improving the understanding of their listening styles and techniques, and offering a diversity of materials, communication styles, and listening situations are all part of this. Underwood (1989) says that teachers should provide systematic chances for pupils to learn how to detect the purpose of an expression or discussion, ascertain who is speaking and to whom, and reconditte the mood and disposition of the speakers.

### *D. Advanced - Teaching Methods*

It is widely accepted that teachers should place a premium on their students' ability to listen and that this is where teachers should spend their efforts to improve their teaching. As learners' listening levels differ, it is critical to address these differences. The employment of the most modern listening teaching methods is one of the most significant things that should be highlighted in order to overcome these differences. To meet the expectations of learners, a new teaching approach should be used. This innovative approach is known as Activity-Based Language Teaching. When students are taught about the factors that influence listening, the degrees of listening, and the aspects of the listening process, they are more likely to recognize their listening abilities and participate in activities that help them become better listeners. According to Karakas (2002), listening activities strive to avoid failure so that the learner's comprehension of the text can be supported. Pre-listening, while-listening, and post-listening are three common categories for listening activities. Students can use these activities to help them improve their listening skills.

### *E. Stages of Teaching Listening Skills*

Pre-listening, while-listening, and post-listening exercises are all effective ways to teach the listening text. Each level does have its own set of objectives and activities to complete.

#### *(a). Pre-Listening*

The pre-listening stage provides students with all they need to listen to and understand the listening text. This stage is critical because it directs students to the listening passage to which they will listen, piques their curiosity, and informs them about the goal of listening. Pre-listening is the step before while-listening. At this stage, the most important thing is to provide enough context to mirror what is accessible in real life and to inspire drive. It would be unfair to throw them right into the listening without first explaining the topic or the sort of task they would be working on. As a result, students should be provided extensive pre-listening assistance which enables them in becoming more self-assured and effective. Pre-listening exercises emphasize on

- providing a proper general framework for the activity, as well as examples of well-structured texts
- breaking the activity into simple, well-sequenced learning steps
- briefing
- activating previous knowledge
- relating to previous task experience
- relating to previous levels of achievement
- sharing learning goals
- explaining listening behavior

#### *(b). While-Listening*

The objective of this level is to improve students' listening skills and assess their understanding. The teacher assigns the students activities to complete while they are listening. Sometimes, students will have to listen to the text more than once to complete their while-listening exercises. After reviewing the students' responses, the instructor should highlight the main aspects of the book and clarify any difficulty with language or structures that the students face while listening. Teachers must ensure that students do not have access to the tape script of the listening text. The success of the while-listening assignments is also determined by the material of the listening text and the students' interests. If the same tasks are done over and over again, students may become bored. As a result, a range of activities should be carried out on various

occasions. While-listening exercises should be tailored to students' various levels and requirements to help them to listen more effectively.

While – listening activities primarily focus on

- contextualizing
- explaining
- teacher modeling strategies to monitor understanding
- teacher modeling of appropriate listening behaviors
- questioning of/by pupils while on task
- seeking clarification

(c). *Post-Listening*

Post-listening exercises are planned to broaden the topic or language of the listening material. Following the completion of the hearing, post-listening actions are carried out. Post-listening exercises that are well-planned allow pupils to relate the content have heard to their feelings and experiences, as well as develop interpretive and critical listening and reflective thinking. Furthermore, post-listening exercises allow not only the teachers to test and review students' knowledge and assess their comprehension but also the students to expand understanding beyond the literal level to the interpretative and critical levels.

Post-Listening Activities Primarily focus on

- reflecting
- evaluating
- encouraging transfer of skills
- valuing different levels of achievement

## II. STUDY

### A. *Problem Description*

In almost all the courses offered in the English language in B. Tech. study, focus is laid upon all the four skills. Most of the time students face difficulty in terms of listening. The researchers have discovered that their pupils have numerous difficulties speaking in English and that their listening competence is low when compared to their other language abilities. To enhance listening comprehension, students should be motivated and encouraged to apply all four language skills to learn English communicatively, properly, and effectively. Therefore, to improve the performance of students in listening comprehension, the researchers have designed a strategy by focusing on pre, while, and post listening activities.

### B. *Research Questions*

The study aims to answer the following three questions:

- 1) Is there any significant difference between the mean scores of the experimental group and the control group in the pre-test?
- 2) Is there any significant difference between the mean scores of the experimental group and the control group in the post-test?
- 3) What are the opinions of students regarding the pre, while, and post-listening instructional strategies in developing their listening skills and their suggestions to enhance them?

### C. *Participants in This Research Study*

A total of 60 female EFL students from a private engineering college were chosen as research participants. They were all in their fourth semester at the time. To generate groups of equivalent language skills, the students were separated into two groups (30 students in the experimental group and 30 students in the control group). Both sets of students attended English classes as part of the program.

### D. *Research Design*

The current study used a quantitative methodology with a pre-test-post-test analogous group experimental design. Also, qualitative analysis was done by interviewing the students and recording their responses. The experiment was carried out in a controlled atmosphere within a language laboratory, using audio-visual assistance.

### E. *Research Instrument*

The researcher devised an achievement test to assess the amount to which the participants' listening abilities had progressed. The participants were given this test twice, once as a pre-test and once as a post-test. A pre-test was given to all participants to make sure that the students in the experimental and control groups had the same level of understanding of the listening competency being tested. The post-test was used at the end of the research. Considerable attention was made to match the complexity and subject of the pre-test and post-test items.

The lesson plan was created in accordance with the ABL technique, with an emphasis on pre, while, and post-listening exercises for use in the experiment group. The study was carried out in six language laboratory sessions, one each week. As tools, the researcher utilized TED talks from YouTube. To address issues with accent and intonation, TED talks offered by Indian speakers were chosen with consideration. To determine the learner's uniformity in listening comprehension before the research, a TED Talk by Kiran Bedi: 'How I remade one of India's toughest prisons?' with 20 objective questions was utilized as a pre-test. After listening to the presentation, the students were to write the answer on sheet that was provided to them. In the second, third, fourth, and fifth sessions, four TED talks were used: 'The gift of words' by Javed Akhtar, 'How to construct a life of service' by Raminder Dhillon, 'How my challenges made me who I am?' by Vikas Khanna, and 'Everyone deserves to be safe' by Jasmeen Patheja. The standard teaching approach was employed for the control group in these four sessions, while the pre, while, and post-listening method was used for the experimental group. In the last session, Shreyans Jain's TED Talk: 'Figure It Out — The Art of Problem Solving' was taught to both the groups as done previously. On completion of the teaching, in the same session, a post-test was given with 20 objective questions on the same topic to assess the comprehension levels of the students.

At the end of the experiment, the researchers conducted semi-structured interviews with the students in the experimental group to assess the success of the experiment. Individually, the interviewees responded to the questions, and their responses were recorded and examined qualitatively.

### III. FINDINGS

In this section, statistical analyses carried out to address the study's topic, as well as the data analysis results in light of the research questions were discussed. The findings of the data analysis were presented and tabulated in this part in an attempt to answer the study question. Tables were also used to display the findings of the pre-test and post-test.

#### A. Data Analysis

The data from the two groups were compared to examine the data and answer the research question. The crucial value of *t* was used to analyze the data. The data were analyzed using the Statistical Package for Social Science (SPSS). To establish the significance of the difference in mean scores across groups at the 0.05 level, the researcher used an independent sample *t*-test. The researcher had to guarantee that the learners in the experimental and control groups had the same quantity of knowledge about the listening ability under investigation for the groups to be comparable and for a study like this to be meaningful. All participants were given a pre-test to check their listening capacity to meet this requirement.

Table 1 reflected the descriptive data for the participants' mean pre-test scores across the two groups. Following the scoring of the exams, the findings were statistically analyzed to provide responses to the study questions.

TABLE 1  
DESCRIPTIVE STATISTICS OF LEARNERS' PRETEST SCORES

Group	N	Mean	Std. Deviation	Std. Error Mean
Control	50	32.97	3.335	.472
Experimental	50	33.03	4.106	.581

The mean scores for the two groups were statistically quite similar (32.97, 33.03), as shown in table 1. As a result, it was possible to infer that the learners in the two groups did not differ significantly in terms of their understanding of the target forms in consideration. That is, before the study, the participants' previous knowledge of the target forms was statistically nearly identical, but a paired sample *t*-test was performed to ensure the close uniformity of the two groups. The results of the first study question showed that there was no statistically significant difference in the mean scores of the experimental group and the control group in the pre-test.

The findings of descriptive statistics on the posttest scores of the two groups are presented in Table 2.

TABLE 2  
DESCRIPTIVE STATISTICS OF LEARNERS' POSTTEST SCORES

Group	N	Mean	Std. Deviation	Std. Error Mean
Control	50	33.24	3.212	.455
Experimental	50	36.42	4.717	.668

Given the data in Table 2, it was evident that the experimental group's mean post-test score (36.42) was greater than the control group's (33.24). The response to the second study question was that the experimental group and control group had a significant difference in the mean scores in the post-test.

#### B. Investigation of the Assumption

As a part of investigating the effect of the experiment on the participants, a paired sample *t*-test was done as shown in Table 3. The purpose of the *t*-test was to realize the effectiveness of the experiment by comparing the acquired mean scores of the participants of the two groups. As the differences between the means were concerned, two-tailed significance was used.



Thus, pre-listening, while-listening, and post-listening exercises could help EFL learners to improve their listening skills. The fact that learners who got pre, while, and post-listening instruction performed much higher on the posttest implied that the experiment was helpful in encouraging learners to grasp the listening text. Furthermore, through the educational intervention, learners adapted the examples given during the experiment period to real-life circumstances. In summary, while the duration and breadth of this study were restricted, the findings clearly showed that pre-listening, while-listening, and post-listening activities expedite accomplishment and had a beneficial influence on some crucial aspects such as motivation and joy of the class.

The students' responses to the interview questions demonstrated their enthusiasm for the before, during, and post-listening exercises that improved their listening comprehension. They also expressed gratitude for the activities that made learning simpler for them by allowing them to listen to the material and take notes. According to the interview questions, the activities enhanced group collaboration and assisted students in expanding their networks.

Several options for further research are open in light of the current study's findings: The current study may serve as a foundation for future research to see whether the same results are produced when pre-listening, while-listening, and post-listening studies are conducted in connection to other areas of listening comprehension. Given that this study is conducted with two groups of female graduate students from a private engineering college, it is proposed that comparable studies with mixed-gender subjects can be duplicated to examine the effects of topic, memory, and text length on listening comprehension. Language teachers and syllabus writers are expected to incorporate a variety of pre-listening, while-listening, and post-listening activities, as well as shift the emphasis of listening lessons from testing listening to teaching listening, to assist language learners in improving their listening performance.

#### APPENDIX A

##### *Pre-test*

The listening text for this test is a TED Talk by Kiran Bedi: 'How I remade one of India's toughest prisons?' You are going to listen to the text twice and then take the test.

1. ----- is a product of a visionary mother and father?
2. The 1950s and 60s belonged to girls. *True/False*
3. Kiran Bedi had ..... siblings. ( 1/2/3/4)
4. Kiran Bedi's father defied his grandfather because he decided to .....(marry/ educate) the girls.
5. ----- would be dolled up to get married in the 1950s and '60s.
6. "I'm going to spread my 4 girls to the 4 corners of the world."- these words were told by .....
7. "Life is on an incline. You either go up, or you come down." – these words were told by .....
8. Out of 100, Thirty are nature-sent over which you can't do a thing. *True/False*
9. Kiran Bedi is a product of -----.
10. Policing according to Kiran Bedi is .....
11. The two unique journeys in Kiran Bedi's life are ..... and .....
12. Kiran Bedi was not sensitive to injustice. *True/False*
13. Kiran Bedi was given the prison assignment to .....
14. ----- criminals were there in the den when Bedi got prison assignment.
15. Bedi was able to convert the prison to an ashram through.....( meditation/ education)
16. In Madras prison, the concept of vision of education happened. *True/False*
17. The movement and ambition of Kiran Bedi's life at moment are.....
18. Crime is not a product of a distorted mind. *True/False*
19. ----- prisoners sat in meditation When Kiran Bedi took as a prison governor.
20. "Do you pray?"- these words were said by ..... to .....

##### *Post-test*

The listening text for this test is Shreyan Jain's TED Talk: 'Figure It Out - The Art of Problem Solving'

1. The organization run by the speaker is .....
2. The speaker inherited his problem-solving skills from \_\_\_\_\_.
3. The third step in the problem-solving cycle is to \_\_\_\_\_.
4. The two parts of the problem according to the speaker are \_\_\_\_\_.
5. There are five steps in the problem-solving cycle. (*True/False*)
6. Inefficient problem solvers look at \_\_\_\_\_. (*Problem/Solution*)
7. Efficient problem solvers take a lot of stress and cannot remain cool. (*True/False*)
8. The problem faced by the speaker's father was .....
9. Do efficient problem solvers seek the help of others? (*Yes/No*)
10. The first step of "Figure it Out 101" is.....
11. Whenever there is a problem, instead of worrying, we should focus on the \_\_\_\_\_.
12. The phrase that guided Shreyan Jain's life in more ways than one is .....
13. The two types of problem solvers are ..... and .....

14. Inefficient people go through the entire cycle of problem-solving with a truckload of stress especially on ..... (step 1&2/ step 2&3/ step 3&4/ step 4&5)
15. In problem-solving, the power of ..... (Solution/ visualization/ planning/ analyzing) is absolutely incredible.
16. Every problem has a pinpoint solution. (True/ False)
17. Problems are .....( ideas/ solutions/ plans/ consequences) waiting to be found.
18. The words “This is my source of trouble” belong to ..... (Declaration/ Consequence) part.
19. The words “My failure is the reason for my unhappiness” belong to ..... (Declaration/ Consequence) part.
20. For inefficient problem solvers, the consequence happens in the ..... stage. (identify/ analyzing/ generate solutions/ plan/ implement)

#### APPENDIX B

##### *The Interview Questions*

- 1) What is your opinion about the effectiveness of pre, during, and post listening exercises?
- 2) Do you have any recommendations to improve the teaching of listening comprehension?

#### REFERENCES

- [1] Abbas, P. G., & Mohammad, R. A. (2011). A Study of Factors Affecting EFL Learners' English Listening Comprehension and the Strategies for Improvement. *Journal of Language Teaching and Research*, 2(5), 977-988.
- [2] Abu-Mwais, H., Smadi, O. M. (2017). The Effect of an Integration-Based Instructional Strategy on Developing EFL Students' Listening Skills at Al-AI Bayt University. *Arab World English Journal*, 8 (1), 355-371.
- [3] Akram, A. & Malik, A. (2010). Integration of language learning skills in second language acquisition. *International Journal of Arts and Sciences*, 3 (14), 230- 241.
- [4] Al- Jamal, G. (2009). *Listening comprehension processes, strategies, and difficulties in interactive settings: A case study of Jordanian EFL students* [Unpublished doctoral dissertation]. Yarmouk University, Jordan.
- [5] Al- Karain, K. (2011). *The effect of a strategy-based instructional program on Jordanian EFL University students' listening comprehension* [Unpublished doctoral dissertation]. Yarmouk University, Jordan.
- [6] Anderson, A. & Lynch, T. (1988). *Listening*. Oxford University Press.
- [7] Brown, H. D. (2001). *Teaching by principles: An interactive approach to language pedagogy* (2nd Ed.). Longman.
- [8] Brown, H. D. (1994). *Principles of Language Learning and Teaching*. Prentice-Hall.
- [9] Buck, G. (2001). *Assessing Listening*. Cambridge University Press.
- [10] Burns, A. (1999). *Collaborative action research for English language teachers*. Cambridge University Press.
- [11] Carroll E. R. (1969). *The learning of language*. National Council of Teachers of English Publication.
- [12] Celce-Murcia, M. (2001). *Teaching English as a second or foreign language* (2 nd Ed.). Newbury House.
- [13] Celce-Murcia, M., Brinton, D., & Goodwin, J. (1996). *Teaching pronunciation: A reference for teachers of English to speakers of other languages*. Cambridge University Press.
- [14] Chastain, K. (1988). *Developing second language skills: Theory and practice*. Harcourt Brace Jovanovich, Publishers.
- [15] Chaudron, C. (1988). *Second language classroom: Research on teaching and learning*. Cambridge University Press.
- [16] Clark, H., & Clark, E. (1977). *Psychology and language: An introduction to psycholinguistics*. New York: Harcourt Brace.
- [17] Cook, V. (2003). *Effects of the second language on the first*. Multilingual Matters.
- [18] Doff, A. (1994). *Teaching English: A training course for teachers*. Oxford University Press.
- [19] Ellis, R. (1985). *Understanding second language acquisition*. Oxford University Press.
- [20] Ellis, R. (1994). *The study of second language acquisition*. Oxford University Press.
- [21] Field, J. (1998). Skills and strategies: Towards a new methodology for listening. *ELT Journal*, 52 (2), 110-118.
- [22] Field, J. (2008). *Listening in the language classroom*. Cambridge University Press.
- [23] Gardener, C. & Lambert, W. (1972). *Attitudes and Motivation in Second Language Learning*. Newbury House Publishers, INC.
- [24] Hadijah, S. & Shalawati, S. (2016). A Study on Listening Skills and Perspectives to First-Year Students at English Department of Academic Year 2015/2016. *J-SHMIC Journal of English for Academic*, 3(2), 527-529.
- [25] Jing, W. (2006). *Integrating skills for teaching EFL*. Sino-US English Teaching, 3(12), 1-5.
- [26] Karakas. (2002). Study of Factors Affecting EFL Learners' English Listening Comprehension and the Strategies for Improvement. *Journal of Language Teaching and Research*, 2(5), 977-988.
- [27] Le, T. M. (2019). Teaching Listening Skills for English Non-Majored Students at Ba Ria - Vung Tau University: Difficulties and Solutions. *IOSR Journal Of Humanities And Social Science (IOSR-JHSS)*, 24 (4), 28-37.
- [28] Richards, J. C. (1983). Listening Comprehension: Approach, Design, Procedure. *TESOL Quarterly*, 17(2), 219-240.
- [29] Mekheimer, M. & Aldosari, H. (2013). Evaluating an integrated EFL teaching methodology in Saudi universities: A longitudinal study. *Journal of language teaching and research*, 4 (6), 1264-1276.
- [30] Mendelsohn, D. (1994). *Learning to listen: A strategy-based approach for the second language learner*. Dominic Press.
- [31] Mohammad Zohrabi et al. (2015). The Impact of Pre-Listening Activities on Iranian EFL Learner's Listening Comprehension of Authentic English Movies. *International Journal on Studies in English Language and Literature*, 3(2), 42-56.
- [32] Moody, R. (1988). Personality preferences and foreign language learning. *The Modern Language Journal*, 72, 389-401.
- [33] Nunan, D. (1998). *Language teaching methodology*. London: Prentice-Hall.
- [34] Nuttall, C. (1982). *Teaching reading skills in a foreign language*. New York: Heinemann.
- [35] O'Malley, M. & Chamot, A. (1990). *Learning strategies in second language acquisition*. Cambridge University Press.

- [36] O'Malley, M., Chamot, A. & Kupper, L. (1989). *Listening Comprehension Strategies in Second Language Acquisition*. *Applied Linguistics*, 10(4), 418-437.
- [37] Richards, J. C., & Rodgers, T. (1986). *Approaches and methods in language teaching: A descriptive analysis*. Cambridge University Press.
- [38] Rivers, W. M. (1981). *Teaching foreign language skills*. The University of Chicago Press.
- [39] Rost, M. (2013). *Teaching and researching: Listening*. Routledge.
- [40] Rost, M. (1994). *Introducing Listening*. Penguin
- [41] Sanchez, M. A. (2000). An approach to the integration of skills in English teaching. *Didactica (linguay literatura)*, 12, 21-41.
- [42] Tajzad, M. & Ostovar-Namaghi, S. A. (2014). Exploring EFL learners' perceptions of integrated skills approach: a grounded theory. *English Language Teaching*, 7 (11), 92-98.
- [43] Tavit, Z. M. (2010). Integrating listening and speaking skills to facilitate English language learners' communicative competence. *Procedia Social and Behavioral Sciences*, 9, 765-770.
- [44] Underwood, M. (1989). *Teaching listening*. New York: Longman.
- [45] Widdowson, H.G. (1978). *Teaching Language as Communication*. Oxford University Press.
- [46] Wu, S. & Arabah, S. (2014). Tapping the Potential of Skill Integration as a Conduit for Communicative Language Teaching. *English Language Teaching*. 7 (11), 119-129.
- [47] Zahra, R. (2015). The Role of Pre-listening Activities on EFL Learners' Listening Comprehension. *International Journal of Foreign Language Teaching & Research*, 3(10), 35-42.

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# Production of the English “sh” by L2 Thai Learners: An Acoustic Study

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**Abstract**—L2 sound production might vary in accordance with factors such as the vowel context and L2 experience held. This study investigates the production of the English “sh” by L2 Thai learners via acoustic analysis. The target sounds in this study were those in the initial position in three vowel contexts: high, low and back. The data were drawn from 48 subjects who were Thai undergraduate students. This sample was divided between two groups: high-experienced and low-experienced. All read the stimuli with the target sound in a carrier phrase. From this, their production was acoustically analysed with six acoustic measurements; duration, peak location, centroid, SD, skewness and kurtosis. The findings show that the English /ʃ/ produced by the high-experienced group was different from the English [ʃ] produced by the low-experienced group in many acoustic measurements. Furthermore, the English [ʃ] produced by the low-experienced group was found not to be different from the Thai [tɕʰ] in many acoustic aspects. These findings suggest that L2 experience supports L2 speech production. They also showed the effect of vowel context in relation to peak location and duration, as suggests the consideration of vowel context in the teaching of the L2 speech sounds.

**Index Terms**—English “sh”, Thai, English, vowel context, acoustic, experience

## I. INTRODUCTION

In the learning of the L2 sound, there are four influential models – the Contrastive Analysis Hypothesis (CAH) (Lado, 1957), the Speech Learning Model (SLM) (Flege, 1995), the Perceptual Assimilation Model-L2 (PAM-L2) (Best & Tyler, 2007) and the Second-Language Linguistic Perception (L2LP) Model (Escudero, 2005). CAH has been developed to account for L2 production and perception, while SLM aims to explain changes across a life span in L2 speech perception with a linkage to production, PAM-L2 seeks to account for the perception of non-native sounds by L2 listeners in L2 natural settings. Finally, L2LP is a new model that focuses on accounting for L2 sound perception at all stages of learning. All models are similar in that they agree that the learning of L2 sound is filtered via the native language (L1) of L2 learners.

In this regard, not only does an individual’s L1 tend to influence L2 sound learning, but also L2 experience is influential here (e.g., Baker & Trofimovich, 2006; Flege et al., 1997). For example, in the study of Kitikanan (2017), the perceptual assimilation of English fricatives by L2 Thai learners was investigated. The findings showed that vowel context and L2 experience affected the perceived similarities of both shared and non-shared sounds. Kitikanan (2020a), as also considered the perceptual assimilation of British English monophthongs by L2 Thai learners, found that high-experienced and low-experienced groups had different assimilation patterns for the English /æ, i, u, ʊ/. The findings of these studies suggest that L2 experience should be taken into account when exploring L2 sound production.

Aside from L2 experience, vowel context is also found to be important in the production of L2 consonant sounds. Notably, L2 learners might find some vowel contexts more difficult to learn than other vowel contexts (e.g., Hardison, 2003; Kitikanan, 2016; Schmidt, 1996). For example, Schmidt (1996) had 20 Korean subjects listening to English consonant sounds at the initial position in three vowel contexts. This group also judged the level of similarity between English consonants and Korean consonants on a scale of 1 to 5. The results highlight that the rating scores of the English /m, n, j, p, t, k, h/ were greater in low and high vowel contexts and lower in the back vowel context, suggesting that the lip rounding of vowels hinders the perception of L2 consonant sounds.

The investigation of L2 speech production is not easy, namely as there are many factors shown to affect production. For instance, as noted by Flege (1987), it is difficult to interpret age effect in L2 speech exploration as the age of learning is often found to be related to other factors influencing L2 sound production. Although there are many studies on L2 sound production which have considered a diversity of factors (e.g., Baker, 2008; Flege, 1991), to the best of our knowledge the relative importance of vowel context, L2 experience and L1 impact on L2 sound production is not yet known. Thus, the present study is the first of its kind on this topic.

Acoustic analysis is a well-known method through which to explore sound production as it provides insight as to the characteristics of speech sound which might not be perceivable via an impressionistic study (Kitikanan, 2016). This present study is a continuation of that provided by Huang (2020) as to the production of the English /tʃ/ and /ʃ/ in an

initial position by L2 Thai learners via an impressionistic study. In that earlier study, two English native speakers with phonetic transcribing experience judged the production of English [ʃ]. It was found that learners with high-experience and low-experience demonstrated an accurate production (of over 90%) as to the English [ʃ] across the vowel contexts. This suggests that those learners had encountered success in learning L2 sounds that do not exist in their native phonological inventory, seemingly indicating a lack of influence of L2 experience and vowel context. This present study aims to find out whether this presupposition is true. If such a statement has veracity, the L2 learners – regardless of their level of L2 experience and the vowel context – should produce the acoustic characteristics of the English [ʃ] in contrast to those of the Thai [tɕʰ] as these two sounds are different when compared phonemically. The specific research question held here is: To what extent are the L2 speech sounds produced by the L2 Thai learners affected by their L1, their L2 experience and the vowel context? This study seeks to provide insight as to the learning of the L2 English /ʃ/ by Thai learners using acoustic measurements.

## II. REVIEW OF LITERATURE

### A. English /ʃ/ and Thai /tɕʰ/

The English /ʃ/ is produced with the blade of the tongue raising towards the alveolar ridge or the hard palate, as is more backward and articulated with a larger air channel than for /s/ or /z/ and as is produced with lip protruding (Aslaksrud & Haarberg, 1967). When producing the English /ʃ/, the area of turbulence is wider (more grooved than /s/) (Stevens, 1960). Whereas the English /ʃ/ is fricative, the Thai /tɕʰ/ is affricate (Kitikanan, 2020b). To be specific, the Thai /tɕʰ/ is a voiceless aspirated alveolo-palatal affricate. When producing this sound, the lips are spread rather than protruding as in the production of the English /ʃ/. In the initial position, L2 Thai learners tend to replace the English /ʃ/ with the Thai /tɕʰ/ (Kanokpermpoon, 2007), such as producing ‘shoe’ as /tɕʰuː/.

### B. Acoustic Study as to the Production of the English /ʃ/ by L2 Thai Learners

In regards to the acoustic study of the production of the English /ʃ/ by L2 Thai learners, only two studies have been found. The first, as carried out by Roengpitya (2011), investigated the acoustic properties of the L2 English /ʃ/ in initial, intervocalic and final positions. The words were produced by three female Thai subjects. Each production was measured with seven acoustic measurements; amplitude at three temporal points (onset, duration, offset), fricative duration, vowel duration, fundamental frequency of voiced fricatives, voicing duration (if any), fundamental frequency of vowels and formant frequencies of the adjacent vowels (onset, mid duration, offset). However, as noted by Kitikanan (2016), no statistical analysis was undertaken to identify the difference between L1 Thai and L2 English fricatives nor was the environment of the vowel context controlled.

The second study, as carried out by Kitikanan (2016), studied the acoustic characteristics of the L2 English [ʃ] as opposed to L1 English [ʃ] produced by British native speakers of English. Here, the effects of the speakers’ sex and the vowel context were explored. It was found that, for the production of females, there were two possibilities as to the interpretation; 1) that the L2 English [ʃ] was more fronted than the native English [ʃ] and 2) that the L2 English [ʃ] was more retracted than the native English [ʃ]. In the production of males, the L2 English [ʃ] was produced with higher effort than the native English [ʃ]. The vowel context was also found to affect the L2 English [ʃ] production. In the high and low vowel contexts, there were two possibilities as to the interpretation; 1) that the L2 English [ʃ] is more fronted than the native English [ʃ] and 2) that the L2 English [ʃ] is more retracted than the native English [ʃ]. Additionally, in the high vowel context of the production of males, the L2 English [ʃ] is more fronted than the native English [ʃ]. Nevertheless, the exploration of the L2 English [ʃ] in Kitikanan’s study is different from that undertaken in this present study as the former compared the production of the L2 English [ʃ] with that of the L1 English [ʃ] while this study compares the production of the L2 English [ʃ] with the L1 Thai [tɕʰ].

## III. METHODOLOGY

### A. Subjects

In this study, the 48 subjects were Thai students at Naresuan University. This sample was divided into two groups; a high-experienced group and low-experienced group. The high-experienced group’s studies comprised an English-language major whereas the low-experienced group’s studies related to Food Science and Technology. Each group contained 24 students. The subjects had studied English in a Thai context. The low-experienced group had only been exposed to English via an English module which was positioned among other courses. The high-experienced group had studied many modules in English – including modules in Linguistics and Literature. However, outside of the English module(s) studied, all subjects used Thai in their daily lives. In addition, all were female and none reported having disorders in their speech or hearing. These subjects were the same subjects as in the study of Huang (2020).

### B. Stimuli

The stimuli in this study consisted of 18 words (9 Thai words and 9 English words). The target sounds, the English [ʃ] and the Thai [tɕʰ], were in the initial position. The words were in three different vowel contexts; high, low and back. Each vowel context had three words. For the Thai words, these were: /tɕʰiː/, /tɕʰiːp/, /tɕʰiː/, /tɕʰāːt/, /tɕʰáː/, /tɕʰaː/, /tɕʰuː/.

/tɛ<sup>h</sup>ú:/, /tɛ<sup>h</sup>ú:t/. For the English words, there were 9 which started with the English [ʃ] as the initial consonant sound; ‘she’, ‘sheet’, ‘sheep’, ‘sharp’, ‘shark’, ‘shack’, ‘shoot’, ‘should’ and ‘shoe’.

### C. Data Collection

Each subject sat in a soundproofed meeting room and read the stimuli presented on a laptop screen. The English stimuli were read via the carrier phrase ‘Say \_\_\_ again’, whereas the Thai stimuli were read via the phrase /o:k<sup>h</sup>e: \_\_\_\_\_ ì:k. k<sup>h</sup>rán/ ‘Okay \_\_\_ again.’ Each stimulus was articulated five times. The entire process for each subject to produce words in phrases had a duration of 15 minutes. This research study received ethical approval from the Naresuan University Institutional Review Board (COA No. 112/2019 and IRB No. 0096/62).

### D. Acoustic Analyses

Acoustic analysis was undertaken through the facilitation of Praat 6.0.23 (Boersma & Weenink, 2019). The realisations of the L2 English [ʃ] and the L1 Thai [tɛ<sup>h</sup>] were only the target-like ones from the study of Huang (2020). In segmenting the target sounds and vowels, both waveform and spectrogram were considered. The starting point of the target sounds and vowels was the onset of an increase in the frication noise amplitude in the waveform. The final point of the target sound was decided at the offset of the frication noise. The final point of the vowel was the onset of the following vowel in the carrier speech. The segmentations were made using a Praat script written by Al-Tamimi (Al-Tamimi & Khattab, 2015). Six acoustic measurements were utilised for the English [ʃ] and Thai [tɛ<sup>h</sup>] – duration, peak location, centroid, standard deviation (SD), skewness and kurtosis. The production of the target sounds followed the interpretation of the English [ʃ] in the study of Kitikanan (2016). Hence, the interpretations of each acoustic characteristic were as follows:

Duration: high for fricatives and low for affricates (Repp et al., 1978).

Peak location and centroid: high for more fronted (Jongman et al., 2000) fricatives.

SD: high for non-sibilant (Jongman et al., 2000) fricatives.

Skewness: high for more retracted (Jongman et al., 2000) fricatives.

Kurtosis: high for sibilant (Jongman et al., 2000) fricatives.

### E. Statistical Analysis

The number of target-like realisations was 3,093 (1,080 realisations for the L1 Thai [tɛ<sup>h</sup>] and 2,013 realisations for the L2 English [ʃ]). To explore the acoustic properties of the target sounds, linear mixed models were carried out using the *lme4* package in *R* statistical software (Bates et al., 2015). The independent variables were vowel context (high vowel, low vowel and back vowel) and the language experience of the L2 learners (high-experienced and low-experienced). The dependent variables were the acoustic characteristics. The optimal model was selected by comparing the model with two-way interaction to the model with no interaction of the two factors using the *anova* function. Where there was significant difference found between the two models, the model with the smaller Akaike Information Criterion was chosen (Zheng et al., 2014). Where there was no significant difference between the two models, the model with no interaction was chosen as it was understood to be simpler. Tukey’s HSD post-hoc tests using *emmeans* package in *R* statistical software (Lenth et al., 2021) were used to find significant difference between the language pairs.

## IV. RESULTS

Three groups of the target sounds – the English [ʃ] produced by the high-experienced and low-experienced groups and the Thai [tɛ<sup>h</sup>] – were compared in three vowel contexts; high, low and back. The results are below separated into six parts in accordance with the acoustic characteristics of duration, peak location, centroid, SD, skewness and kurtosis.

### A. Duration

Tukey’s HSD post-hoc test indicates that in the high vowel context, the duration of the English [ʃ] produced by the high-experienced group was significantly higher than that produced by the low-experienced group ( $b = 14.65$ ,  $SE = 2.64$ ,  $df = 2725.51$ ,  $t = 5.56$ ,  $p < 0.01$ ) and of the Thai [tɛ<sup>h</sup>] ( $b = 21.82$ ,  $SE = 2.18$ ,  $df = 3078.66$ ,  $t = 9.99$ ,  $p < 0.01$ ). In the same vowel context, the duration of the English [ʃ] produced by the low-experienced group was significantly higher than that of the Thai [tɛ<sup>h</sup>] ( $b = 7.17$ ,  $SE = 2.18$ ,  $df = 3085.39$ ,  $t = 3.29$ ,  $p < 0.05$ ). In the low vowel context, the duration of the English [ʃ] produced by the high-experienced group ( $b = 25.62$ ,  $SE = 2.18$ ,  $df = 3078.85$ ,  $t = 11.74$ ,  $p < 0.01$ ) and the low-experienced group ( $b = 23.60$ ,  $SE = 2.18$ ,  $df = 3086.56$ ,  $t = 10.81$ ,  $p < 0.01$ ) were significantly higher than that of the Thai [tɛ<sup>h</sup>]. Similarly, in the back vowel context, the duration of the English [ʃ] produced by the high-experienced group ( $b = 27.83$ ,  $SE = 2.18$ ,  $df = 3079.36$ ,  $t = 12.77$ ,  $p < 0.01$ ) and the low-experienced group ( $b = 20.84$ ,  $SE = 2.18$ ,  $df = 3083.13$ ,  $t = 9.57$ ,  $p < 0.01$ ) were significantly higher than that of the Thai [tɛ<sup>h</sup>]. These results suggest that in the high vowel context, the English [ʃ] produced by the high-experienced group was the most fricative-like, with this being followed by the English [ʃ] produced by the low-experienced group and the Thai [tɛ<sup>h</sup>], respectively. The findings also suggest that in the low and back vowel contexts, the English [ʃ] produced by the high-experienced and low-experienced groups were more fricative-like than the Thai [tɛ<sup>h</sup>]. The means of the duration recorded for [ʃ] and [tɛ<sup>h</sup>] according to the group x vowel context from pairwise comparison based on LMM are presented in Figure 1.

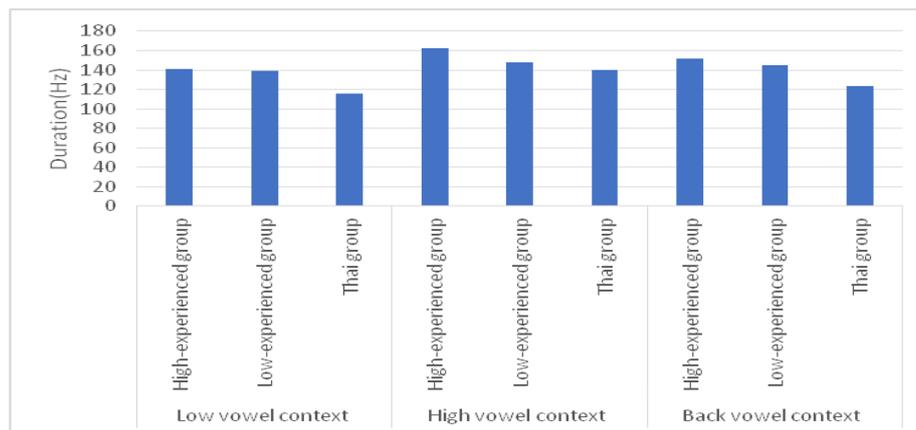


Figure 1. Means of the Duration Recorded for [j] and [tɛʰ] According to the Group x Vowel Context From Pairwise Comparison Based on LMM

### B. Peak Location

Tukey's HSD post-hoc test shows that in the high vowel context, the peak location of the English [j] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -964.57$ ,  $SE = 206.51$ ,  $df = 2517.13$ ,  $t = -4.67$ ,  $p < 0.01$ ) and of the Thai [tɛʰ] ( $b = -919.42$ ,  $SE = 171.93$ ,  $df = 3048.28$ ,  $t = -5.35$ ,  $p < 0.01$ ). Similarly, in the low vowel context, the peak location of the English [j] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -1197.00$ ,  $SE = 207.16$ ,  $df = 2530.27$ ,  $t = -5.78$ ,  $p < 0.01$ ) and of the Thai [tɛʰ] ( $b = -1380.67$ ,  $SE = 171.80$ ,  $df = 3048.63$ ,  $t = -8.04$ ,  $p < 0.01$ ). In the back vowel context, the peak location of the English [j] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -874.99$ ,  $SE = 206.46$ ,  $df = 2510.09$ ,  $t = -4.24$ ,  $p < 0.01$ ). These results suggest that in the high and low vowel contexts, the English [j] produced by the high-experienced group was less fronted than the English [j] produced by the low-experienced group and the Thai [tɛʰ]. The findings also suggest that in the back vowel context, the English [j] produced by the high-experienced group was less fronted than the English [j] produced by the low-experienced group. The means of the peak location recorded for [j] and [tɛʰ] according to the group x vowel context from pairwise comparison based on LMM are presented in Figure 2.

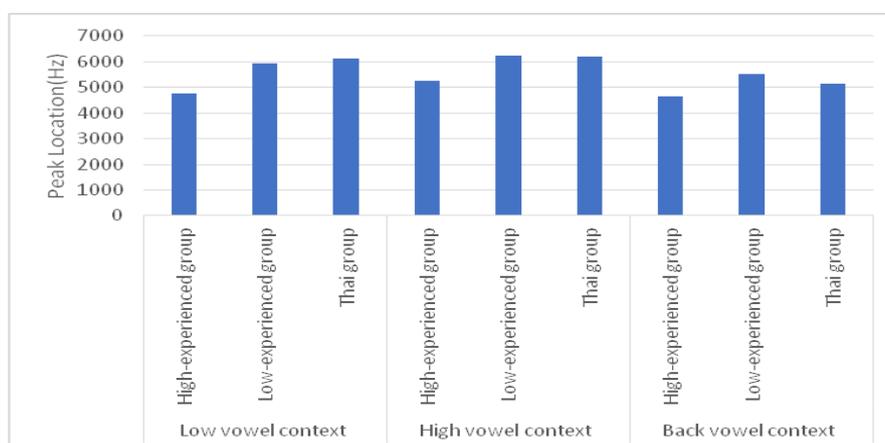


Figure 2. Means of the Peak Location Recorded for [j] and [tɛʰ] According to the Group x Vowel Context From Pairwise Comparison Based on LMM

### C. Centroid

Tukey's HSD post-hoc test indicates that in the high vowel context, the centroid of the English [j] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -1152.92$ ,  $SE = 96.73$ ,  $df = 3074.01$ ,  $t = -11.92$ ,  $p < 0.01$ ) and of the Thai [tɛʰ] ( $b = -1058.30$ ,  $SE = 79.37$ ,  $df = 3097.84$ ,  $t = -13.33$ ,  $p < 0.01$ ). In the same way, in the low vowel context, the centroid of the English [j] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -1254.52$ ,  $SE = 97.01$ ,  $df = 3075.41$ ,  $t = -12.93$ ,  $p < 0.01$ ) and of the Thai [tɛʰ] ( $b = -1438.40$ ,  $SE = 79.31$ ,  $df = 3097.81$ ,  $t = -18.14$ ,  $p < 0.01$ ). Similarly, in the back vowel context, the centroid of the English [j] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -974.68$ ,  $SE = 96.73$ ,  $df = 3073.26$ ,  $t = -10.08$ ,  $p < 0.01$ ) and of the Thai [tɛʰ] ( $b = -732.72$ ,  $SE = 79.18$ ,  $df = 3097.72$ ,  $t = -9.25$ ,  $p < 0.01$ ). These results suggest that across the vowel contexts, the English [j] produced by the high-experienced group was less fronted than the English [j] produced by the

low-experienced group and the Thai [tɛ<sup>h</sup>]. The means of the centroid recorded for [ʃ] and [tɛ<sup>h</sup>] according to the group x vowel context from pairwise comparison based on LMM are showed in Figure 3.

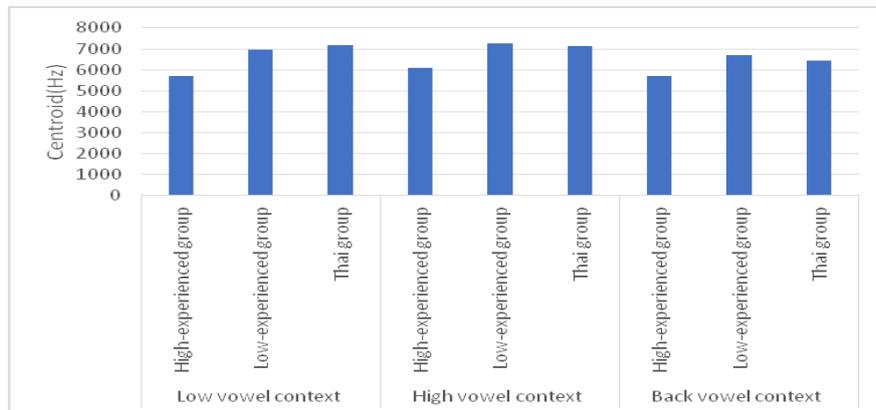


Figure 3. Means of the Centroid Recorded for [ʃ] and [tɛ<sup>h</sup>] According to the Group x Vowel Context From Pairwise Comparison Based on LMM

#### D. SD

Tukey's HSD post-hoc test indicates that the SD of the English [ʃ] produced by the high-experienced group was significantly lower than that produced by the low-experienced group ( $b = -512.20$ ,  $SE = 37.12$ ,  $df = 2587.66$ ,  $t = -13.80$ ,  $p < 0.01$ ) and that of the Thai [tɛ<sup>h</sup>] ( $b = -520.39$ ,  $SE = 26.85$ ,  $df = 2990.62$ ,  $t = -19.38$ ,  $p < 0.01$ ). These results suggest that the English [ʃ] produced by the high-experienced group was more sibilant than the English [ʃ] produced by the low-experienced group and the Thai [tɛ<sup>h</sup>]. Figure 4 shows the means of SD recorded for [ʃ] and [tɛ<sup>h</sup>] according to different language groups based on LMM.

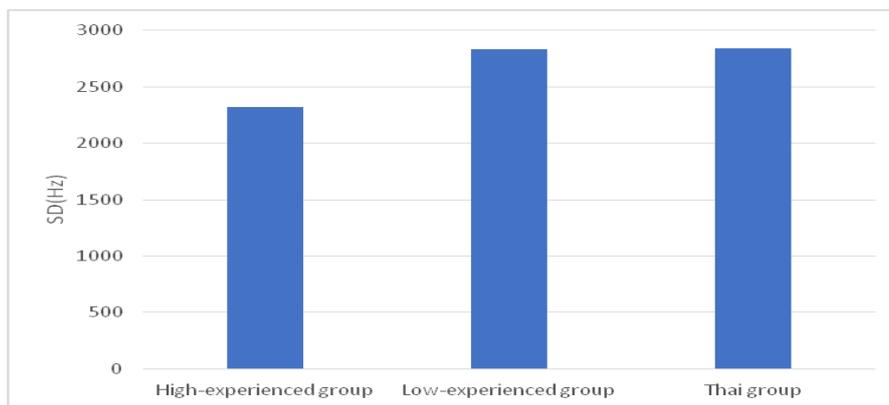


Figure 4. Means of the SD Recorded for [ʃ] and [tɛ<sup>h</sup>] According to Different Language Groups Based on LMM

#### E. Skewness

Tukey's HSD post-hoc test indicates that in the high vowel context, the skewness of the English [ʃ] produced by the high-experienced group was significantly higher than that produced by the low-experienced group ( $b = 0.81$ ,  $SE = 0.07$ ,  $df = 2978.36$ ,  $t = 10.96$ ,  $p < 0.01$ ) and that of the Thai [tɛ<sup>h</sup>] ( $b = 0.76$ ,  $SE = 0.06$ ,  $df = 3100.42$ ,  $t = 12.59$ ,  $p < 0.01$ ). In the same way, in the low vowel context, the skewness of the English [ʃ] produced by the high-experienced group was significantly higher than that produced by the low-experienced group ( $b = 0.83$ ,  $SE = 0.07$ ,  $df = 2982.62$ ,  $t = 11.30$ ,  $p < 0.01$ ) and that of the Thai [tɛ<sup>h</sup>] ( $b = 0.90$ ,  $SE = 0.06$ ,  $df = 3100.44$ ,  $t = 14.78$ ,  $p < 0.01$ ). Similarly, in the back vowel context, the skewness of the English [ʃ] produced by the high-experienced group was significantly higher than that produced by the low-experienced group ( $b = 0.71$ ,  $SE = 0.07$ ,  $df = 2976.09$ ,  $t = 9.66$ ,  $p < 0.01$ ) and of the Thai [tɛ<sup>h</sup>] ( $b = 0.58$ ,  $SE = 0.06$ ,  $df = 3100.49$ ,  $t = 9.60$ ,  $p < 0.01$ ). These results suggest that across the vowel contexts, the English [ʃ] produced by the high-experienced group is less fronted than the English [ʃ] produced by the low-experienced group and the Thai [tɛ<sup>h</sup>]. Figure 5 illustrates the means of skewness recorded for [ʃ] and [tɛ<sup>h</sup>] according to the group x vowel context from pairwise comparison based on LMM.

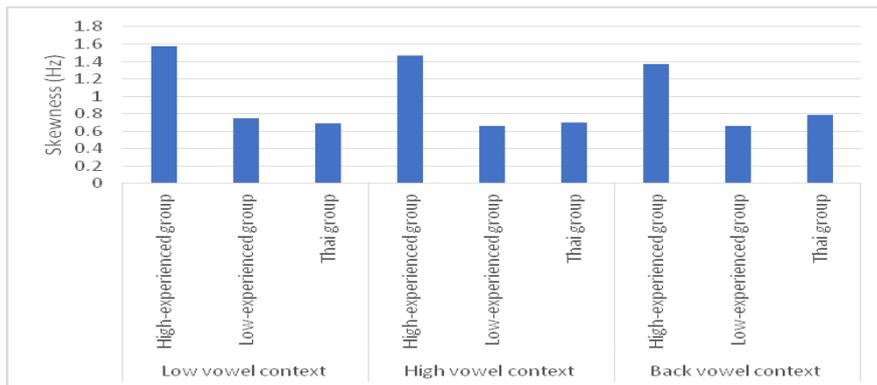


Figure 5. Means of the Skewness Recorded for [ʃ] and [tɕʰ] According to the Group x Vowel Context From Pairwise Comparison Based on LMM

F. Kurtosis

Tukey's HSD post-hoc test indicates that the kurtosis of the English [ʃ] produced by the high-experienced group was significantly higher than that produced by the low-experienced group ( $b = 2.42, SE = 0.30, df = 1751.34, t = 8.20, p < 0.01$ ) and of the Thai [tɕʰ] ( $b = 2.89, SE = 0.22, df = 2630.01, t = 13.33 p < 0.01$ ). These results suggest that the English [ʃ] produced by the high-experienced group was more sibilant than the English [ʃ] produced by the low-experienced group and the Thai [tɕʰ]. The means of the kurtosis recorded for [ʃ] and [tɕʰ] according to different language groups based on LMM are presented in Figure 6. Additionally, Table 1 presents a summary of the acoustic measurements used and the interpretations derived.

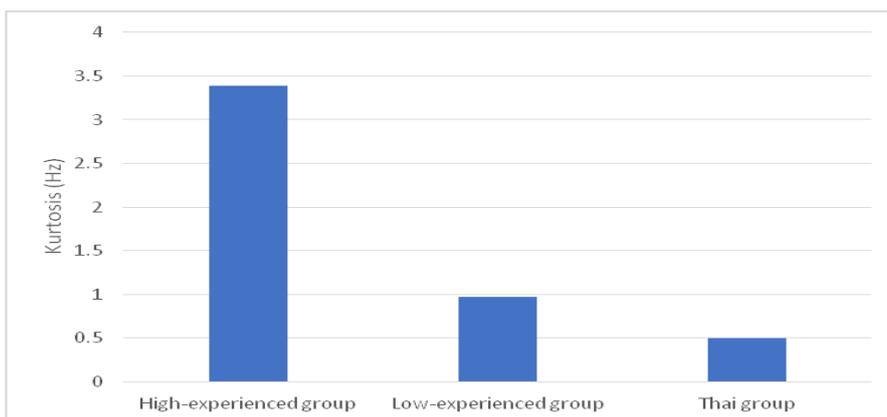


Figure 6. Means of the Kurtosis Recorded for [ʃ] and [tɕʰ] According to Different Language Groups Based on LMM

TABLE 1  
SUMMARY OF THE ACOUSTIC MEASUREMENTS USED AND THE INTERPRETATIONS DERIVED

Measurement	Vowel Context	Difference	Interpretation
Peak Location	High & Low	High < Low & Thai	High = less fronted than Low & Thai
	Back	High < Low	High = less fronted than Low
Centroid	All	High < Low & Thai	High = less fronted than Low & Thai
Skewness		High > Low & Thai	
SD	All	High < Low & Thai	High = more sibilant than Low & Thai
Kurtosis		High > Low & Thai	
Duration	High	High > Low > Thai	High = most fricative-like
	Low & Back	High & Low > Thai	High & Low = more fricative-like than Thai

Note: The first column denotes the measurement used. The second column sets out the vowel context. For this column, ‘High’ is the high vowel context, ‘Back’ is the back vowel context, ‘Low’ is the low vowel context and ‘All’ is all vowel contexts. The third column details the significant differences found in each pair of language group. For this column, ‘High’ is the English [ʃ] produced by the learners with high experience of the L2; ‘Low’ is the English [ʃ] produced by the learners with low experience of the L2 and ‘Thai’ is the Thai [tɕʰ]. The last column provides the interpretation derived.

V. DISCUSSION AND CONCLUSION

Overall, the English [ʃ] produced by the high-experienced group was different from the English [ʃ] produced by the low-experienced group in many acoustic measurements – including peak location, centroid, skewness, SD, kurtosis and duration in the high vowel context. Furthermore, the English [ʃ] produced by the low-experienced group was found not

to be different from the Thai [t<sup>h</sup>] in many acoustic aspects – including centroid, skewness, SD and kurtosis across the vowel contexts, and peak location in the high and low vowel contexts. The findings as to the peak location recorded in the high and low vowel contexts and spectral moments across contexts show that the English [ʃ] produced by the high-experienced group was less fronted and more sibilant than the one produced by the low-experienced group. The results also demonstrate that these acoustic measurements in these contexts between the English [ʃ] produced by the low-experienced group and the Thai [t<sup>h</sup>] were not significantly different. This suggests that the L2 learners with a high exposure to their L2 can decrease the negative influence of their native language when pronouncing L2 sounds. In other words, L2 experience has a positive effect upon L2 speech production. This implication is consistent with the findings produced in studies as to the positive effect of L2 experience on L2 sound learning (e.g., Baker, 2008; Flege et al., 1997; Kitikanan, 2017). The assumption that the learning of L2 speech sounds is filtered by a learner's L1 (Best & Tyler, 2007; Escudero, 2005; Flege, 1995; Lado, 1957) is supported only in the findings as to the low-experienced group in the above measurements. The findings of the high-experienced group in these acoustic measurements seem to advocate the SLM's last hypothesis – that bilinguals will be able to produce native-like L2 sounds eventually. This is because many of the acoustic characteristics of the English [ʃ] produced by the high-experienced group were different from the Thai [t<sup>h</sup>]. However, this presupposition requires further investigation.

As the findings show significant difference between the English [ʃ] produced by the high-experienced group and the English [ʃ] produced by the low-experienced group, and no significant difference between the English [ʃ] produced by the low-experienced group and the Thai [t<sup>h</sup>], these are contrastive to those findings presented in Huang (2020). The findings from the earlier impressionistic analysis undertaken as to the same realisations transcribed by two native speakers of British English showed that both groups of learners had over 90% accuracy in the production of the English [ʃ] in all vowel contexts. This suggests that both groups of L2 learners had no difficulty producing the English [ʃ]. However, the findings of our study suggest that, in many acoustic measurements, the English [ʃ] produced by the low-experienced group was influenced by the Thai /t<sup>h</sup>/ unlike with the English [ʃ] produced by the high-experienced group. These findings imply that such acoustic measurements can provide insight as to L2 speech realisations beyond the perceptions of humans.

The findings of this study also show the effect of vowel contexts towards the learning of L2 sounds. This is supported by the findings recorded as to peak location and duration. In the peak location recorded, the production of the English [ʃ] produced by the high-experienced group was found to be less fronted than that produced by the low-experienced group and the Thai [t<sup>h</sup>] in the high and low vowel contexts. However, in the back vowel context, the English [ʃ] produced by the high-experienced group was found to be less fronted than the low-experienced group whereas there was no significant difference between the Thai [t<sup>h</sup>] and the English [ʃ] produced by the two groups of learners. In regards to the duration recorded, in the high vowel context, the English [ʃ] produced by the high-experienced group was found to be the most fricative-like among three groups. In contrast, in the low and back vowel contexts, the English [ʃ] produced by the two groups of learners was found to be more fricative-like than the Thai [t<sup>h</sup>]. These findings suggest the influence of the vowel context in L2 speech learning as pointed out in a number of studies (e.g., Hardison, 2003; Kitikanan, 2016; Schmidt, 1996). In the teaching of L2 sounds, teachers might take vowel context into consideration when designing teaching materials. For example, in the teaching of the English [ʃ] as L2, the target sound might be presented in high, low and back vowel contexts to expose the learner to the target sound in distinct vowel contexts.

There are three limitations of this study. Firstly, this study did not investigate the production of the English [ʃ] produced by native speakers of English. Addressing the production of sound by native speakers of the L2 under consideration could help to determine the extent to which L2 learners are successful in producing the L2 sound in question. This would answer the last hypothesis in SLM – that an L2 sound will be produced with phonetic characteristics that are similar to the phonetic qualities of the L2 sound produced by L2 native speakers. Secondly, this study only explored six acoustic measurements, yet others are available in studying the production of fricatives – such as F2 frequency (Jongman et al., 2000). Exploring more acoustic properties might result in greater insight as to the aspects of the English [ʃ] produced by both groups of learners. It is possible that the English [ʃ] produced by L2 learners, regardless of their L2 experience, shall be different from the Thai [t<sup>h</sup>]. Lastly, the subjects in this study were L2 Thai learners. When the English /ʃ/ is produced by L2 learners of other linguistic backgrounds, the results might differ – for example, in showing the influence of the vowel context in all acoustic characteristics.

#### REFERENCES

- [1] Al-Tamimi, J., & Khattab, G. (2015). Acoustic cue weighting in the singleton vs geminate contrast in Lebanese Arabic: The case of fricative consonants. *The Journal of the Acoustical Society of America*, 138(1), 344-360.
- [2] Aslaksrud, L., & Haarberg, G. (1967). *English Speech: Sounds, rhythm and tunes*. Oslo: Forlagt AV H. Aschehoug & CO.
- [3] Baker, W. (2008). *Social, experiential and psychological factors affecting L2 dialect acquisition*. Paper presented at the Selected proceedings of the 2007 second language research forum, Somerville, MA.
- [4] Baker, W., & Trofimovich, P. (2006). Perceptual paths to accurate production of L2 vowels: The role of individual differences. *IRAL - International Review of Applied Linguistics in Language Teaching*, 44(3), 231-250.
- [5] Bates, D., Maechler, M., Bolker, B., & Walker, S. (2015). Fitting Linear Mixed-Effects Models Using lme4. *Journal of Statistical Software*, 67(1), 1-48. doi:10.18637/jss.v067.i01

- [6] Best, C. T., & Tyler, M. D. (2007). Nonnative and second-language speech perception: Commonalities and complementarities. In M. J. Munro & O.-S. Bohn (Eds.), *Second language speech learning: The role of language experience in speech perception and production* (pp. 13-34). Amsterdam: John Benjamins.
- [7] Boersma, P., & Weenink, D. (2019). *Praat: doing phonetics by computer [Computer program] (Version 6.0.23)*. Retrieved October, 2, 2021, from <http://www.praat.org/>
- [8] Escudero, P. (2005). *Linguistic perception and second language acquisition: explaining the attainment of optimal phonological categorization*. (Doctoral dissertation), Utrecht University.
- [9] Flege, J. E. (1987). A critical period for learning to pronounce foreign languages? *A critical period for learning to pronounce foreign languages?*, 8, 162-177.
- [10] Flege, J. E. (1991). Age of learning affects the authenticity of voice-onset time (VOT) in stop consonants produced in a second language. *The Journal of the Acoustical Society of America*, 89(1), 395-411.
- [11] Flege, J. E. (1995). Second language speech learning: Theory, findings, and problems. *Speech perception and linguistic experience: Issues in cross-language research*, 233-277.
- [12] Flege, J. E., Bohn, O.-S., & Jang, S. (1997). Effects of experience on non-native speakers' production and perception of English vowels. *Journal of Phonetics*, 25(4), 437-470.
- [13] Hardison, D. M. (2003). Acquisition of second-language speech: Effects of visual cues, context, and talker variability. *Applied Psycholinguistics*, 24, 495-522. doi:<https://doi.org/10.1017/S0142716403000250>
- [14] Huang, Q. (2020). The Impressionistic Study of English [ch] and [sh] in Initial Position by L2 Thai Learners. *English Language Teaching*, 13(9), 112-118.
- [15] Jongman, A., Wayland, R., & Wong, S. (2000). Acoustic characteristics of English fricatives. *The Journal of the Acoustical Society of America*, 108(3), 1252-1263.
- [16] Kanokpermpoon, M. (2007). Thai and English consonantal sounds: a problem or a potential for EFL learning? *ABAC Journal*, 27(1), 57-66.
- [17] Kitikanan, P. (2016). *L2 English fricative production by Thai learners*. (PhD thesis), Newcastle University, Newcastle.
- [18] Kitikanan, P. (2017). The Effects of L2 Experience and Vowel Context on the Perceptual Assimilation of English Fricatives by L2 Thai Learners. *English Language Teaching*, 10(12), 72. doi:10.5539/elt.v10n12p72
- [19] Kitikanan, P. (2020a). The Effect of L2 Experience on the Perceptual Assimilation of British English Monophthongs to Thai Monophthongs by L2 Thai Learners. *English Language Teaching*, 13(5), 1-10. doi:10.5539/elt.v13n5p1
- [20] Kitikanan, P. (2020b). สัทวิทยาภาษาที่สอง [L2 Phonology]. Phitsanulok: Naresuan University Publishing House.
- [21] Lado, R. (1957). *Linguistics Across Cultures*. Ann Arbor, Mich.: Univeristy of Michigan Press.
- [22] Lenth, R. V., Buerkner, P., Herve, M., Love, J., Riebl, H., & Singmann, H. (2021). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. Retrieved February, 10, 2022, from <https://github.com/rvlenth/emmeans>
- [23] Repp, B. H., Liberman, A. M., & Eccardt, T. (1978). Perceptual intergration of acoustic cues for stop, fricative and affricate manner. *Journal of Experimental Psychology*, 4(4), 621-637.
- [24] Roengpitya, R. (2011). *An acoustic study of English and Thai fricatives produced by Thai speakers*. Paper presented at the 17th International Congress of Phonetic Sciences (ICPhS XVII), Hong Kong, China.
- [25] Schmidt, A. M. (1996). Cross-language identification of consonants. Part 1. Korean perception of English. *Journal of Acoustical Society of America*, 99(5), 3201-3211.
- [26] Stevens, P. (1960). Spectra of fricative noise in human speech. *Language and Speech*, 3, 32-49.
- [27] Zheng, Y., McPherson, K., & Smith, P. (2014). Effects of early and late treatment with L-baclofen on the development and maintenance of tinnitus caused by acoustic trauma in rats. *Neuroscience*, 258, 410-421.

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# Monitor Model Theory as a Solution to Overcome the Problem of Mastering Arabic Grammar Among Students in Malaysia

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**Abstract**—The issue of mastery of Arabic grammar has long been discussed by researchers as well as academicians. Until now, the problem of students' Arabic grammar mastery in Malaysia has been a grievance of teachers in schools and lecturers in Institutions of Higher Learning. There are two divisions of grammatical aspects that are difficult for students which have been identified, firstly the use of *al-kalimat* (words) and secondly, the use of *at-tarakib* (sentence construction). Therefore, this paper aims to discuss the problem of Arabic grammar mastery of students in Malaysia as well as how the role of Monitor Model Theory acts as a solution to address the problem of Arabic grammar mastery based on secondary sources. It also discusses the history of the development of Arabic language, the syllabus of the Arabic language curriculum in religious secondary schools as well as the learning of Arabic grammar in the *Kurikulum Standard Sekolah Menengah Syllabus* and the *Kemahiran Bersepadu Dini Syllabus*. This paper will contribute to the knowledge of more effective teaching methods or approaches which in turn have an impact on pedagogy in the teaching of Arabic grammar to improve the students' understanding and reduce their errors in learning Arabic grammar.

**Index Terms**—monitor model theory, grammar mastery problem, Arabic language, Malaysian students

## I. INTRODUCTION

A review of the literature proves that the mastery of Arabic grammar among students is still at an alarming rate. Previous researchers have also proven that there are two types of students' difficulties in learning Arabic grammar, namely the use of *al-kalimat* الكلمات (words) and also *at-tarakib* التراكيب (sentence construction) (Sokri & Ismail, 2017; Mokhtar et al., 2017; Ismail et al., 2021). It is important for students to be able to master the use of *al-kalimat* to produce grammatical *at-tarakib*.

The Monitor Theory introduced by Krashen (1981) focuses on the sequence of acquisition of students' grammar. This is based on Chomsky's view where humans are biologically endowed with a language acquisition device (LAD) which is also called an innate mechanism. This LAD serves as a tool that receives inputs and serves to determine the sequence of acquisitions that is initially obtained or vice versa. For second or foreign language learning, a monitor that

serves as a monitoring tool will ensure whether the grammatical aspects used are correct or otherwise during speech or writing, provided that adequate time is allocated in grammar learning which focuses on the grammatical forms or structures and the knowledge of grammatical methods.

In addition, the input received by students in grammar learning should be higher than the existing knowledge as it can give great impact on their attitude, motivation and self-confidence in grammar learning. Therefore, this paper aims to discuss further how Monitor Theory Model acts as a solution to students' mastery of grammar. This is important as it can give benefits to educators and academicians. Furthermore, it also gives an impact towards the pedagogy of Arabic grammar as well as the development of Arabic language education in Malaysia.

#### A. History of the Development of Arabic Language Education in Malaysia

The teaching and learning of Arabic is not something new to the community in Malaysia. This can be seen based on the teaching and learning activities which have existed since the reign of Malacca state government that has become the center of international trade for about 500 years ago (Muhammad et al., 2006) until today. The Arabic language has its own specialty and it is highly positioned especially among the Malay community (Ismail, 1994; Yaacob, 2017), in which it is learnt to understand the Quran. The uniqueness of the Arabic language can be seen in the use of *Jawi* script which is taken from the Arabic alphabets before the independence, and it is widely used in Malaysian society (Khalid, 1994). In addition, the Arabic language has contributed a lot to the Malay language vocabulary (Khalid, 1994; Mezah, 2009) especially words which are related to religion and education (Khalid, 1994), worship and religious activities.

The teaching and learning of Arabic in the Malay community has started since pre-school education until higher education (Sahid & Fettane, 2019). Back then, the teaching and learning of Arabic was taught in *pondok* system (Samah, 2012; Zaini et al., 2019) using the traditional method. This method focuses on the teacher (formerly called master teacher) who gave lecture to the students by reading and explaining the translated Arabic book verse by verse and the students wrote as well as memorized what they had learnt till they graduated (Ishak, 1995). This *pondok* education system has grown extensively in almost every state in Malaysia (Samah, 2012).

The teaching and learning of Arabic has continued until Malaysia achieved independence in 1957, where the institutions of Islamic Studies have officially established in the form of *madrasah* system or school system in early 20th century (Nordin, 2005; Samah, 2012). At the end of the 20th century, Arabic language was regarded as an important subject and it was placed under the Islamic and Moral Education Curriculum Division, Department of Islamic and Moral Education, Ministry of Education Malaysia (MOE) and there were also religious schools found under the state government and state religious council (Nordin, 2005). The teaching and learning of Arabic is categorized into two parts, namely *Bahasa Arab Tinggi* (Higher Arabic) and *Bahasa Arab Komunikasi* (Communication Arabic) (Sardi & Majid, 2004) and they have been placed under the *Kurikulum Standard Sekolah Menengah* (Secondary School Standard Curriculum) and *Kemahiran Bersepadu Dini* (Early Integrated Skills).

Meanwhile, the teaching and learning of Arabic at public and private higher education institutions like colleges and universities has started in the era of 1980s (Nordin, 2005). Today, it has become either a compulsory subject or as an elective course at diploma, bachelor and doctoral level (Mustapa & Arifin, 2012; Yaacob, 2017). Among the early universities to establish the Department of Arabic Language and Islamic Civilization are Universiti Kebangsaan Malaysia (UKM) (Mustapa & Arifin, 2012; Arifin et al., 2012) followed by the International Islamic University (IIUM), then Universiti Malaya (UM) followed by Universiti Putra Malaysia (UPM) and Universiti Sains Islam Malaysia and Universiti Sultan Zainal Abidin (UNISZA) (Mustapa & Arifin, 2012). Meanwhile, at Universiti Teknologi Mara (UiTM), Arabic language courses are provided for all students, staff and general public. The course has been conducted by the Arabic Language Unit which is placed under the Department of Asian and European Languages (JBAE), the Academy of Language Studies (ALS) that was established in the 60s (Mohamad et al., 1999).

#### B. Arabic Language Curriculum Syllabus in Religious Secondary Schools in Malaysia

In Malaysia, there are two Arabic language curriculum syllabi used in religious secondary schools, namely:

##### (a). *Kurikulum Standard Sekolah Menengah (KSSM)*

In 2017, *Kurikulum Standard Sekolah Menengah (KSSM)* is the Secondary School Standard Curriculum which was implemented in stages at *Sekolah Menengah Kebangsaan Agama (SMKA)* starting from Form 1 to Form 5 students (Kementerian Pendidikan Malaysia, 2013). The implementation of KSSM uses the Curriculum and Assessment Standard Document (DSKP). For Arabic language subjects, the textbook entitled *al-Lughah al-'Arabiyyah* is used for Form 1 until Form 5 students. Based on the circular letter of the *Kementerian Pendidikan Malaysia* (Ministry of Education Malaysia) No. 6 of 2019 (KPM.100-1/3/1 vol.2 (7)), the Secondary School Standard Curriculum syllabus is a syllabus formulated by the Ministry of Education Malaysia from the *Kurikulum Bersepadu Sekolah Menengah (KBSM-Sekolah Menengah Integrated Curriculum)* syllabus. This is because the *Pelan Pembangunan Pendidikan Malaysia (PPPM-Malaysian Education Development Plan) 2013-2025* has recommended the KBSM syllabus to be revised in accordance with the development of 21st century education so that students are able to master skills such as critical thinking, high-level thinking, creative thinking and innovative thinking. The use of the KSSM syllabus in learning Arabic is elective and it is not compulsory for all students in secondary schools. However, for those who are interested

to pursue their studies at university level in Arabic language and Islamic studies, they are required to learn Arabic Language at secondary level.

(b). *Kemahiran Bersepadu Dini (KBD)*

*Kemahiran Bersepadu Dini (KBD)* is the Early Integrated Skills Syllabus that was implemented in *Sekolah Agama Bantuan Kerajaan (SABK- Government Aided Religious Schools)*, *Sekolah Agama Negeri (SAN- State Religious Schools)* and *Sekolah Agama Rendah (SAR- Primary Religious Schools)*. Based on the *Kementerian Pendidikan Malaysia* notification letter (KPM.BPI.100.611.47 vol.4 (64), the KBD syllabus was implemented in 2015 except for SABK in Negeri Sembilan and SABK Tun Ahmad Zaidi Sarawak, in which its implementation began in 2016. For Arabic language subjects, the textbook entitled *al-Lughah al-'Arabiyyah al-Mu'asirah* is used for students from Form 1 to Form 5. This KBD syllabus is divided into three parts based on Arabic language skills, namely *al-kitabah* (writing skills), *al-qira'ah* (reading skills) and *al-istima' wa al-kalam* (listening and speaking skills) (Khatib & Zainal, 2018). This is because KBD curriculum emphasizes the need of mastering the four language skills by students. KBD curriculum was introduced to produce knowledgeable and skilled students in Arabic Language. Based on the document of Standard Curriculum *al-Lughah al-'Arabiyyah al-Mu'asirah* 2014, the syllabus in the textbook *al-Lughah al-'Arabiyyah al-Mu'asirah* emphasizes on the mastery of Arabic vocabulary whereby there are approximately 2000 words introduced. Therefore, it was found that the KBD syllabus focuses more on vocabulary learning (Khatib & Zainal, 2018) rather than grammar aspects.

The learning of Arabic grammar is studied according to the topics in the textbook *al-Lughah al-'Arabiyyah KSSM* 2017, 2018, 2019 and 2020 and the textbook entitled *al-Lughah al-'Arabiyyah al-Mu'asirah KBD* 2015, 2017 and 2018 from Form 1 to Form 5. It focuses on words (الكلمات) as well as sentence construction (التركيب). Among the parts of words studied are introduction to nouns (الاسم) from gender aspects such as masculine (مذكر) and feminine (مؤنث), nouns by numbers like singular (مفرد), dual nouns *muthanna* (مثنى) and plural (جمع), pronoun (الضمائر), *masdar* noun (مصدر), number (*al-adad* and *al-ma'dud*), preposition (حروف الجر), demonstrative pronoun (الاسم الإشارة) and derivation (مشتقات). There are also types of verbs (الفعل) studied such as present tense (المضارع), past tense (الماضي), command verbs (الأمر) as well as prepositional verbs (المزيد).

Meanwhile the types of sentence construction (*at-tarakib-التركيب*) studied in the KSSM and KBD curriculum are noun sentences (الجملة الإسمية) and verb sentences (الجملة الفعلية), *at-tarkib al-idafiyy* (التركيب الإضافي) and *at-tarkib ana'tiyy* (التركيب النعتي). The Arabic grammar in KSSM and KBD textbooks is learned in order of topics and some are learned together. This topic of grammar needs to be well understood so that students can use the words to build grammatical sentences to master the Arabic language skill.

## II. LITERATURE REVIEW

### A. *A Study of Arabic Grammar Mastery Among Students in Malaysia*

The development of Arabic language education has encouraged the language researchers to study the issues on teaching and learning the language itself. The position of Arabic in Malaysia as a third language (L3) followed by Malay (L1) and English (L2) has also contributed to the existence of issues on Arabic language mastery. Figure 1 shows the process of mastering Arabic as a third language:

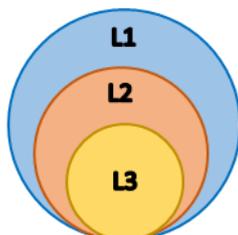


Figure 1 The Process of Mastering the Arabic Language

Based on figure 1, Arabic is learned when students have mastered the first language (L1) and the second language (L2). This situation causes students to have difficulty in understanding some grammatical methods of the Arabic language due to grammatical differences in terms of word formation as well as the construction of phrases or sentences. There are confusions over sentence structure construction (Samah, 2012), the use of word forms or patterns, the use of pronoun (Sokri & Ismail, 2017) and the use of verbs (الفعل) (Mokhtar et al., 2020). Apart from that, the complexity of Arabic grammar from the aspect of genus or gender (Ismail et al., 2014; Sokri & Ismail, 2017) as well as *al-adad* (number) are the difficulties in learning Arabic grammar (Mat & Soon, 2010; Ismail et al., 2018). Students still have not mastered the rules of sentence structure construction and word change (transform) in Arabic grammar since they are still being influenced by their mother tongue (Malay language) (Awang et al., 2014).

Some studies that have been done by researchers such as Hussin et al. (2015), Karim and Husaini (2016), Hamid et al. (2017), Mokhtar et al. (2020) and also Baharum and Rahman (2020) have proven that students' mastery of Arabic grammar is still poor where this can affect their performance in learning the language. Previous researchers have also

found that students face two types of difficulties in learning Arabic grammar namely the use of words (الكلمات) and sentence construction (التركيب).

One of the difficulties is the use of verbs (الفعل), for example, a study by Sokri and Ismail (2017) who have collected data through the writing of Arabic essays. Their results showed that students find it more difficult to use past tense verb (الفعل الماضي) than the present tense verb (الفعل المضارع) that is by using the present tense verb "يعملون" (they do) in construction of the sentence "they did". Their findings are in line with the study conducted by Ismail et al. (2021) who also found it is more difficult for students to use past tense than present tense, for example in the sentence "أنتهي من" "المدرسة الثانوية في سنة الماضية" (I finish from high school last year) by using present tense "أنتهي" (I finish) which should be the past tense verb "انتهيت" (I finished).

Sopian (2019) also found that students find it difficult to use verbs in learning Arabic grammar. However, his findings show that it is difficult for students to use present tense in sentence writing. The students did errors in terms of forming verbs to the appropriate perpetrator in sentence writing. The example is in the sentence "كل يوم أناقش الدروس و" "تكتب التدريبات" (every day I discuss lessons and you write exercises). The students form the present tense "تكتب" (you write), instead of "أكتب" (I write) because the doer refers to the first person (me). The findings of Sopian's (2019) study are different from the study of Sokri and Ismail (2017) and the study of Ismail et al. (2021).

Apart from that, study done by Ismail et al. (2021) has identified errors in number (العدد) such as the failure of students in using the word "ثلاث" (number 3) which is *muzakkar* (masculine) for *ma'dud* (which is counted) which is *muzakkar* in the construction of the sentence "ثلاث طلاب" (3 male students). This is because the rules of Arabic grammar define the plurals from 3 to 10 should be considered when constructing the correct phrase and numbers (معدود) opposite gender and *ma'dud* should be in plural form.

In terms of sentence construction (التركيب), Sokri and Ismail (2017) found that students find it difficult to construct noun sentences (الجملة الاسمية) and also sentences that have the phrase *as-sifah* (الصفة) that uses the phrase *al-idafah* (الإضافة). This finding is further strengthened by the findings of Sopian (2019) which also found that students were confused of using the phrase *as-sifah* and the phrase *al-idafah* in sentence construction. Students were confused in forming *at-tarkib al-idafiy* in the verse *at-tarkib an-na'tiy* and forming *at-tarkib an-na'tiy* in the verse *at-tarkib al-idafiy*.

The study conducted by Mokhtar et al. (2017) also found that students have not mastered well the aspects of construction of noun sentences (الجملة الاسمية) and verb sentences (الجملة الفعلية) and *at-tarkib al-idafiy* from the dual (مثنى) and plural (جمع) form with average percentage. They have collected data using questionnaires as well as Arabic grammar mastery test questions. Through the Arabic grammar mastery test questions, only 18% of the students answered correctly for the question that tested them about the noun sentences (الجملة الاسمية) and 6% who correctly answered the verb sentences (الجملة الفعلية) and 43% who answered correctly for *at-tarkib al-idafiy*. The findings of the study done by Ismail et al. (2021) also supported the study of Mokhtar et al. (2017) which indicated that students who confused over the grammar rules of Arabic as a second language (L2) and those who have different language from their first language (L1) are the main factors that lead to students' errors in learning Arabic grammar.

The study done by Ismail et al. (2021) found that students are not able to construct *at-tarkib al-idafiy* according to the correct grammatical rules, instead they have constructed sentences that disagree with Arabic grammar method. This can be seen in the student sentence such as "أرى النور في الوجه والدين" (I see there is light on the faces of both parents). The construction of the sentence "الوجه والدين" violates the rules of Arabic grammar because the word "الوجه" (face) is *mudaf* (مضاف) which needs to be *nakirah* (نكرة) by not including the letters *alif* and *lam* (ال) at the beginning of the word.

Past studies have found that among the factors of students' weaknesses in understanding the rules of Arabic grammar is due to the teaching methods used by teachers which are not appropriate and less effective (Zaini et al., 2019). This is because teachers are still using the traditional teaching methods (Samah, 2014; Ariffin@Riffin & Taat, 2020) in teaching Arabic grammar such as grammar and translation (Samah, 2012; Sahid & Fettane, 2019) and memorization without paying attention to the real problems that students face. This situation causes students to be less skilled and to have passive attitude which in turn affect students' performance in learning Arabic (Hamid et al., 2017; Sahid & Fettane, 2019).

Apart from that, the textbooks used by teachers are also particularly important in learning Arabic grammar. This is because textbooks which contain syllabus for each topic taught are the main source of teachers and students (Ghazali et al., 2015; Sopian, 2017). The teaching method used by teachers also depends on the content is presented in the textbook used. Using textbooks is one of the important factors that determine the level of mastery and achievement of Arabic language among students apart from other factors like teachers, environment and students themselves (Sopian, 2017). Therefore, the organisation of the textbook content should be appropriate to the abilities and needs of students, especially in learning Arabic grammar.

Sahid and Fettane (2019) stated that the time allocated in learning Arabic grammar is inadequate where it affects the performance and quality of students. In addition, there is no specific time allocated in learning Arabic grammar. Normally, the subject of Arabic grammar is taught during the Communication Arabic lesson. On the other hand, students who study abroad are required to learn Arabic grammar as a compulsory subject. This has affected the performance and quality of students in learning Arabic subjects compared to those who are in Malaysia (Sahid & Fettane, 2019).

### B. Monitor Theory Model as a Solution to Arabic Grammar Mastery Problems

The Monitor theory introduced by Krashen (1981; 1982) was based on the sequence of grammatical morpheme acquisition (Kwon, 2005) conducted by the previous researchers such as Dulay and Burt (1973; 1974), Freeman (1975; 1976) as well as Bailey et al. (1974) in the 70s to 80s focusing on the study of second language acquisition (Izumi & Isahara, 2004).

Through a survey by researchers, studies on the sequence of morpheme acquisition in the field of grammar are abundant in the field of English studies. For example, Dulay and Burt's studies in 1973 and 1974 found a similar sequence of acquisitions from three groups of children at the aged from 6 to 8 years. The first group has 95 Chicano children from Sacramento California, while the second group has 26 Mexican children from San Ysidro California and the third group has 30 Puerto Rican children from the East Harlem area of New York. The results of their studies found that there is a sequence of acquisition of grammatical morphemes that have been mastered earlier like the word plural "s" while the progressive form -ing has been mastered later by the students. While other grammatical morphemes such as irregular past tense, third person singular present tense -s and possessive - 's are mastered later by students. The results of this study also showed that the sequence of acquisition of second language morphemes acquisition was the same regardless of age (Dulay & Burt, 1973; Krashen, 1981; 1982; Morais, 1991; Izumi & Isahara, 2004; Kwon, 2005).

In addition, there are several studies that also focus on the sequence of acquisition of grammatical morphemes such as studies conducted by Kwon (2005), Bahrani (2011), Abukhattala (2013), Barrot and De Leon (2014). Yet these studies focus more on the sequence of English grammatical morphemes. While studies in the field of Arabic grammar focus a lot on grammar mastery without discussing the sequence of acquisition which was discussed in the previous studies in the Arabic grammar field.

Knowledge of this sequence of acquisition is important so that educators and academics can structure the curriculum according to the sequence of acquisition and mastery of students (Izumi & Isahara, 2004). In addition, research findings on acquisition sequences will be able to contribute to more effective teaching methods or approaches which in turn give impact to language teaching pedagogy in order to improve students' comprehension and reduce their errors in learning (Kwon, 2005).

An interesting finding found in grammatical morpheme acquisition research is that the acquisition of grammatical structures occurs in a predictable sequence. This means that a language learner tends to acquire certain grammatical structures early and there are those that students acquire late. An early sequence means it is easy to master while a late sequence means it is difficult to master. Chomsky (2006) states this situation because humans are biologically endowed with a language acquisition device (LAD) which is also referred to as an innate mechanism. This LAD serves as a tool that receives inputs or inputs whose role is to determine the sequence of acquisitions that are initially obtained or vice versa. He further states that a human being naturally has an ability to speak in himself known as universal grammar (Guat, 2006; Jumhana, 2014). This can be explained in the following figure 2:

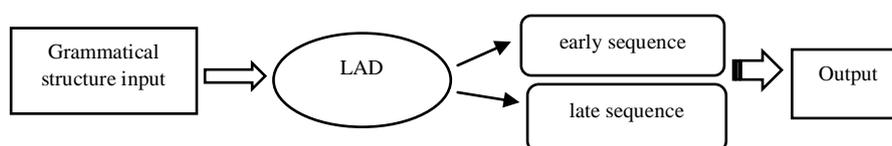


Figure 2 The Role of LAD as a Tool of Receiving Grammatical Structure Input

Krashen Monitor Theory Model puts forward five hypotheses namely:

#### (a). Acquisition-Learning Hypothesis

Krashen (1981; 1982) states that there are two methods for a person to master and acquire his first second language through the process of acquisition and the second through the process of learning. The process of acquisition is a process that occurs unconsciously (subconscious) through informal learning referred to as implicit (Krashen, 1982) with an emphasis on the meaning to be conveyed (Abukhattala, 2013). While the second way is a learning process that needs to be through formal education called explicit, which is a process that occurs in a conscious state by focusing on the grammatical structure, in order to know the grammar method of the second language (Bahrani, 2011; Abukhattala, 2013). This formal education serves as a monitor (monitoring tool) that provides output or results to a person orally as well as in writing (Krashen, 1981; 1982). Krashen (1982) states "Conscious learning is available only as a "monitor", which can alter the output of the acquired system before or after the utterance is actually spoken or written" (Krashen, 1982, p.16).

In Malaysia, learning Arabic is through formal education. This means, the process of learning Arabic is through conscious learning which acts as a monitor that can be seen through the results (output) when students practice grammar in the form of communication or speech or writing. Through this hypothesis, the teaching of Arabic grammar should be given emphasis on the form or structure of Arabic grammar. For example, in the learning of nouns (الاسم) from the aspect of number such as singular nouns, *muthanna* (dual) and plural which have significant differences from the aspect of word form such as the noun معلم (one teacher), معلمان (two teachers) and معلمون (several teachers). A good understanding of the form or structure of this grammar is necessary as it impacts the meaning to be conveyed.

*(b). Natural Order Hypothesis*

The natural order hypothesis is one of the important elements in the Monitor Theory of this model. It is also known as natural order which states that the acquisition of a form or grammatical structure for second language learners can occur through natural order. This means that some grammatical structures are acquired earlier while some are acquired later (Krashen, 1982; Bahrani, 2011). The early sequence obtained means a sequence that is easy to master while the late sequence is a sequence that is difficult to master. The sequence of difficult grammatical structures is not necessarily as we might expect (Abukhattala, 2013). Through this natural sequence hypothesis, students' mistakes and errors can also be seen when students have not mastered the grammatical structure used.

In Arabic language learning, it is important to know information on the natural sequence of grammatical aspects which is based on the sequence of students' mastery. By knowing this, the mastery of grammar aspects whether it is easy or difficult can be identified. Arabic grammar is learned indirectly in every chapter in the textbook if it is examined through the use of KSSM and KBD syllabus. Most grammar topics are studied periodically and there are also different topics studied simultaneously without considering the easy and difficult sequences. This can lead to confusion as students need to distinguish the form or structure of Arabic grammar and its use in sentences.

*(c). Monitor Hypothesis*

Monitor is a self-monitor that involves learning consciously. This conscious learning that acts as a self-monitor can alter the output obtained either before or after an utterance is spoken or written (Krashen, 1982). Krashen also stated that the monitor will be able to function properly based on three conditions that need to be met, namely:

- a. Sufficient time allocated
- b. Focus on the form
- c. Knowledge of grammatical methods (Krashen, 1982; Gregg, 1984)

The process of teaching and learning Arabic grammar formally in this class will provide new information to students. The new information that results from this teaching and learning process acts as a self-monitoring monitor that can change the output obtained by students when they need to use it in speaking or writing. This depends on the sufficient time allocated in the teaching and learning of Arabic grammar. In addition, teaching should focus more on the form and structure of grammar that give the impact in terms of the meaning and students have a good knowledge in the aspects of Arabic grammar.

*(d). Input Hypothesis*

Input hypothesis is an input received because of the learning process. This input hypothesis states that an input received should exceed the existing level and students can best understand the language input obtained through listening or reading. This input process is seen based on the formula from level  $i$  (current competency) to develop to level  $i+1$  when students understand well the input obtained. This level of  $i+1$  indicates the ability and competence of students are beyond the existing level (Krashen, 1982; Abukhattala, 2013).

Based on this input hypothesis, students will master the Arabic grammar successfully when they themselves receive the input more than they expect and understand well the learning of Arabic grammar. Therefore, teachers need to give more emphasis on the aspects of *al-kalimat* (words) and *at-tarakib* (sentences) when teaching Arabic grammar. That is, each Arabic grammar topic which is studied should be given more input than the existing ones either in word form or in sentence construction. In fact, more emphasis should also be given on the ones which are difficult to acquire. In addition, trainings or drills should be designed based on the students' frequent errors.

*(e). Affective Filter Hypothesis*

The affective filter hypothesis states that importance of second language acquisition depends on the factors like high attitude, motivation, and confidence as well as low anxiety. This is because attitude, motivation and high confidence will cause the affective filter to be low, as a result, students will be able to receive the input effectively in learning the second language. However, when attitude, motivation and confidence are low, the anxiety will increase which causes the affective filter to be high. This situation will have a negative impact on second language achievement because the resulting mental block will affect the comprehensible input of the second language (Krashen, 1982; Bahrani, 2011).

Although this Monitor Theory refers to the acquisition of a second language, it is also suitable for a third language or known as foreign language. Ellis (1997) states that a second language refers to several languages which are learned after the first language. This refers to a second or third language or other foreign languages. This is because the process of acquiring a second language and a third language or foreign language must go through the same learning process that is formal learning (Kridalaksana, 1983). In Malaysia, learning English and Arabic as a second or third language needs to go through formal learning. Figure 3 below shows how Monitor Theory Model works in addressing the problem of Arabic grammar mastery:

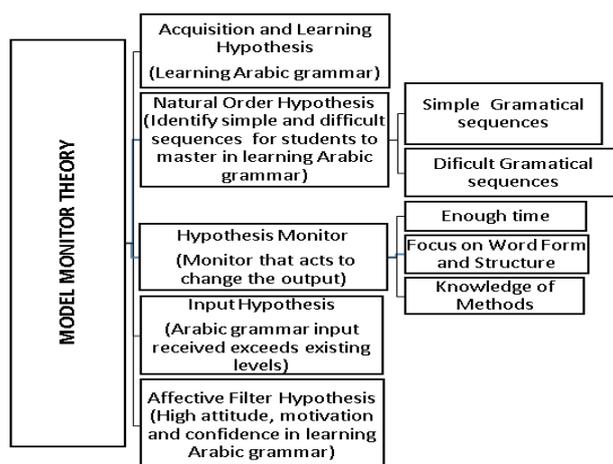


Figure 3 Monitor Theory Model as a Solution to Overcome the Problem of Arabic Grammar

### III. RECOMMENDATIONS AND CONCLUSION

Mastery of Arabic grammar is important to improve language skills, especially reading, writing and speaking skills apart from vocabulary mastery. If we look at the results of previous studies, students' knowledge and mastery of Arabic grammar has not yet reached a satisfactory level that can impact students' performance in language skills. Based on the KSSM and KBD curriculum syllabus, the focus is more on vocabulary mastery compared to Arabic grammar. Although vocabulary mastery is important in improving students' language skills, students' weaknesses in Arabic grammar will affect the construction of correct sentences based on Arabic grammar methods. The proposed subject of *Qawaid Arabiyyah* (Arabic grammar) as a compulsory subject to be taken in learning Arabic in addition to the existing curriculum is necessary to strengthen the mastery of Arabic grammar. In addition, the compilation of Arabic grammar syllabus in the curriculum based on *al-kalimat* (words) and *at-tarakib* (sentences) should be arranged in both simple and difficult order for students to master the form and structure of Arabic words based on Arabic grammar methods. The grammatical aspects of Arabic that are difficult to master can be seen based on students' errors in learning *al-kalimat* and *at-tarakib*. Sokri and Ismail (2017) stated that the aspects of students' errors in teaching and learning need to be emphasized. Ismail et al. (2021) suggested that the right teaching approach needs to be implemented by considering the level of mistakes made by students. In addition, the approach such as checking students' mistakes face to face also helps students to identify their mistakes and correct them starightaway (Sopian, 2019). Therefore, it is hoped that this paper can contribute to the academic and development of research in the field of Arabic grammar so that the mastery of Arabic grammar can be improved and the goal of language skills will be achieved successfully.

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### REFERENCES

- [1] Abukhattala, I. (2013). Krashen's five proposals on language learning: Are they valid in Libyan EFL classes. *English Language Teaching*, 6(1), 128–131. <https://doi.org/10.5539/elt.v6n1p128>
- [2] Arfin, Z., Mohamed, F. A., Hamzah, M. S., Ghani, S. A., & Ismail, Z. (2012). Penilaian semula modul kursus bahasa Arab di Fakulti Pengajian Islam, program eksekutif dan program pengajian berterusan di Pusat Kembangan Pendidikan (PKP), UKM. *Prosiding Seminar Pemantauan Projek Penyelidikan Tindakan /Strategik (PTS) Fakulti Pengajian Islam 2012*, 1–10.
- [3] Ariffin@Riffin, A., & Taat, M. S. (2020). Penguasaan bahasa Arab: Hubungannya dengan sikap murid dan pengajaran guru. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(3), 13–23.
- [4] Awang, N. A., Hat, N.C., & Rouyan, N. M. (2014). Analisa kelemahan kemahiran menulis bahasa Arab dalam kalangan pelajar Unisza. *Prosiding Seminar Pengajaran dan Pembelajaran Bahasa Arab 2014*, 1–11.
- [5] Baharum, A. S., & Rahman, M. H. A. (2020). Pengajaran kemahiran bertulis pelajar Universiti Sains Islam Malaysia berteraskan analisis pelbagai kesalahan bahasa dalam sintaksis bahasa Arab. *INSANIAH: Online Journal of Language, Communication, and Humanities*, 3(1), 59–85.
- [6] Bahrani, T. (2011). The implications of the Monitor Theory for foreign language teaching. *Asian Social Science*, 7(10), 281–284. <https://doi.org/10.5539/ass.v7n10p281>
- [7] Bailey, N., Madden, C., & Krashen, S. (1974). Is there a "natural sequence" in adult second language learning? *Language Learning*, 24(2), 235–243.
- [8] Barrot, J., & De Leon, K. (2014). Accuracy order of the grammatical morphemes in the oral production of preschool pupils. *Indonesian Journal of Applied Linguistics*, 3(2), 63–76.
- [9] Chomsky, N. (2006). *Language and mind* (First edition). Cambridge University Press.

- [10] Dulay, H. C., & Burt, M. K. (1973). Should we teach children syntax. *Language Learning*, 23(2). 245–258. <https://doi.org/10.1111/j.1467-1770.1973.tb00659.x>
- [11] Dulay, H. C., & Burt, M. K. (1974). Natural sequences in child second language acquisition. *Language Learning*, 24(1). 37–53. <https://doi.org/10.1111/j.1467-1770.1974.tb00234.x>
- [12] Ellis, R. (1997). *Second language acquisition* (First edition). Oxford University Press.
- [13] Freeman, D. E. L. (1975). The acquisition of grammatical morphemes by adult ESL students. *TESOL Quarterly*, 9(4), 409–419. <https://doi.org/https://doi.org/10.2307/3585625>
- [14] Freeman, D. E. L. (1976). An explanation for the morpheme acquisition order of second language learners. *Language Learning*, 26(1), 125–134.
- [15] Ghazali, A. R., Ismail, M. R., Hasan, Y., Hussin, M. N., Zakaria N. S. & Shaharuddin, H. N. (2015). Analisis kesalahan morfologi buku teks Bahasa Arab peringkat tinggi di Sekolah Rendah Agama (JAIS). *E-Journal of Arabic Studies & Islamic Civilization*, 2, 82–89.
- [16] Gregg, K. R. (1984). Krashen's monitor and occam's razor. *Applied Linguistics*, 5(2), 79–100. <https://doi.org/10.1093/applin/5.2.79>
- [17] Guat, T. M. (2006). Pemerolehan bahasa kanak-kanak: Satu analisis sintaksis. *Jurnal Pendidikan IPBL*, 7, 87-108.
- [18] Hamid, S. M. A. S. A., Mohamad, A. H., Kamis, M. S., Lubis, M. A., & Arriffen, A. M. (2017). Kelemahan pelajar-pelajar Sekolah Menengah Kebangsaan Agama (SMKA) dan Sekolah Agama Menengah (SAM) dalam penguasaan topik terpilih dalam tatabahasa Arab. *ASEAN Comparative Education Research Journal on Islam and Civilization (ACER-J)*, 1(2), 67–78.
- [19] Husaini, M. H., Yusoh, A. M., Mat Ali, A., Mohd Pisol, M. I., Mat Razali, A. S., Mat Saad, D. U., Aziz, M. B., & Rani, J. (2018). *Kurikulum Bersepadu Dini : Pelaksanaan dan cabaran*. 4th International Conference on Islamiyyat Studies 2018, 913–921.
- [20] Hussin, M. N., Ghazali, A. R., Ismail, M. R., Hasan, Y., & Zakaria, N.S. (2015). *Analisis kesalahan sintaksis buku teks bahasa Arab peringkat tinggi di Sekolah Rendah Agama Jabatan Agama Islam Selangor (JAIS)*. International Conference on Arabic Studies and Islamic Civilization, ICASIS 2015 (March), 9–10.
- [21] Ishak, A. (1995). *Pendidikan Islam dan pengaruhnya di Malaysia*. Kuala Lumpur: Dewan Bahasa dan Pustaka.
- [22] Ismail, A. R. (1994). Pengajaran bahasa Arab sebagai bahasa kedua : Permasalahan dan penyelesaian. In Muhammad Bukhari Lubis (Ed.), *Persuratan Islam* (Cetakan pertama). Kuala Lumpur: Dewan Bahasa dan Pustaka.
- [23] Ismail, M. R., Ghazali, A. R., Abdul Latif, K. A., & Sokri, N. E. A. (2014). *Analisis kesalahan nahu bahasa Arab dalam karangan pelajar kursus pengukuhan bahasa Arab*. International Research Management and Innovation Conference 2014 Kuala Lumpur (November), 295-310.
- [24] Ismail, S., Mohamed, Y. Abd Razak, Z. R., Ibrahim, M., & Isa, Z. (2021). Analisis kesilapan sintaksis bahasa Arab dalam penulisan karangan pelajar natif bahasa Melayu. *International Journal of Language Education and Applied Linguistics (IJEAL)*, 11(1), 27–36.
- [25] Ismail, U. S., Atoh, N., & Awang, A. B. (2018). Urutan Pemerolehan *al-damir* dalam ayat nominatif bahasa Arab dalam kalangan pelajar Institusi Pengajian Tinggi. *E-Academia Journal*, 7(2), 92–105.
- [26] Izumi, E., & Isahara, H. (2004). Investigation into language learners' acquisition order based on an error analysis of a learner corpus. *IWLeL 2004: An Interactive Workshop on Language e-Learning*, 63–71.
- [27] Jumhana, N. (2014). Pemerolehan bahasa pada anak (Kajian teoritis tentang pemerolehan bahasa pertama). *Al-Ittihad*, 6(02), 109–128.
- [28] Karim, M. Z. A., & Husaini, M. H. (2016). Tahap penguasaan penulisan karangan bahasa Arab dalam kalangan pelajar sekolah agama menengah. *E-Jurnal Penyelidikan dan Inovasi*, 3(1), 123–138. <https://doi.org/10.1111/j.1475-6765.2011.02014.x>
- [29] Kementerian Pendidikan Malaysia. (2013). *Pelan Pembangunan Pendidikan Malaysia 2013-2025*. Retrieved February 20, 2022, from <https://www.moe.gov.my/index.php/dasarmenu/pelan-pembangunan-pendidikan-2013-2025>
- [30] Khalid, O. (1994). Pengaruh bahasa Arab dalam memperteguh dan memperkaya bahasa Melayu : Suatu Pengamatan. In Muhammad Bukhari Lubis (Ed.), *Persuratan Islam* (Cetakan pertama). Dewan Bahasa dan Pustaka.
- [31] Khatib, K. M., & Zainal, H. (2018). Penguasaan kata nama dan kata kerja Arab dalam Pelaksanaan Kurikulum Bersepadu Dini. *International Journal of Civilizational Studies and Human Sciences*, 1(1), 69–79.
- [32] Krashen, S. (1981). *Second language acquisition and second language learning*. Pergamon Press.
- [33] Krashen, S. (1982). *Principles and practice in second language acquisition*. Pergamon Press. <https://doi.org/10.2307/328293>
- [34] Kridalaksana, H. (1983). *Kamus linguistik* (Cetakan kedua): PT Gramedia.
- [35] Kwon, E. Y. (2005). The “ natural order ” of morpheme acquisition : A historical survey and discussion of three putative determinants. *Teachers College, Columbia University Working Papers in TESOL & Applied Linguistics*, 5(1), 1–21.
- [36] Mat, A. C., & Soon, G. Y. (2010). Grammar in the classroom: Students' expectations and reality the case of Arabic and Mandarin. *Novitas Royal (Research on Youth and Language)*, 4(1), 51–63.
- [37] Mezah, C. R. (2009). *Kesilapan leksikal dalam pembelajaran bahasa Arab* (Cetakan pertama). Universiti Putra Malaysia.
- [38] Mohamad, S. O. S., Nyata, M. N., Kadir, A. R., Salleh, S., & Abdullah, N. (1999). *Modul pembelajaran bahasa Arab 1* (Cetakan ketiga). Pusat Pendidikan Lanjutan Universiti Teknologi Mara.
- [39] Mokhtar, W. R. W., Abd Rahman, M. Z., Mohamed Adnan, M. A., & Mohd Salleh, N. H. (2017). Penguasaan tatabahasa Arab dalam kalangan pelajar asasi universiti awam Malaysia. *Al-Basirah Jurnal*, 7(2), 23-41.
- [40] Mokhtar, W. R.W., Rahman, M. Z. A., Adnan, M. A. M., & Salleh, N. H. M. (2020). Implikasi penguasaan tatabahasa Arab terhadap kemahiran menulis dalam kalangan pelajar asasi universiti awam Malaysia. *Al-Basirah Jurnal*, 10(1), 53–68.
- [41] Morais, E. (1991). Satu kritikan mengenai suatu kajian pemerolehan morfem yang tertentu. *Jurnal of Modern Language*, 6(1), 48–58.
- [42] Muhammad, A., Abdullah, A. H., Basiron, B., Jasmi, K. A., & Noor, S. S. M. (2006). *Penguasaan pelajar sekolah menengah aliran agama terhadap pengajian ilmu retorik Arab*. Pusat Pengajian Islam dan Pembangunan Sosial: Universiti Teknologi Malaysia.

- [43] Mustapa, A., & Arifin, Z. (2012). Pengajaran dan pembelajaran bahasa Arab : Satu tinjauan literatur Di Negeri Sembilan. *Persidangan Kebangsaan Pengajaran dan Pembelajaran Bahasa Arab 2012*, 278–285.
- [44] Nordin, M. Z. F. (2005). Pendidikan bahasa Arab di Malaysia: Hari ini dan masa depan. In Zawawi Ismail and Mohd Sukki Othman (Eds.), *Pendidikan bahasa Arab Di Malaysia: Cabaran dan inovasi (Edisi pertama)*: Minda Imtiyaz.
- [45] Sahid, M. M., & Fettane, A. (2019). Kemahiran bahasa Arab: Penanda aras agenda integrasi ilmu naqli dan aqli. *International Journal of Education, Psychology and Counseling*, 4(29), 12–23.
- [46] Samah, R. (2012). Isu pembelajaran bahasa Arab. *Persidangan Kebangsaan Pengajaran dan Pembelajaran Bahasa Arab 2012*, 286–300.
- [47] Samah, R. (2014). Kaedah muhakaat Ibnu Khaldun untuk pembelajaran bahasa Arab di Malaysia. *Prosiding Seminar Pengajaran dan Pembelajaran Bahasa Arab 2014*, 7–22.
- [48] Sardi, J., & Majid, M. A. A. (2004). *E-pembelajaran: Tinjauan penggunaan kosa kata dan nahu dalam laman web percuma dan implikasinya terhadap pengajaran dan pembelajaran bahasa Arab*. Institut Penyelidikan, Pembangunan dan Pengkomersilan: Universiti Teknologi Mara Shah Alam.
- [49] Sokri, N. E. A., & Ismail, M. R. (2017). Analisis kesalahan nahu (Sintaksis) bahasa Arab dalam karangan pelajar pengajian tahun asas bahasa Arab Kolej Universiti Islam Antarabangsa Selangor. *National Pre University Seminar*, 1, 252-260. <https://doi.org/10.1002/jcb.25536>
- [50] Sopian, A. (2017). Analisis isi kandungan buku teks bahasa Arab “ Al- Munir Al-Lughah Al-Arabiyyah Al-Ittisoliyah” TAC151 UiTM Malaysia. *Journal of Humanities, Language, Culture and Business (HLCB)*, 1(1), 35–44.
- [51] Sopian, A. (2019). Kemahiran menulis bahasa Arab: Analisa kelemahan pelajar UiTM Melaka. *International Journal of Humanities, Philosophy and Language*, 2(7), 58–65. <https://doi.org/10.35631/ijhpl.27005>
- [52] Yaacob, Y. (2017). Penerapan teknik analisis kontrasitif dalam pengajaran dan pembelajaran nahu untuk meningkatkan kemahiran pelajar membina ayat nafi tunggal dalam bahasa Arab : Kajian terhadap pelajar PISMP Pendidikan Islam IPG Kampus Ipoh. *Jurnal Penyelidikan Pendidikan*, 18, 83–91.
- [53] Zaini, A. R., Zakaria, N., Hamdan, H., Ghazali, M. R., & Ismail, M. R. (2019). Pengajaran bahasa Arab di Malaysia : Permasalahan dan cabaran. *Jurnal Pengajian Islam*, 12(1), 47–57.

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# “However, we argue that ...”: The Construction of Authorial Identities in English Research Articles

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**Abstracts**—This research investigates how professional authors construct their authorial identities in English research articles (RAs). Sixty research articles were selected from three disciplines, biology, linguistics, and medicine, published by native and non-native authors in reputable international journals. First-person references in the articles were analyzed qualitatively and quantitatively with the help of corpus linguistic methods to examine the identities they were used to express, their density, and their cross-cultural and cross-disciplinary variation. The findings showed that native and non-native authors frequently employed authorial references in their English RAs. The results showed striking similarities in the density of authorial references and the identities they express in the RAs published by both groups. However, there was a significant difference in authorial references and identities by these groups of authors across different disciplines, with the hard sciences employing significantly more frequent authorial references than the soft sciences. The findings suggest that while research publication at the highest level does not seem to affect the construction of authorial identities, disciplinary practices significantly affect authorial identity construction. It is argued that authorial references may be an essential feature of written academic interaction at the highest level. They allow authors to create identities serving as humble servants to seek cooperation and emphasize solidarity with their disciplinary communities and as knowledge originators to stress personal contribution to their respective disciplines.

**Index Terms**—academic writing, authorial identities, disciplinary variation, research article

## I. INTRODUCTION

There appear to be conflicting ideas about academic writing, especially in English. On the one hand, English academic writing has been commonly viewed as impersonal reporting, promoting directness, accuracy, and objectivity (Hacker, 2008; Lipson, 2005; Manser, 2006; Strunk Jr. & White, 2000; Taylor, 2005). This view emphasizes the impersonality of academic writing, commonly characterized by the prominent use of nominalization, agentless passive constructions, and impersonal constructions. Lachowicz (1981) argues that impersonality gives prominence to the collective responsibility of academic endeavor and objectivity and open-mindedness. Moreover, it highlights the “common share of knowledge with the community” (p. 111). This viewpoint is based on the positivist concept that academic research is simply empirical and objective. As a result, it is best presented as if a human agency is not involved (Hyland, 2001, p. 208). Thus, as an objective report, academic writing leaves no room for authorial presence, as evidenced by the common discouragement of the use of pronominal reference, particularly first-person pronouns in academic writing (see, e.g., Arnaudet & Barrett, 1984; Lester, 1993; Spencer & Arbon, 1996).

However, academic writing has recently been more than just an objective, distant and impersonal report. It has recently been seen as displaying interaction between the writer and the reader (e.g., Hyland, 2004, 2005, 2008). In this view, text production represents an external reality and involves the use of language to acknowledge, construct, and negotiate social relations (Hyland, 2005). Furthermore, as Hyland (1994) argues, rather than being factual and impersonal, effective academic writing relies on interactional components to strengthen propositional material throughout the text and make readers aware of the author’s point of view. In an attempt to demonstrate how such writer-reader interactions are realized in academic writing, researchers have examined such linguistic features as attitude markers (e.g., Mur-Dueñas, 2010), evaluative adjectives (e.g., Swales & Burke, 2003), evaluation (e.g., Hunston, 1993; Thompson & Ye, 1991), hedges (e.g., Hardjanto, 2016; Hyland, 1996, 1998; Salager-Meyer, 2011; Yang, 2013), and stance adverbials (e.g., Conrad & Biber, 2000). However, the study of authorial identities in academic writing has received little attention, especially in research articles. This lack of research is interesting as writers’ ability to create a credible portrayal of themselves and their work by aligning themselves with their communities’ socially shaped identities is critical to their pragmatic competence (Hyland, 2002a). Examples (1) and (2) below illustrate how authors use the first-person singular pronoun *I* in (1) and the inclusive first-person plural pronoun *us* in (2) to express their authorial identities in their RAs. In example (1), the single author Nikolaev uses the first-person singular pronoun *I* to indicate the purpose of his research. In (2), Gao and Skolnick use the accusative first-person plural pronoun to refer to both the writers and the reader. The authors attempt to engage the reader in this case.

- (1) Using a sample of over 5,000 debt issues, *I* test whether firms with more extensive use of covenants in their public debt contracts exhibit timelier recognition of economic losses in accounting earnings (Nikolaev, 2010, p. 51).

(2) Let *us* consider all geometrically possible quaternary structures of dimers (Gao & Skolnick, 2010, p. 22520).

The present research examines authorial identities in English academic writing. It focuses mainly on first-person pronouns as “the most visible expression of a writer’s presence in a text” (Hyland, 2002b, p. 354). Moreover, they not only serve as “powerful metadiscursive resources in manifesting authorial identities” but also “most overtly mark attribution of stance to the writer.” More specifically, it addresses the following questions:

- a) What linguistic forms are used to refer to the authors in English research articles? Are they used differently by native and non-native authors in different disciplines?
- b) What authorial identities are these linguistic forms used to express? Are they expressed differently by native and non-native authors in different disciplines?

Thus, in answer to the questions above, this study attempts to explore authorial identities through the use of pronominal references, especially first-person pronouns, that authors use to indicate their presence in their research articles in terms of their forms and roles. An attempt was also made to examine whether there is significant variation in the use of first-person references by native and non-native authors across three different disciplines.

## II. AUTHORIAL IDENTITIES IN ENGLISH ACADEMIC DISCOURSE

The notion of authorial identities refers to the use of linguistic devices to indicate the presence of the author or writer in the text. Such authorial identities are most noticeably expressed through personal pronouns, especially first-person pronouns (Hyland, 2002b). This notion has been referred to differently in different studies. The term *authorial identity* (Flowerdew & Wang, 2015; Hyland, 2002a, 2002b; Işık-Taş, 2018; Ivanič, 1994, 1995, 1998; Matsuda, 2015; Sanderson, 2008) has also been called *authorial presence* (Chávez Muñoz, 2013; Dontcheva-Navrátilová, 2013; Hartwell & Jacques, 2014; Poudat & Loiseau, 2005), *authorial reference* (Basic & Veselica-Majhut, 2016), *authorial self* (Hryniuk, 2018), *authorial stance* (Pho, 2012), *authorial voice* (Fløttum et al., 2006; Matsuda & Tardy, 2007; Tardy, 2012; Tardy & Matsuda, 2009), *personal attribution* (Martín Martín, 2003), *personal reference* (Vladimirou, 2007), *self-mention* (Hyland, 2001) and *subjectivity* (Rentel, 2012). As the notion of authorial identity is very close to authorial presence and authorial voice, they will be used interchangeably in this research.

As expressions of authorial identities, first-person pronouns have been examined in various genres in such academic writing as research articles (e.g., Hyland, 2001; Işık-Taş, 2018; Sanderson, 2008), RA abstracts (Kim, 2015; Martín Martín, 2003), RA methods sections (Harwood, 2005b; Martínez, 2018), and theses (Hyland, 2002b; Isler, 2018; Karoly, 2009). Comparisons have also been attempted between the use of first-person pronouns in research articles written in English and those in Bulgarian, French, German and Russian (Vassileva, 1998), Croatian (Basic & Veselica-Majhut, 2016); French (Hartwell & Jacques, 2014), French, German and Italian (Rentel, 2012), German (Sanderson, 2008), Persian (Tayyebi, 2012), Polish (Hryniuk, 2018), Russian (Krapivkina, 2015), Spanish (Mur-Dueñas, 2011), and Turkish (Işık-Taş, 2018). These studies have shown that scientific disciplines (see, e.g., Harwood, 2005b; Hyland, 2001, 2002a) and writing cultures (see, e.g., Mur Dueñas, 2007; Mur-Dueñas, 2011; Vassileva, 1998) significantly affect the use of first-person pronouns as expressions of authorial identities.

It has also been shown that there are significant differences in the use of first-person singular pronouns and first-person plural pronouns. First-person singular pronouns tend to be used more commonly in soft sciences such as linguistics and economics to indicate a more visible and authoritative identity (Harwood, 2005b; Hyland, 2001, 2002a). On the other hand, first-person plural pronouns to express authorial identities are more dominant in hard sciences. Hyland (2001, 2002a) argues that such variation is attributable to disciplinary communities’ different epistemological beliefs and practices (Harwood, 2005b).

In addition to their linguistic forms and their frequency and distribution, first-person pronouns have also been investigated in terms of the functions and identities in academic discourse (e.g., Harwood, 2005c; Hyland, 2001, 2002a; Ivanič, 1998; Martínez, 2005; Sheldon, 2009; Starfield & Ravelli, 2006; Tang & John, 1999). Previous studies have shown that first-person pronouns can be used, for example, to (a) help to identify a community’s current research concern (Harwood, 2005c), (b) explain what was done (Kuo, 1999), (c) appear as a competent member of an academic community (Tayyebi, 2012), (d) highlight and express the contribution of an author (Vladimirou, 2007), and (e) create cohesion in writing (Zhang, 2012). Furthermore, Hyland (2002a) proposes a taxonomy of the discourse functions of first-person pronouns. He argues that first-person pronouns in academic discourse can be used to (a) elaborate an argument, (b) explain a procedure, (c) express self-benefits, (d) state a goal/purpose, and (e) state results or claim (see also Harwood, 2005a; Kuo, 1999).

Authorial references can also be used to express multiple identities. Building on Ivanič (1998), Tang and John (1999) propose a model of authorial identities. This model explores various authorial identities based on the degree of their presence in the text and the authority invested in their statements. The authorial identities proposed by Tang and John (1999) include the author as a) representative, b) guide, c) architect, d) recounter of the research process, e) opinion holder and f) originator. These identities range from the least powerful (the author as the representative) to the most powerful (the author as the originator). This model has since attracted numerous attempts to develop similar models of authorial identities or roles (see, e.g., Dahl, 2009; Dontcheva-Navrátilová, 2013; Hyland, 2002b, 2002a; Işık-Taş, 2018; Millán, 2010; Mur Dueñas, 2007; Sheldon, 2009; Xia, 2018). Despite the different labels, these models are essentially similar to the one proposed by Tang and John (1999). We adopt this framework in this study.

### III. METHODOLOGY

This research is corpus-based (Lee, 2008), as it is assisted with the help of a collection of digital text and computer techniques. This study rests on the principle that more valid conclusions could be reached and more generalizable results obtained with more data (Ädel, 2006). For this study, the data were collected from a corpus of English RAs from three disciplines (biology, linguistics, and medicine) written by authors affiliated with institutions in English-speaking and non-English-speaking countries and published in reputable international journals (see Appendix for the selected journals). Only empirical research articles were selected because of their vital role in producing scientific knowledge (Knorr-Cetina, 1981; see Swales, 1990, 2004). No theoretical or review papers were selected. On the basis of these criteria, 60 articles were selected randomly, 20 each from biology, linguistics, and medicine. Table 1 below presents the number of articles and words from the three fields under investigation. Out of the 20 articles from each discipline, ten were written by native authors (NAs), and another ten were written by non-native authors (NNAs). The identification of the identities of these groups, whether they are native or non-native authors, is based on their institutional affiliations (Işık-Taş, 2018; Sheldon, 2009; Xia, 2018). Because it was very difficult to find articles written by single authors in biology and medicine, it was decided to collect only articles written by multiple authors. Thus, single-authored articles were excluded “to avoid interference in the interpretation of results from other variables” (Lor és-Sanz, 2011, p. 177).

TABLE 1  
NUMBER OF ARTICLES AND WORDS IN THE CORPUS

No.	Discipline	No. of articles	No. of words	Mean
1.	Biology	20	172,688	8,634
2.	Linguistics	20	136,293	6,815
3.	Medicine	20	115,578	5,779
<b>Total</b>		<b>60</b>	<b>424,559</b>	<b>21,228</b>

First, the data were analyzed in terms of the linguistic realizations of authorial identities, i.e., first-person plural pronouns and such phrases as *the authors* and *the researchers* used as authorial references. Grammatically, first-person pronouns belong to the general category of personal pronouns categorized according to the deictic type of person (Huddleston & Pullum, 2002). Table 2 below shows English first-person pronouns grouped according to their formal grammatical categories. The data were also analyzed quantitatively using a concordance program called WordSmith Tools Version 5 (Scott, 2008) to examine the frequency and distribution of the linguistic forms used to express authorial identities. Moreover, the data were then analyzed quantitatively for possible cross-cultural and cross-disciplinary variation in the use of authorial references in the corpus. Finally, the data were analyzed in terms of the authorial identities that first-person references express in the corpus to address the second research question. The analysis of the authorial identities was based on the existing model proposed by Tang and John (1999): the author as an architect (ARC), guide (GUI), opinion holder (OPI), originator (ORI), recounter (REC) and representative (REP). Data normalization was necessary as this study examines the cross-cultural and cross-disciplinary use of authorial references in English RAs. The data were normalized per 100,000 words (p100kw). Finally, to test whether there is any significant difference in the use of authorial references cross-culturally and cross-disciplinarily, a chi-square ( $\chi^2$ ) test was run using Minitab 18 (Minitab, 2017). A significant level or *p*-value was set at 0.05, which is commonly adopted in applied linguistics (Gomez, 2002; Martínez, 2005; Mur-Dueñas, 2011; Sanjaya, 2013; Xia, 2018).

TABLE 2  
ENGLISH FIRST-PERSON PRONOUNS  
(MODIFIED FROM HUDDLESTON & PULLUM, 2002, P. 426)

Case	First-person Pronouns	
	Singular	Plural
Nominative	I	we
Accusative	me	us
Genitive	my, mine	our, ours
Reflexive	myself	ourselves

### IV. RESULTS AND DISCUSSION

This section presents and discusses the results of the data analyses in terms of authorial references that native and non-native authors use in three different disciplines, i.e., biology, linguistics, and medicine, and the identities that authorial references express.

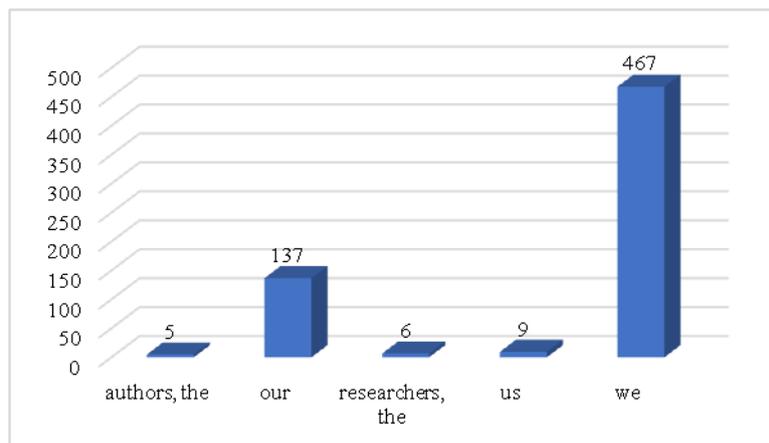


Figure 1 Overall Frequency of Authorial References in the Corpus (p100kw)

### A. Authorial References

In a corpus of 424,559 words, 2,650 tokens of authorial references were found, or 624 per 100,000 words (p100kw), or 44.17 per paper. As Figure 1 shows, the most frequently used authorial reference was the first-person pronoun *we* (74.87%), and the least was the noun phrase *the authors* (0.75%). No token was found for the noun phrase *the writers* used to refer to the RA authors. This noun phrase was not used at all in both the biology and medicine subcorpora, but in the linguistic subcorpus, it was used 19 times. However, all these tokens of *the writers* were not used to refer to the RA authors. A highly significant difference was observed in the use of authorial references in the corpus ( $\chi^2_{(4)} = 1275.04$ ,  $p < 0.001$ ). This finding suggests that, first of all, authorial identity markers are relatively frequently employed in English research articles published internationally by reputable journals. After all, academic writing is not faceless, not as formal as it is commonly believed to be (Hyland, 2001). Secondly, professional authors tend to employ the subjective first-person plural pronoun *we* when making themselves visible to their respective academic communities. This seems to indicate the application of politeness strategies in research articles (Myers, 1989). Authors commonly employ the first-person plural subjective pronoun, particularly inclusive *we*, to engage with their target readers, i.e., disciplinary community or peer researchers, in the knowledge-making process. The best means of gaining acceptance of one's claims is humbleness towards one's peers, reviewers, or the discipline in general (Hyland, 2001).

This finding is slightly different from that of Hyland (2001), who reported an average of 27.8 tokens per paper or 505 tokens of authorial references per 100,000 words (see also Işık-Taş, 2018). This slight difference may result from the search items in both studies. Hyland excluded inclusive first-person plural pronouns, whereas such pronouns were included in the search in this study. The use of the two most common authorial references *we* and *our* is exemplified below. In these and other remaining examples, BIO stands for biology, LIN for linguistics, MED for medicine, NA for native authors, and NNA for non-native authors, whereas the numbers indicate the article numbers.

- (3) Herein, *we* have revealed a particular effect of rG4s on 5'-UTR translation (BIO01NA).
- (4) *Our* results provide empirical evidence to explain the findings of Cumming et al. (2005) (LIN17NNA).
- (5) *We* defined sex-specific quarters of consumption for each type of sugary drink (MED20NNA).

As Figure 2 below shows, the use of authorial references by native and non-native authors seems to be evenly distributed (figures in parentheses indicate the number of words). As can be seen, both groups of authors used the first-person plural subjective and possessive pronouns *we* and *our* extensively with relatively the same degree of density. No statistically significant difference was observed ( $\chi^2_{(4)} = 6.734$ ,  $p = 0.151$ ). This finding suggests that socio-cultural factors and writing cultures do not seem to affect the use of authorial references in research articles published in reputable international journals.

This finding contradicts some previous studies (e.g., Abdi & Farrokhi, 2015; Dontcheva-Navrátilová 2013; Walková 2018), which reported more frequent authorial references by native authors than that by non-native authors. The primary reason for this discrepancy seems to be the readership size and reputation of the journal. In these studies, the non-native authors who published their RAs in nationally-oriented journals with a more limited readership size tend to use a significantly lower frequency of first-person pronominal references than the native speakers who published their RAs in internationally reputable journals. This is corroborated by Işık-Taş (2018), who reported that locally-oriented Turkish authors used a much lower frequency of authorial references than native and internationally-oriented Turkish authors. She found that native authors used approximately the same number of authorial references as the number of internationally-oriented Turkish authors in their RAs published internationally by reputable journals. The frequent use of authorial references in English RAs published by professional authors in international journals might be attributable to the fierce competitiveness of international publications. Moreover, their awareness of this competitiveness has led them to employ authorial references as a strategy to show their confidence in the presentation of their claims (Işık-Taş, 2018; Mur-Dueñas, 2011). This might also be caused by the strict gatekeeping in the review process in international publications.

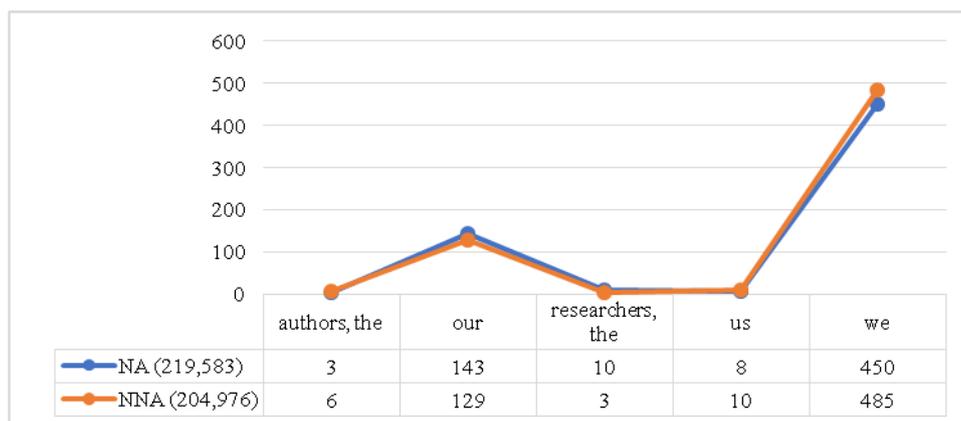


Figure 2 Frequency and Distribution of Authorial References by Author in the Corpus (p100kw)

Figure 3 below shows two crucial points about first-person references used in biology, linguistics, and medicine. First, most importantly, professional authors in the three disciplines used authorial references significantly differently ( $\chi^2_{(8)} = 167.983$ ,  $p < 0.001$ ), with scholars in biology employing the most (887 p100kw) and those in linguistics the least (357), while those in medicine in between (546). This significant disciplinary variation is hardly surprising as previous studies have reported similar findings (e.g., Harwood, 2005b; Hyland, 2001, 2002a; Hyland & Jiang, 2018). This variation may result primarily from disciplinary communities' different epistemological beliefs and practices (Hyland, 2001, 2002a). However, contrary to the traditional view of academic writing, this study has shown that academic writing in biology and medicine, which can be classified as belonging to the hard sciences (Becher, 1989, 1994), is not "author-evacuated" (Geertz, 1983) after all. Academic writing in these disciplines is traditionally regarded as impersonal, simply reflecting indisputable facts (Mulkay, 1979), and thus not inherently self-promotional (Harwood, 2005b). Yet, self-promotional use of first-person plural pronouns, especially in biology, is significantly much more frequent than that in linguistics. This appears to reflect changes in rhetorical disciplinary practices.

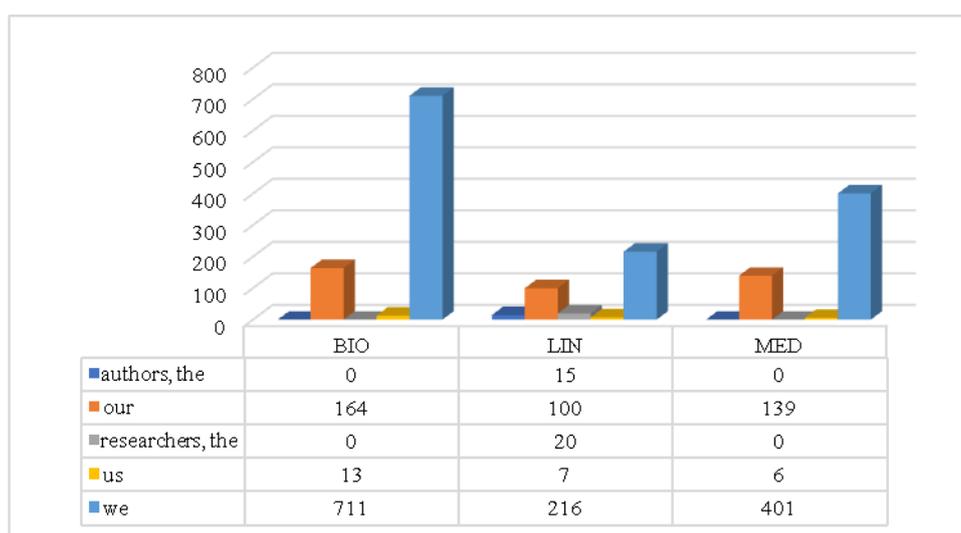


Figure 3 Frequency and Distribution of Authorial References by Discipline in the Corpus (p100kw)

Secondly, we can see that *we* and *our* are the two dominant pronominal forms employed in the three disciplines despite their variable frequencies: the plural pronoun *we* was used most frequently in the disciplines. This finding confirms Hyland (2001). Furthermore, we can also observe that only in linguistics are the noun phrases *the author* and *the researchers* used as authorial references. Despite their low frequencies, these third-person references that are used as authorial references might be characteristic of academic writing in social sciences in general and in linguistics in particular.

### B. Authorial Identities

To answer the second research question, we analyzed the data regarding the overall frequency of first-person references used to express authorial identities, their cross-cultural variation, and their cross-disciplinary variation. Figure 4 displays the overall frequency of authorial identities in the corpus. First-person references most frequently express the author-as-recounting identity in the corpus (360 tokens p100kw or 52.67%). The identities shown in Figure 4 are presented in order of the face-threatening risk (see, e.g., Işık-Taş, 2018; Xia, 2018) or level of authorial presence (see, e.g., Sheldon, 2009; Tang & John, 1999), starting with the lowest risk author-as-representative identity (REP) to

the highest risk author-as-originator identity (ORI). The recounter identity projects the authors as storytellers, reporters, or conductors (Sheldon, 2009) of the research processes. It bears considerable face-threatening risks to the authors. This finding is consistent with Hyland (2002a), who reported that more than half of self-references, especially in biology, were used to explain a procedure. The author recounted the research processes they had gone through. However, it is significantly different from those of Sheldon (2009) and Tang and John (1999) primarily because of the disciplines in the case of Sheldon and text types in the case of Tang and John. In her linguistics and language teaching native author sub-corpus, Sheldon found that only 20% of first-person pronouns were used to express the recounter identity or conductor in her term. In this study, 37.99% of recounter identities were used in linguistics. In addition, in their research, Tang and John (1999) did not find any token of the recounter identity as the texts they examined were not research-based. Yet, in terms of the originator role (15.89%), this finding supports Sheldon's (14%).

Furthermore, we can see that many authorial references (72.38%) were used to express medium-risk identities, i.e., as architects and recounters and a sizeable proportion (25.25%) high-risk identities, i.e., as opinion holders and originators. To a large extent, this finding supports Işık-Taş (2018), who reported an average of 24.15% of first-person pronouns used to express high-risk functions in her native and internationally-oriented non-native subcorpora. In short, it seems that most authorial references are used to express sizable risk identities. This finding might suggest that RA publication in reputable international journals encourages professional authors to assume high-risk identities, such as presenting a knowledge claim or claiming responsibility and credit for the content.

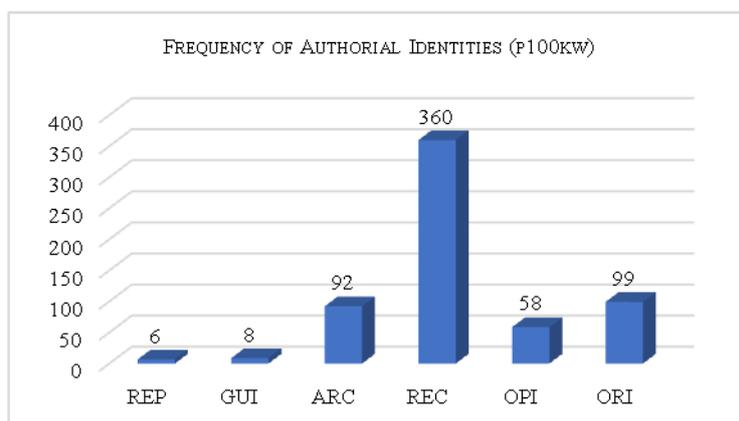


Figure 4 Overall Frequency of Authorial Identities in the Corpus (p100kw)

Figure 5 presents the use of first-person references by native and non-native professional authors to express authorial identities. As we can see, there seems to be no significant difference in the identities expressed by first-person references that both groups of authors used ( $\chi^2_{(5)} = 7.725, p = 0.172$ ), with the author-as-recounter role being the most frequent identity expressed by first-person references in the two sub-corpora and the author-as-representative identity the least frequent. Again, this is in line with Işık-Taş (2018), who found no significant difference in the authorial identities expressed by first-person references in the native and non-native internationally-oriented Turkish subcorpora. This finding also suggests that native and non-native authors tend to assume considerable risk identities when publishing in internationally reputable journals.



Figure 5 Frequency and Distribution of Authorial Identities by Author in the Corpus (p100kw)

Figure 6 shows a marked difference in the use of these authorial identities ( $\chi^2_{(10)} = 232.840, p < 0.001$ ). As can be seen, most identities are dominantly used in biology, except for the guide and opinion holder identities. However, A chi-square test for these two identities does not show any significant difference ( $\chi^2_{(2)} = 2.88889, p = 0.236$  for GUI and  $\chi^2_{(2)} = 2.35754, p = 0.308$  for OPI). The same test for the other identities shows statistically significant difference ( $\chi^2_{(2)} =$

6.33333,  $p = 0.042$  for REP,  $\chi^2_{(2)} = 84.8110$ ,  $p < 0.001$  for ARC,  $\chi^2_{(2)} = 214.414$ ,  $p < 0.001$  for REC,  $\chi^2_{(2)} = 124.303$ ,  $p < 0.001$  for ORI). Another striking difference is that the presence of the authors in biology and medicine RAs far outnumbers that in linguistics RAs. Again, this seems to suggest that different epistemological beliefs and practices of disciplinary communities (Hyland, 2001, 2002a) play a crucial role in the extent to which professional authors “are willing to make a solid personal commitment to the most authorially powerful aspects of their texts, those which carried both the most risks and potentially gained them the most credit” (Hyland, 2002a). In what follows, each identity will be discussed in more detail.

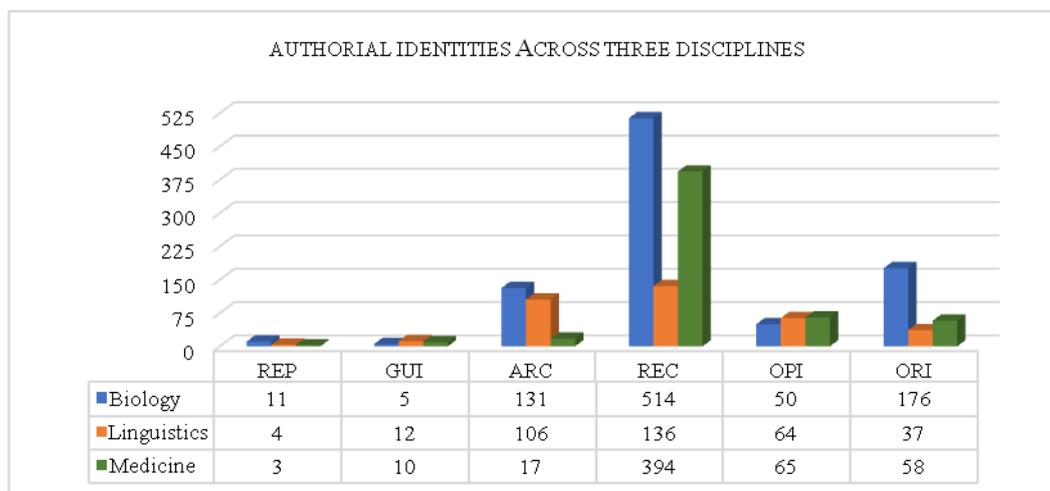


Figure 6 Frequency and Distribution of Authorial Identities by Discipline in the Corpus (p100kw)

#### (a). Authors as Representatives

The author-as-representative identity indicates a reference to people in general or discourse communities. It is the least authoritative power that authors show in their academic writing. Inclusive first-person references commonly express this identity. Some examples below illustrate how professional authors indicate their presence in their RAs as representatives of their discourse communities.

(6) Thus, it is challenging to identify the activities and properties of individual transposons. As a result, *we* only have a partial understanding of how transposons contribute to chromatin folding (...) (BIO01NA).

(7) This comparison of typical shell-noun uses in the N-be-that construction in popular and professional science articles contributes to *our* understanding of the preferred forms of evaluation in the two genres (LIN09NA).

In these examples, the first-person plural pronouns *we* and *our* are used to refer to the authors of the RAs and the readers, especially the research and disciplinary communities, i.e., biologists in the case of (6) and linguists in (7). While in (6), the RA authors indicate a research gap by pointing out the authors' as well as the readers' lack of understanding of the contribution of transposons to chromatin folding and their impact on gene regulation, in (7), the authors point to the contribution of their research to the authors' and the readers' understanding of the preferred forms of evaluation in the two genres. In short, professional authors sometimes employ *we* and *our* inclusively to show their identity as representatives, representing especially their communities of practice.

#### (b). Authors as Guides

The author-as-guide identity directly refers to the authors or readers of the RAs. It is commonly expressed using first-person pronouns. As the representative, this identity shows that authors do not wish to indicate a visible authorial presence in their RAs. However, this identity is reader-oriented. When assuming this identity, authors involve the readers in the research and draw their attention to it (Tang & John, 1999). Sometimes the inclusive first-person plural pronoun *we* is employed to indicate possibilities (8)-(9). Such pronouns in conditional constructions serve to draw the readers' attention and negotiate the authors' arguments as such constructions “bring the writer and reader closer to agreement” (Hyland, 2010, p. 173). The inclusive pronoun *we* is also sometimes used when authors present their interpretation and understanding of their data (10). Involvement of the readers in data interpretation may indicate a reader-writer mutual understanding. Thus such authorial presence can reflect positive politeness in academic writing (Harwood, 2005c; Myers, 1989). The authors view the readers as having the same expertise in data interpretation.

(8) If *we* assume that learners can recognize proper nouns and marginal words, *we* can add these figures to the coverage provided by word families at each level (...) (LIN13NA).

(9) Therefore, if *we* compare outcomes in the groups with blood pressure just above and just below the threshold, *we* can estimate the causal impact of the recommendations made after a screening diagnosis of hypertension (...) (MED19NNA).

- (10) Although the findings were based on self-reports, *we* can assume that the data are of high quality because the participants were highly motivated university graduates (...) (MED10NA)

(c). *Authors as Architects*

The author-as-architect identity indicates the use of first-person pronouns to organize and structure academic writing (Tang & John, 1999). Unlike the guide identity, this identity is realized by exclusive first-person references. These references can serve some functions, such as stating a purpose (11), limiting the research scope (12), and indicating what will be discussed next (13). The use of the first-person pronoun *we* to state the research purpose suggests a step in occupying the niche in Swales' CARS model (Swales, 1990). Overall, authors frequently use first-person pronouns to create coherent RAs by showing what they do to make their RAs easy to understand.

- (11) In this article, *we* provide the estimated numbers of new cancer cases and deaths in 2018 in the United States nationally and for each state (...) (MED11NA).  
 (12) In this paper, *we* focus closely on the writing development of a novice writer, Amal, and an experienced writer, Oscar (LIN04NA).  
 (13) However, the trend showed some dependence on molecular features such as mRNA expression levels, as *we* discuss below (BIO05NA).

(d). *Authors as Recounters*

Next, we turn to the author-as-recounters identity. RA authors very commonly use exclusive first-person pronouns to show themselves as recounters of the research process (Tang & John, 1999) or conductors of research (Sheldon, 2009). This role allows authors to explain their data collection and analysis procedures, as shown in examples (14)-(16) below.

- (14) To control for the quality of the probes and samples, *we* filtered out individuals with > 5% of probes associated with a detection P value > 10<sup>-3</sup> (...) (BIO09NNA)  
 (15) In this study, in order to ensure maximum credibility and validity of findings, *we* collected data through triangulation of instruments (LIN16NNA).  
 (16) *We* classified CVD cases using ICD-CM codes (international classification of diseases-clinical modification, 10th revision) (MED09NNA).

These examples show how authors collected and analyzed their data and how they presented themselves as agents responsible for any finding resulting from their procedural decisions. Such authorial presence indicates authors as competent members of their disciplinary communities. In short, authorial presence in data collection and analysis procedures contributes to the authors' positive self-representation.

(e). *Authors as Opinion Holders*

Professional authors frequently utilize the exclusive first-person pronoun *we* to express their attitudes, opinions, or views. This pronoun is commonly used together with epistemic verbs of cognition (Halliday & Matthiessen, 2004), such as *think*, *believe*, and *assume*, as illustrated in (17)-(19) below. When stating attitudes, opinions, or views, authors are committed to their statements and expose themselves to criticism and refutation. Therefore, this role can be viewed as highly face-threatening (cf. Işık-Taş, 2018). In other words, by explicitly showing their presence in their writing, authors indicate their responsibility for their personal opinions.

- (17) (...) *we thought* that the decrease in monoterpene biosynthesis could have caused an increase in sesquiterpene biosynthesis (BIO17NNA).  
 (18) *We believe* that the ACL (...) can serve as part of a lexical syllabus to raise learners' awareness of word co-occurrence and help them prioritize the learning of lexical items (LIN11NA).  
 (19) *We assumed* a common heterogeneity variance across all pairwise comparisons (...) (MED08NNA).

(f). *Authors as Originators*

The author-as-originator identity allows authors to claim authority and indicate ownership of the content of their writing. In Tang and John's (1999) model, this identity is the most powerful presence that authors can make in their writing and, therefore, the most face-threatening. This role allows authors to highlight their contribution to the field and promote their merits as researchers (Harwood, 2005b). In (20)-(22) below, the authors present their findings (20), knowledge claim (21), and contribution of their research to the field (21).

- (20) *We* found that both lincRNAs and mRNAs contain cis-regulatory potential in their promoters (...) (BIO03NA).  
 (21) *We* have claimed that (...) lexical diversity values will no longer be a function of text length (LIN17NNA).  
 (22) (...) *our* findings reinforce the existing evidence on the negative impact of ultra-processed foods on the overall incidence of chronic diseases (...) (MED10NNA).

## V. CONCLUSION

This study has explored how professional authors announce their presence in English RAs published in reputable international journals through first-person references. It has been shown that native and non-native authors frequently use authorial references in different disciplines. The results revealed that at the highest level of research publication, native and non-native authors show some notable similarity in the frequency of first-person references and their

identities, suggesting that socio-cultural factors do not seem to affect the employment of authorial references in reputable international publications. This seems to support the view that rhetorical choices are influenced by publication context (Işık-Taş, 2018), in which authors publishing in a national context tend to employ significantly fewer authorial references than those in an international context (see, e.g., Abdi & Farrokhi, 2015; Dontcheva-Navrátilová, 2013; Işık-Taş, 2018; Walková, 2018).

It has also been shown that authorial references are used differently in different disciplines in terms of frequency and the identities they express. They are prevalent in the hard sciences, but they are unexpectedly rare in the soft sciences like the humanities. This seems to suggest that different disciplines allow different degrees of authorial presence. Authors' rhetorical choices appear to be affected by "the social and epistemological practices of their disciplines and represent an important way of signaling membership and honoring what is accepted as professional engagement, appropriate intrusion, and persuasive conviction" (Hyland, 2001, p. 224).

It can be argued that authorial references may be an essential feature of written academic interaction at the highest level. They may play a crucial role in the promotion of a competent scholarly identity and the acceptance and ratification of knowledge claims. They allow authors to create identities serving as humble servants to seek cooperation and emphasize solidarity with their disciplinary communities and as knowledge originators to stress personal contribution to their respective disciplines.

This study has focused on authorial presence realized by first-person references in RAs published in reputable international journals by native and non-native authors in three disciplines, i.e., biology, linguistics, and medicine. Future research might address whether first-person references are employed differently in different RA sections to express authorial identities. Another interesting question is whether female and male authors from different cultural backgrounds and disciplines create different authorial identities when publishing in international and national journals. Answers to these questions and those related to the readers' processing of authorial presence will undoubtedly contribute to a better understanding of how scholars interact with one another through their scholarly writing and mainly how they create authorial identities in their text.

#### APPENDIX. LIST OF SELECTED JOURNALS

##### BIOLOGY

BIO01-10 Genome Biology (<https://genomebiology.biomedcentral.com/>)

BIO11-20 The Plant Cell (<https://academic.oup.com/plcell>)

##### LINGUISTICS

LIN01-10 English for Specific Purposes (<https://www.sciencedirect.com/journal/english-for-specific-purposes>)

LIN11-20 Journal of English for Academic Purposes (<https://www.sciencedirect.com/journal/journal-of-english-for-academic-purposes>)

##### MEDICINE

MED01-10 British Medical Journal (<https://www.bmj.com/>)

MED11-20 CA: A Cancer Journal for Clinicians (<https://acsjournals.onlinelibrary.wiley.com/journal/15424863>)

#### REFERENCES

- [1] Abdi, J., & Farrokhi, F. (2015). Investigating the projection of authorial identity through first-person pronouns in L1 and L2 English research articles. *International Journal of Language and Literature*, 3(1), 156–168. <https://doi.org/10.15640/ijll.v3n1a21>
- [2] Ädel, A. (2006). *Metadiscourse in L1 and L2 English*. John Benjamins.
- [3] Arnaudet, M., & Barrett, M. (1984). *Approaches to academic reading and writing*. Prentice-Hall.
- [4] Basic, I., & Veselica-Majhut, S. (2016). Explicit Author Reference in Research Articles in Linguistics in English and Croatian. *Linguistics and Literature Studies*, 4(4), 233–242.
- [5] Becher, T. (1989). *Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines*. The Society for Research into Higher Education and Open University Press.
- [6] Becher, T. (1994). The significance of disciplinary differences. *Studies in Higher Education*, 19(2), 151–161.
- [7] Chávez Muñoz, M. (2013). The "I" in interaction: Authorial presence in academic writing. *Revista de Lingüística y Lenguas Aplicadas*, 8, 49–58.
- [8] Conrad, S., & Biber, D. (2000). Adverbial marking of stance in speech and writing. In S. Hunston & G. Thompson (Eds.), *Evaluation in text: Authorial stance and the construction of discourse* (pp. 57–73). Oxford University Press.
- [9] Dahl, T. (2009). Author identity in economics and linguistics abstracts. In E. Suomela-Salmi & F. Dervin (Eds.), *Cross-Linguistic and Cross-Cultural Perspectives on Academic Discourse* (pp. 123–134). John Benjamins.
- [10] Dontcheva-Navrátilová, O. (2013). Authorial presence in academic discourse: Functions of author-reference pronouns. *Linguistica Pragmensia*, 3(1), 9–30.
- [11] Fløttum, K., Dahl, T., & Kinn, T. (2006). *Academic voices: Across languages and disciplines*. John Benjamin.
- [12] Flowerdew, J., & Wang, S. H. (2015). Identity in academic discourse. *Annual Review of Applied Linguistics*, 35, 81–99.
- [13] Gao, M., & Skolnick, J. (2010). Structural space of protein–protein interfaces is degenerate, close to complete, and highly connected. *Proceedings of the National Academy of Sciences*, 107(52), 22517–22522.
- [14] Geertz, C. (1983). *Local Knowledge: Further Essays in Interpretive Anthropology*. Basic Books.
- [15] Gomez, P. C. (2002). Do we need statistics when we have linguistics? *DELTA*, 18(2), 233–271.

- [16] Hacker, D. (2008). *Rules for Writers* (6th ed.). Bedford.
- [17] Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An Introduction to Functional Grammar* (3rd ed.). Hodder Arnold.
- [18] Hardjanto, T. D. (2016). Hedging through the use of modal auxiliaries in English academic discourse. *Humaniora*, 28(1), 37–50.
- [19] Hartwell, L. M., & Jacques, M. (2014). Authorial Presence in French and English: Pronoun + Verb. Patterns in Biology and Medicine Research Articles. *Discours*, 15, 3–21.
- [20] Harwood, N. (2005a). ‘I hoped to counteract the memory problem, but I made no impact whatsoever’: Discussing methods in computing science using I. *English for Specific Purposes*, 24, 243–267.
- [21] Harwood, N. (2005b). ‘Nowhere has anyone attempted ... In this article I aim to do just that’ A corpus-based study of self-promotional I and we in academic writing across four disciplines. *Journal of Pragmatics*, 37, 1207–1231.
- [22] Harwood, N. (2005c). ‘We do not seem to have a theory. The theory I present here attempts to fill this gap’: Inclusive and exclusive pronouns in academic writing. *Applied Linguistics*, 26(3), 343–375.
- [23] Hryniuk, K. (2018). Expressing authorial self in research articles written by Polish and English native-speaker writers: A corpus-based study. *Studies in Second Language Learning and Teaching*, 8(3), 621–642.
- [24] Huddleston, R., & Pullum, G. K. (2002). *The Cambridge Grammar of the English Language*. Cambridge University Press.
- [25] Hunston, S. (1993). Professional conflict—Disagreement in academic discourse. In M. Baker, G. Francis, & E. Tognini-Bonelli, *Text and Technology: In Honour of John Sinclair* (pp. 115–134). John Benjamins.
- [26] Hyland, K. (1994). Hedging in academic writing and EAP textbooks. *English for Specific Purposes*, 13(3), 239–256.
- [27] Hyland, K. (1996). Writing without conviction? Hedging in science research articles. *Applied Linguistics*, 17(4), 433–454.
- [28] Hyland, K. (1998). *Hedging in scientific research articles*. John Benjamin.
- [29] Hyland, K. (2001). Humble servants of the discipline? Self-mention in research articles. *English for Specific Purposes*, 20, 207–226.
- [30] Hyland, K. (2002a). Authority and invisibility: Authorial identity in academic writing. *Journal of Pragmatics*, 34(8), 1091–1112.
- [31] Hyland, K. (2002b). Options of identity in academic writing. *ELT Journal*, 56(4), 351–358.
- [32] Hyland, K. (2004). Disciplinary interactions: Metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13, 133–151.
- [33] Hyland, K. (2005). Stance and engagement: A model of interaction in academic discourse. *Discourse Studies*, 7(2), 173–192.
- [34] Hyland, K. (2008). Disciplinary voices: Interactions in research writing. *English Text Construction*, 1(1), 5–22.
- [35] Hyland, K. (2010). Community and Individuality: Performing Identity in Applied Linguistics. *Written Communication*, 27(2), 159–188. <https://doi.org/10.1177/0741088309357846>
- [36] Hyland, K., & Jiang, F. (Kevin). (2018). “In this paper we suggest”: Changing patterns of disciplinary metadiscourse. *English for Specific Purposes*, 51, 18–30. <https://doi.org/10.1016/j.esp.2018.02.001>
- [37] Işık-Taş, E. E. (2018). Authorial identity in Turkish language and English language research articles in Sociology: The role of publication context in academic writers’ discourse choices. *English for Specific Purposes*, 49, 26–38. <https://doi.org/10.1016/j.esp.2017.10.003>
- [38] Isler, C. (2018). The use of first-person pronouns in master’s theses written in English by Turkish authors. *Journal of English Language and Education*, 4(1), 12–20.
- [39] Ivanič, R. (1994). I Is for interpersonal: Discourse construction of writer identities and the teaching of writing. *Linguistics and Education*, 6(1), 3–15.
- [40] Ivanič, R. (1995). Writer Identity. *Prospect*, 10(1), 8–31.
- [41] Ivanič, R. (1998). *Writing and identity: The discursive construction of identity in academic writing*. Benjamins.
- [42] Karoly, K. (2009). Author identity in English academic discourse: A comparison of expert and Hungarian EFL student writing. *Acta Linguistica Hungarica*, 56(1), 1–22.
- [43] Kim, E. (2015). Quantitative evidence on the uses of the first-person pronoun (I and We) in journal paper abstracts. *Journal of the Korean Society for Information Management*, 32(1), 227–243.
- [44] Knorr-Cetina, K. D. (1981). *The manufacture of knowledge*. Pergamon.
- [45] Krapivkina, O. A. (2015). Verbalization of the writer in academic prose. *Journal of Siberian Federal University. Humanities & Social Sciences*, 8, 1625–1634.
- [46] Kuo, C. (1999). The Use of Personal Pronouns: Role Relationships in Scientific Journal Articles. *English for Specific Purposes*, 18(2), 121–138.
- [47] Lachowicz, D. (1981). On the use of the passive voice for objectivity, author responsibility and hedging in EST. *Science of Science*, 2(2), 105–114.
- [48] Lee, D. Y. W. (2008). Corpora and discourse analysis. In V. K. Bhatia, J. Flowerdew, & R. H. Jones (Eds.), *Advances in Discourse Studies* (pp. 86–99). Routledge.
- [49] Lester, J. D. (1993). *Writing research papers* (7th ed.). Harper Collins.
- [50] Lipson, C. (2005). *How to Write a BA Thesis: A Practical Guide from Your First Ideas to Your Finished Paper*. University of Chicago Press.
- [51] Lorés-Sanz, R. (2011). The construction of the author’s voice in academic writing: The interplay of cultural and disciplinary factors. *Text & Talk*, 31(2), 173–193. <https://doi.org/10.1515/text.2011.008>
- [52] Manser, M. (2006). *The Facts on File: Guide to Good Writing*. Infobase Publishing.
- [53] Mart ń Mart ń, P. (2003). Personal attribution in English and Spanish scientific texts. *Barcelona English Language and Literature Studies*, 12. Retrieved February 7, 2019 from <http://www.publicacions.ub.es/revistes/bells12/PDF/art09.pdf>.
- [54] Mart ńez, I. A. (2005). Native and non-native writers’ use of first-person pronouns in the different sections of biology research articles in English. *Journal of Second Language Learning*, 15, 174–190.
- [55] Martinez, R. (2018). “Specially in the last years...”: Evidence of ELF and non-native English forms in international journals. *Journal of English for Academic Purposes*, 33, 40–52. <https://doi.org/10.1016/j.jeap.2018.01.007>

- [56] Matsuda, P. K. (2015). Identity in written discourse. *Annual Review of Applied Linguistics*, 35, 140–159.
- [57] Matsuda, P. K., & Tardy, C. M. (2007). Voice in academic writing: The rhetorical construction of author identity in blind manuscript review. *English for Specific Purposes*, 26, 235–249.
- [58] Millán, E. L. (2010). Extending this claim, we propose...” The writer’s presence in research articles from different disciplines. *Ibérica*, 20, 35–56.
- [59] Minitab. (2017). *Minitab 18 Statistical Software*. Minitab, Inc.
- [60] Mulkay, M. (1979). *Science and the Sociology of Knowledge*. George Allen & Unwin.
- [61] Mur Dueñas, P. (2007). ‘I/we focus on...’: A cross-cultural analysis of self-mentions in business management research articles. *Journal of English for Academic Purposes*, 6(2), 143–162. <https://doi.org/10.1016/j.jeap.2007.05.002>
- [62] Mur-Dueñas, P. (2010). Attitude markers in business management articles: A cross-cultural corpus-driven approach. *International Journal of Applied Linguistics*, 19(1), 50–72.
- [63] Mur-Dueñas, P. (2011). An intercultural analysis of metadiscourse features in research articles written in English and in Spanish. *Journal of Pragmatics*, 43(12), 3068–3079.
- [64] Myers, G. (1989). The pragmatics of politeness in scientific articles. *Applied Linguistics*, 10, 1–35.
- [65] Nikolaev, V. V. (2010). Debt covenants and accounting conservatism. *Journal of Accounting Research*, 48(1), 51–89.
- [66] Pho, P. D. (2012). Authorial stance in research article abstracts and introductions from two disciplines. In N. Baumgarten, I. D. Bois, & J. House (Eds.), *Subjectivity in language and in discourse* (pp. 97–114). Emerald.
- [67] Poudat, C., & Loiseau, S. (2005). Authorial presence in academic genres. In E. Tognini-Bonelli & G. D. L. Camiciotti (Eds.), *Strategies in Academic Discourse* (pp. 51–68). John Benjamins.
- [68] Rentel, N. (2012). Subjectivity in academic discourse: A cross-linguistic comparison of the author’s presence in French, Italian and German research articles in linguistics. In N. Baumgarten, I. D. Bois, & J. House (Eds.), *Subjectivity in language and in discourse* (pp. 339–354). Emerald.
- [69] Salager-Meyer, F. (2011). Scientific discourse and contrastive linguistics: Hedging. *European Science Editing*, 37(2), 35–37.
- [70] Sanderson, T. (2008). Interaction, identity and culture in academic writing: The case of German, British and American academics in the humanities. In A. Ädel & R. Reppen (Eds.), *Corpora and discourse: The challenges of different settings*. John Benjamin.
- [71] Sanjaya, I. N. S. (2013). *Hedging and Boosting in English and Indonesian Research Articles*. (Unpublished doctoral dissertation). Pennsylvania State University.
- [72] Scott, M. (2008). *WordSmith Tools Version 5*. Lexical Analysis Software.
- [73] Sheldon, E. (2009). From one I to another: Discursive construction of self-representation in English and Castilian Spanish research articles. *English for Specific Purposes*, 28(4), 251–265. <https://doi.org/10.1016/j.esp.2009.05.001>
- [74] Spencer, C., & Arbon, B. (1996). *Foundations of writing: Developing research and academic writing skills*. National Textbook Co.
- [75] Starfield, S., & Ravelli, L. J. (2006). “The writing of this thesis was a process that I could not explore with the positivistic detachment of the classical sociologist”: Self and structure in New Humanities research theses. *Journal of English for Academic Purposes*, 5(3), 222–243. <https://doi.org/10.1016/j.jeap.2006.07.004>
- [76] Strunk Jr., W., & White, E. B. (2000). *The Elements of Style* (4th ed.). Pearson.
- [77] Swales, J. (1990). *Genre analysis: English in academic and research settings*. Cambridge University Press.
- [78] Swales, J. (2004). *Research Genres*. Cambridge University Press. <https://doi.org/10.1017/cbo9781139524827>
- [79] Swales, J., & Burke, A. (2003). It’s really fascinating work”: Differences in evaluative adjectives across academic registers. In P. Leistyna & C. F. Meyer (Eds.), *Corpus analysis: Language structure and language use* (pp. 1–18). Rodopi.
- [80] Tang, R., & John, S. (1999). The “I” in identity: Exploring writer identity in student academic writing through first-person pronoun. *English for Specific Purposes*, 18(Suppl.), 23–39.
- [81] Tardy, C. M. (2012). Current conceptions of voice. In K. Hyland & C. S. Guinda (Eds.), *Stance and voice in written academic genres*. Palgrave.
- [82] Tardy, C. M., & Matsuda, P. K. (2009). The construction of author voice by editorial board members. *Written Communication*, 26(1), 32–52.
- [83] Taylor, R. B. (2005). *The Clinician’s Guide to Medical Writing*. Springer.
- [84] Tayyebi, M. (2012). Personal pronouns in English and Persian medical research articles. *English for Specific Purposes World*, 36(12), 1–12.
- [85] Thompson, G., & Ye, Y. (1991). Evaluation of the reporting verbs used in academic papers. *Applied Linguistics*, 12(4), 365–382.
- [86] Vassileva, I. (1998). Who am I/who are we in academic writing? A contrastive analysis of authorial presence in English, German, French, Russian and Bulgarian. *International Journal of Applied Linguistics*, 8(2), 163–190.
- [87] Vladimirou, D. (2007). I suggest that we need more research: Personal reference in linguistics journal articles. *Lancaster University Postgraduate Conference in Linguistics and Language Teaching*, 1, 139–157.
- [88] Walková, M. (2018). Author’s self-representation in research articles by Anglophone and Slovak linguists. *Discourse and Interaction*, 11(1), 86–105. <https://doi.org/10.5817/DI2018-1-86>
- [89] Xia, G. (2018). A cross-disciplinary corpus-based study on English and Chinese native speakers’ use of first-person pronouns in academic English writing. *Text & Talk*, 38(1), 93–113. <https://doi.org/10.1515/text-2017-0032>
- [90] Yang, Y. (2013). Exploring linguistic and cultural variations in the use of hedges in English and Chinese scientific discourse. *Journal of Pragmatics*, 50(1), 23–36.
- [91] Zhang, Y. A. (2012). Generic analysis on 1st personal pronouns in the international conference presentation. *International Conference on Education Technology and Management Engineering, Lecture Notes in Information Technology*, 16–17, 345–349.

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# A Descriptive Study on the Effect of Blogs on Writing Skill Development Using Social Constructivism as a Theory

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**Abstract**—Social media is currently playing an increasingly crucial role around the world. Pupils may become bored if the instructor employs typical teaching tools to help them strengthen their language abilities. A new teaching approach or set of materials should be introduced to them by the teacher. Learning is more enjoyable for pupils when we employ digital tools in the classroom. For decades, teachers and others have been developing technological aids to aid in the process of teaching and learning. It would increase the learners' enthusiasm to participate in the learning process by increasing their motivation. This study analyses the impact of blogs on the development of English as a second language (ESL). Instructors attempt to improve learners' writing abilities by way of focusing their opinions on blogs. In order to determine the outcome of the study, the researchers utilised a descriptive research design. The information was gathered through the use of a questionnaire. The questionnaire was constructed using a three-point Likert Scale. Fifty-four students were selected randomly from an Arts and Science College in Tindivanam, Tamil Nadu. Almost every single student took part with enthusiasm and provided necessary feedback on the blogs. The findings demonstrated that blogs are a very beneficial tool for improving students' writing abilities, particularly in the secondary school setting. In addition, the advantages and disadvantages of blogs are explored in this research article.

**Index Terms**—writing skills, blogs, teaching and learning, social constructivism, social media

## I. INTRODUCTION

Writing instruction, particularly in ESL classrooms, is fraught with difficulties because teachers frequently find students who are hesitant, if not downright opposed, to expressing themselves verbally in English. Writing is widely regarded as the most difficult English talent to master (Richards & Renandya, 2002). In today's world, technology plays an important role in almost every facet of life. A fair assessment of the state of the world now would be that technology is in absolute control of events. In such a scenario, it is impossible for English teachers to remain immune to the influences of technology. It is now a given dictum that computers and the internet are a part of our everyday lives and educational environments (Carrier, 1997; Warschauer & Healey, 1998; Zorko, 2009). As a result, it has become unavoidable to combine traditional methods and approaches with modern technologies. Incorporating technology into lesson preparations, on the other hand, boosts communication and passion between teachers and students throughout sessions (Ozkan, 2011). It is currently a common practice to use social media as a learning platform in a variety of school settings, including language instruction and learning. The value of social media in assisting language teaching and learning activities has been demonstrated in a rising number of research papers.

Blogs (sometimes known as "weblogs") are online platforms that function similarly to a journal or diary and are completely free to use, update, and personalize. Using a blog platform, which is a free online hosting service, a blogger or blog-user can write, modify and publish written outputs known as blog posts into the blogosphere (cyberspace blog community) (Campbell, 2003). Despite the fact that blogs are popular, they are not always brand fresh. Early blogs were distinguished by three primary characteristics: connections to other websites of interest, comments on the links, and interaction and connectivity with other blogs and websites of interest (Li & Chignell, 2010). Students in various sorts of academic institutions are benefiting from the use of Web 2.0 technology in classroom instruction to create a social constructivist environment for all students (Cochrane & Bateman, 2008). Weblogs are among the most popular Web 2.0 tools among language learners, and they are being used by individuals of all ages and from all walks of life. Blogging evolves into a two-way street where everyone is welcome to express themselves through remarks, appreciation and argument. This has the potential to be both beneficial and detrimental. Bloggers must be cautious about what they share and how the general public responds; once something is published online, it is difficult to control who shares, reads, posts on, re-posts, etc. It becomes a part of the public discourse, and the blogger's control of what

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they've shared is frequently lost. Plagiarism might be considered a cultural issue among this generation, which takes pleasure in expressing themselves (Gross, 2011). Therefore, individuals who submit original content such as essays, photographs, graphics, or other media kinds risk being accused of plagiarism. Smith (2004) asserts the following: "All too frequently, our schools and universities place a high value on tradition at the expense of current knowledge, research and requirements. We continue to use an out-of-date educational model. Its effectiveness is severely restricted and it is past time to make a change" (p. 174).

## II. REVIEW OF LITERATURE

Social media is a digital technology that a vast majority of people utilize to connect and communicate with one another through their mobile devices. Most modern technology and social media platforms such as Twitter, Facebook, WhatsApp, Telegram, Instagram, blogs and other similar platforms have had an impact on language acquisition. This section contains reviews of a few important research studies on the development of writing skills and on the impact of social media on language development.

Fageeh (2011) investigated the use of a blog in an intermediate level English language learning college writing class and oral presentation traditions of writing education to see how it affected students' attitudes toward writing, as well as how it affected the establishment of positive attitudes toward writing. In order to explore the effects of blogging on writing proficiency and attitudes, the researcher employed a triangulated research methodology that included an experimental research method as well as a descriptive research design in order to collect information. The select students viewed Weblog as a tool for developing their English writing skills and attitudes toward writing, according to the findings. In addition, the students believed that blogging provides them with an opportunity and flexibility to express themselves in English, write for both a local and a global audience, participate in active, dynamic social exchanges on blogs, and maintain an engaged relationship with a real-time readership. Generally speaking, the students had expressed enthusiasm for the use of Weblogs. In light of these findings, weblogs can be used in college writing courses to give learning incentive, opportunities for authorship and reading, and to help students develop their writing skills.

Yunus et al. (2013) conducted a study to examine the factors that influence students' willingness to use blogs as a critical tool for improving their writing abilities while studying English as a second language. The purpose of the study was to investigate how blogs might be included as classroom activities in order to assist students in improving their writing abilities. While demonstrating certain unique characteristics, the blogs would also highlight the motivational benefit connected with them. While gathering the qualitative information necessary to achieve the study's purpose, a semi-structured interview strategy was used to collect necessary information. The findings of the study serve as a continual reminder that ESL teachers should re-orchestrate blogs that have been particularly specified in the curriculum in order for them to be more successful.

Suadah (2014) published an essay entitled *Enhancing EFL Learners' Writing Skills through Blogging* which sought to determine the benefits of blogging as well as the ways of incorporating this technology into the classroom to improve students' writing skills. Two different types of incentives were used: extrinsic and intrinsic motivation. Students studying EFL (English as a Foreign Language) should utilize blogs to improve their writing fluency and then submit their blogs for consideration. The researcher discovered that blogging provided various benefits to students, including motivating them to write in a productive manner, allowing them to use English more frequently, and maintaining their excitement.

According to MugeGunduz (2016), blogging can assist pupils in developing fascinating writing abilities as well as authentic creative thinking skills. Blogs have the potential to motivate students to develop their writing skills while also allowing them to connect freely with others.

Rodliyah (2016) investigated how social media, specifically Facebook, can be used to teach English as a second language through the use of e-dialogue journal writing that was published in a Facebook private group to teach English as a second language. Through the use of the content of the students' journals and their reactions in this closed group, the nature of the students' journals, patterns of interaction, and responses to e-journaling through Facebook were all analyzed. The findings revealed that the set of sample students benefited from this exercise and noticed an improvement in their writing, notably in vocabulary and grammar.

Yoncazkan (2017) did an exploratory case study to determine whether or not writing blogs has an impact on the writing talents of high school pupils. The findings indicate that using a blog to help students improve their English writing skills is a good idea. Also discovered was that blogging increased students' interest in writing and motivated them to write on their own. This research also implies that writing blogs can be beneficial to English learners, language instructors, material developers and curriculum designers as well as providing suggestions for further research in the field of English.

Aliyev and Ismayilova (2017) conducted research to investigate the efficacy of using movies and new information technologies to boost students' writing skills in English classroom. Two films were screened for the students to evaluate their writing talents. With the help of those movies and internet technologies, students' writing talents, motivation, ideas for better writing, and inventions were found to be improved.

Mabuan (2018) conducted a study to find out what students thought about using blogs to better their English writing talents and to get their thoughts on the advantages of utilizing blogs as a virtual writing platform. The information was gathered from 58 first-year university students through blogs and questionnaires written by them. In the study, it was discovered that the students considered blogging to be a feasible medium for improving their English writing skills, despite technological limitations. It provides them a sort of freedom to express themselves which enhances or develops their writing skills and helps them to interact with and communicate with their classmates online, among other benefits of using technology.

Fithriani et al. (2019) did a qualitative case study to determine whether Facebook, Indonesia's most popular social media platform, can be a useful learning tool for EFL university students enrolled in advanced writing courses at the university level. The findings indicate that incorporating Facebook into a writing course helps students gain confidence in using English as a communication tool, participate more actively in classroom discussions and enhance their English language skills, particularly in writing. According to the findings of this study, the Facebook may be used as a secondary learning aid in higher education classrooms because it has a good impact on students' study habits and capabilities.

### III. RESEARCH OBJECTIVES

The following are the study's aims.

1. To determine the effect of blogs on the development of ESL learners' writing skills.
2. To direct students' attention to the importance of blogs in honing their writing skills.

### IV. RESEARCH QUESTIONS

The following are the research questions that were used in this study.

1. What effect do blogs have on the development of writing skills?
2. What are ESL learners' perspectives in using blogs to improve their writing skills?
3. Will blogs assist ESL students in developing their writing skills?

### V. SIGNIFICANCE OF THE STUDY

According to the researchers, the study will demonstrate the benefits of using blogs in the teaching and development of writing skills. For the most part, people believe that blogs are a highly convenient communication tool for students to stay up-to-date on current events and to keep their general knowledge current in their classroom and social environment. The ability to speak with others is made possible through this technology. Students can express themselves and share their opinions, information, ideas, feelings and emotions through blogs. It instills a sense of excitement about taking part in such a group activity. Blogs provide excellent possibilities for students to communicate with their peers as well as with their teachers. Blogs allow people to communicate freely with one another, and they are particularly effective at improving the writing abilities of ESL learners.

### VI. BACKGROUND OF THE STUDY

Following the principles of social constructivism, which was developed by the Russian psychologist Lev Vygotsky as a theory of social learning, individuals are active participants in the development of their knowledge (Schreiber & Valle, 2013). Learning, according to Vygotsky, takes place primarily in social and cultural contexts, rather than solely within an individual (Schreiber & Valle, 2013). Social constructivism is concerned with dyads and small groups of people (Johnson & Bradbury, 2015). According to social constructivism, effective teaching and learning are dependent primarily on interpersonal contact and interaction, with a particular emphasis on the students' perception of the problem (Prawat, 1992). The natural flow of speech is used by teachers to develop and encourage conversation in the classroom, as is the case with students who learn primarily through interactions with their peers, teachers and parents (Powell & Kalina, 2009).

A significant influence on the subject of education, as well as a significant amount of research on writers and writing, has come from the theory of social constructivism. Social constructivist theory is closely tied to the theoretical framework developed by Lev Vygotsky in his book 'Mind in Society', which asserts that social interaction and cultural surroundings play a crucial role in the development of learners' cognition and understanding. "Every function in the child's cultural development, according to him, emerges twice: first on the social level and then on the individual level; initially between individuals (inter-psychologically) and then within the kid (intra-psychological). This holds true for voluntary attention, logical memory, and the creation of concepts, all of which are interconnected. Each and every one of the higher functions has its roots in genuine relationships between individuals" (qtd. in Vens 16). They assert that the social constructivist theory encourages learners to use language in a variety of situations such as expression, explanation, bargaining and compromise with peers. Baker and Ismail believe this to be true (Squires 15). Collaborative writing with peers can be applied to these situations in order to improve writing skills. Take, for example, the various stages that

students go through during the writing process, such as the activities that the teacher uses to encourage the learner through discussion and brainstorming.

## VII. ANALYSIS

### A. Methodology

The descriptive approach was used as the research design for this study. Descriptive research is a written description of an item's current status under study at the time of the research's completion, which is referred to as descriptive data. It is a technique that is based on observation and is used to assess the current situation. The purpose of this study was to determine whether or not students' ability to improve their language competency in writing skills is affected by their use of blogs. The researcher, on the other hand, conducted this study in order to find out what the students who use blogs think about the development of their writing abilities.

### B. Sample and Size

There were a total of 54 participants from the second year of B.A English and Commerce streams. This research was conducted with the help of students from BWDA Arts and Science College, Mailam (Tindivanam). A simple random sample technique was used in choosing the students for this study. In order to achieve the research's objectives, the researchers developed a set of questions that were used to collect data through a Google form in order to assess students' ideas, opinions and perspectives on using blogs to develop writing skills. They were given 15 items to answer in a questionnaire.

### C. Research Design and Procedure

Before introducing the activities, the researchers provided a brief overview of the study's purpose to the participants. It was then explained to them that they needed to download and install an application for blogs on their smartphones or Android phones. Following that, the researchers formed a Telegram group and explained all the participants how to use the programme to improve writing skills. The researchers distributed new titles to the participants concerning the writing of new stories and the development of paragraph writing skills. According to social constructivist theory, the participants were allowed to actively participate in their own learning experience, which encourages social and individual interaction among all the members of the society, including children. Social constructivism, as defined by Vygotsky (1986), is the belief that all learning occurs as a result of social interaction and that meaning is socially constructed through speech and interaction with other individuals. Individual development, according to Richardson, is obtained through social interactions in which cultural implications are exchanged by society and eventually absorbed by the individuals (1997). After the discussion, the researchers instructed the participants to post their thoughts using new words on their blogs. The students were asked to narrate stories, essays, phrases and other expressions in the blog, which was maintained by the researchers. During the research practice session, the only requirement was that the blog included information about what they had looked for, discussed and discovered. It was required of the students that they shared their blogs with the rest of the group. They could read the blogs of other students and leave comments on their own blogs. Finally, they were asked to complete a questionnaire created by the researchers in order to gain a better understanding of their perspectives on the use of blogs in the development of writing skills.

## VIII. RESULTS AND DISCUSSIONS

To improve our language abilities, we must take advantage of the various learning resources that are now available. Because of the limited amount of knowledge we have in class throughout the day, learning from a single source or relying solely on what we learn in class will severely impair our learning process. Young children, on the other hand, have mastered the art of using a variety of media as learning tools. In this section, the main findings of the students' opinions on blogs are discussed in order to help them improve their writing skills. The mean score value was also calculated from the responses of the students.

The purpose of this study is to look into the impact of blogs on people's writing abilities in English. Many young people prefer to use blogs as a social networking platform because of the numerous exciting features that it provides. In order to accommodate the large number of people who are interested in this, social media and academics have created a variety of accounts that are extremely useful for learning English, particularly when it comes to improving writing skills.

The participants were instructed to complete a questionnaire created by the researchers in order to have their opinions and perspectives analyzed. The study concentrated on the use of blogs to improve writing abilities. The participants in this study were second-year students at BWDA Arts and Science College who were learning English as a second language. There have been 54 students who have taken part. To gather the information, the researchers used a custom-built questionnaire. All of the students took part with a great deal of zeal and enthusiasm. A total of 54 students responded to the questionnaire. The questionnaire had a three-point Likert Scale with responses such as "Agree," "Neutral," and "Disagree." The qualitative data revealed that the majority of the students expressed (see Table1) positive thoughts (responses) when they used blogs in their learning activities, which were consistent with the quantitative data (writing activity).

The students were given an overview of blogs by the researchers during the presentation. Following a brief introduction to blogs, the students were tasked with researching the websites of blogs as well as different types of blogs. The learner blog, the class blog and the tutor blog are all examples of different types of blogs. The students were instructed to determine what types of blogs were most frequently posted on the blogs. They gained an understanding of blogs and how to write for them as a result of this. Following that, a passage was read aloud to the students and instructed to look for new words and determine their meanings. They were able to comprehend the meaning of the words and the passage as a whole. They might be able to pick up some new vocabulary. Once they had finished with this activity, they were asked to write new summaries on topics that had been provided by the researchers. The students began to post their writings on blogs. They took part with a lot of enthusiasm, and their writing abilities improved as a result. They were able to create new sentence structures and use proper punctuation in their sentences as a result of the training. When they posted comments on blogs that contained grammatical errors, other students were quick to point out and correct their mistakes. Because of the blogs, their ability to collaborate with one another got improved. They were free to write anything they wanted on their blogs, and there were no rules or restrictions.

TABLE 1  
STUDENTS' OPINION OF BLOGS ON THE DEVELOPMENT OF WRITING SKILLS

S.No.	Uses of Blogs	Agree	Neutral	Disagree
1	Blogs make the students curious to enhance writing skills	48	2	4
2	Blogs comfortable to post content and acquire new knowledge	39	10	5
3	Blogs give more enthusiasm rather than other tools in learning	43	5	6
4	Blogs are a very useful tool to develop writing skills	49	3	2
5	Blogs encourage conversation among students	41	8	5
6	Blogs enable learning of new words when communicating with others	35	12	7
7	Blogs have helped me to learn new vocabulary	37	9	8
8	My writing skills improved better through blogs than through the traditional method	42	7	5
9	Blogs assist in sharing our ideas, opinions, knowledge and feelings with others	46	5	3
10	Blogs help to learn new ways of constructing sentences	33	13	8
11	Blogs instigate group activity in learning writing skills	45	5	4
12	It helps to make friendship via blogs	40	8	6
13	Blogs have more advantages than through any other tool	44	6	4
14	Blogs help to develop grammar, vocabulary and punctuation	34	7	13
15	Blogs help me to rectify my mistakes	29	14	11

The above table indicates the participant responses about the uses of blogs on developing writing skills.

#### A. Findings

The following result, which had been collected through the questionnaire from the students, showed the opinion of blogs on the development of writing skills. All the students participated very enthusiastically and they gave their opinion on developing writing skills. Based on the result the researchers found that blogs were a very useful tool to develop writing skills. The learning style was found to be increased and the students' creative thinking and writing skills were also found to be developed when they posted their comments on blogs. They could improve their vocabulary. It was an excellent opportunity for them to develop writing skills.

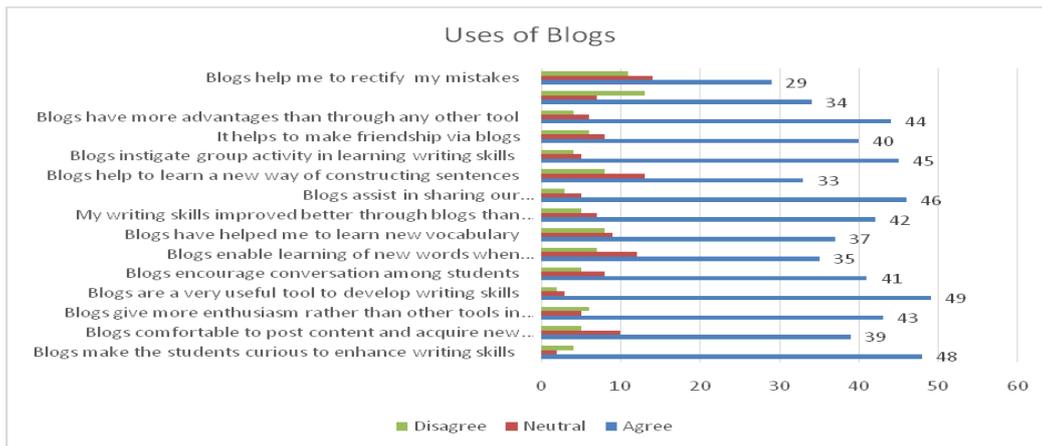


Figure. 1 Opinion on Blogs on the Development of Writing Skills

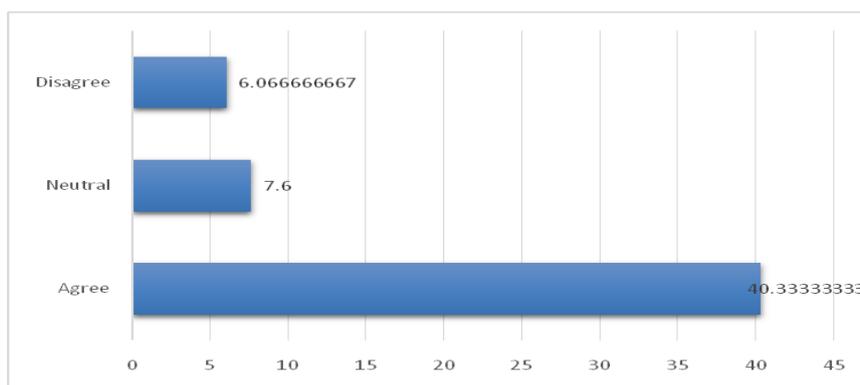


Figure 2 Averages of Students' Responses

The Figure 2 shows the opinion of the students on blogs on developing their writing skills and the Figure 2 reveals that the majority of the students had given positive responses. The mean score of Agree was 40.33. The mean score of Neutral was 7.62 and the mean score of Disagree was 6.06.

This quantitative data revealed that most of the students have given positive responses after using blogs in their writing activities.

As shown in Table 1 in the questionnaire, Item #4, 49 out of 54 students stated that "Blogs are a very useful tool to develop writing skills." It disclosed the fact that when the students communicated with their peers they were motivated to write content on blogs and they could rectify their mistakes.

In Item # 1, 48 out of 54 students stated that "Blogs make the students curious to enhance writing skills" because while posting their comments on blogs they had the immense pleasure to use blogs.

In Item #7, 37 out of 54 students thought that "Blogs have helped me to learn new vocabulary" as they wrote stories on a blog they could use new words to construct a sentence to write innovatively. Also, when the peers posted their comments or stories in new words, other students also could learn new vocabulary.

In Item #10, 8 out of 54 students disagreed that "Blogs help to learn new ways of constructing sentences" because they had very low proficiency in their knowledge of grammar. They felt it difficult to construct new sentences without grammar mistakes and at the same time 13 out of 54 students had neutral decision because some students were unable to construct new sentences because they had not overcome difficulties in forming sentences. They were slow learners to form new kinds of sentences in their writing skills.

In Item #15, 14 out of 54 students thought that "Blogs help to rectify my mistakes". The students made some mistakes in their writing activities but some of them helped to rectify the mistakes each other.

In Item #2, 39 out of 54 students pointed out that "Blogs are a more comfortable tool to post content and acquire more knowledge". They used some social media tools to improve their writing skills. Most of the students were less satisfied with other tools. When the instructor introduced blogs to the students they actively participated in the learning activity and enjoyed it. They felt that it could be a more comfortable tool than any other social media.

In Item# 3, 43 out of 54 reported that "Blogs give more enthusiasm rather than any other tool in learning". Most of the students agreed that they were allowed to write their opinion, feelings, and emotions on blogs which increased their interest. Some other students evinced, however, less interest to participate in their writing tasks.

In Item #5, 41 out of 54 students stated that "Blogs encourages conversations among students". They could learn collaboratively because when the instructor gave a topic related to making conversations on blogs, they made good use of it for the given topic. From these activities, the students developed creative writing skills.

In Item #6, 35 out of 54 students believed that "Blogs could help them learn new words while communicating with others". They could learn new words and construct new ways of writing sentences as part of their learning task.

In Item #8, 42 out of 54 students pointed out that "My writing skills improved better through blogs than through the traditional method" because the traditional method took longer period of time following many techniques and approaches and also involving technology in teaching. When the instructor introduced blogs to the students, they found it easy to develop writing skills. They were encouraged to participate in group activities on blogs.

In Item #9, 43 out of 54 students mentioned that "Blogs assist in sharing our ideas, opinions, knowledge and feelings with others". Most of the students expressed great opinions because they were motivated to participate in blogs to develop their writing skills. They could post their comments on what they thought without any restriction so that they were satisfied with their group activity.

In Item #11, 45 out of 54 students stated that "The blogs instigate group activity in learning writing skills". They create eagerness in the students as they could post their comments.

In Item # 14, 13 out of 54 students disagreed that "Blogs help to develop grammar, vocabulary and punctuation". Most probably the students found that it was difficult to develop their grammar and vocabulary knowledge because they could not remember everything. They made some mistakes in punctuation in their writing and they tended to forget things very often.

### B. Advantages of Blogs

From this study, the advantages are listed as follows:

- The students' motivation created
- Their writing skills improved
- The students' collaborative learning improved
- They could learn new vocabulary
- Their creative thinking improved

### C. Disadvantages of Blogs

From the study, the following disadvantages are listed:

- Students spent a lot of time posting their comments on blogs
- They felt bored sometimes
- The student – teacher interaction was very less

## IX. CONCLUSION

The use of the internet in language learning is quickly expanding and this is opening up new and exciting opportunities for ESL classes. A weblog is one of these inventions that, according to a slew of research conducted throughout the world, it has proven to be an incredibly effective instrument for boosting the writing abilities of language learners. A class blog experiment was developed in order to determine the viability of incorporating blogs into ESL writing classrooms. The learners' attitudes on this new learning experience were afterwards examined as part of the current study. It is possible to deduce from the study's findings that blogs can be effective in developing learners' English writing skills, provided that the unfavorable conditions identified by the participants are addressed and remedied. They were in favour of the method of implementing blogging in the classroom alongside the traditional classroom instruction is one recommendation in this regard.

The findings of the study revealed that the majority of the selected students were encouraged to continue with their writing activities and that they were extremely satisfied with the use of blogs. They gained new vocabulary and saw an improvement in their ability to write creatively. Blogs can be beneficial to those students in that they encouraged them to participate actively and constructively. Writing skills can be developed through blogs, according to the findings of the study. The student is free to participate despite his or her reluctance without any restrictions. He / She can gain new types of knowledge and improve their language skills when they work together in a collaborative environment. The student is able to be more independent while also working more collaboratively with his / her peers, thanks to the blog. Even though it has some positive aspects, it also has some negative aspects which are mentioned as above. It has been found that through blog posts and observation, blogging experience can improve the writing skills of students, particularly in terms of grammar, vocabulary and punctuation, and that this is true for all students.

## REFERENCES

- [1] Akdağ, E., &Özkan, Y. (2017). Enhancing writing skills of EFL learners through blogging. *The Reading Matrix: An International Online Journal*, 17(2), 79-95.
- [2] Aliyev, A. (2017). Improving English Writing Skills of Non-Native Undergraduate Learners with The Help Of Movies Supported By Online Technologies. *Journal of Education in Black Sea Region*, 2(2). doi:10.31578/jeb.v2i2.38
- [3] Apriani, L., &Melati, M. (2018). Enhancing students writing skill through blogging. *Edu-Ling: Journal of English Education and Linguistics*, 1(2), 10. <https://doi.org/10.32663/edu-ling.v1i2.451>

- [4] Aravind, B. R., & Rajasekaran, V. (2021). Exploring Dysphasia Learners' Vocabulary Acquisition through the Cognitive Theory of Multimedia Learning: An Experimental Study. *International Journal of Emerging Technologies in Learning (IJET)*, 16(12), pp. 263-275. <http://dx.doi.org/10.3991/ijet.v16i12.22173>
- [5] Campbell, A. P. (2003). Weblogs for use with ESL classes. *The Internet TESL Journal*, 9(2).
- [6] Carrier, M. (1997). ELT online: the rise of the Internet. *ELT Journal*, 51(3), 279-309.
- [7] E. Raghul, B.R. Aravind, K. Rajesh. (2021). Difficulties Faced by Special Education Teachers during COVID-19 Pandemic. *International Journal of Early Childhood Special Education (INT-JECSE)*, 13(2): 1245-1251. <https://doi.org/10.9756/INT-JECSE/V13I2.211172>
- [8] Fageeh, A. I. (2011). EFL learners' use of blogging for developing writing skills and enhancing attitudes towards English learning: An exploratory study. *Journal of Language and Literature*, 2(1), 31-48.
- [9] Fithriani, R., Dewi, U., Daulay, S. H., Salmiah, M., & Fransiska, W. (2019). Using facebook in EFL writing class: Its effectiveness from students' perspective. *KnE Social Sciences*. <https://doi.org/10.18502/kss.v3i19.4892>
- [10] Geethanadani, K., & Rajkumar, S. (2021). Comic Relief and Young Learners - How Exposure to Plays Will Influence their Intellect? *International Journal of Early Childhood Special Education*, 13(2), 1238-1244. <https://doi.org/10.9756/int-jecse/v13i2.211171>
- [11] Gross, E. (2011). Clashing values: Contemporary views about cheating and plagiarism compared to traditional beliefs and practices. *Education*, 132(2): 435-440
- [12] Gunduz, M. (2016). Developing Writing Skills Via Blogs. *The Eurasia Proceedings of Educational & Social Sciences (EPESS)*, 5. P 244-246
- [13] *Social Constructivism - an overview | ScienceDirect Topics*. (n.d.). Retrieved March 27, 2022, from <https://www.sciencedirect.com/topics/psychology/social-constructivism>
- [14] Li, J., & Chignell, M. (2010). Birds of a feather: How personality influences blog writing and reading. *International Journal of Human Computer Studies*, 68(9), 589-602.
- [15] Mabuan, R. A. (2018). Using blogs in teaching tertiary ESL writing. *English Review: Journal of English Education*, 6(2), 1. <https://doi.org/10.25134/erjee.v6i2.1238>
- [16] Ozkan, Y. (2011). Blogging in a teaching skills course for pre-service teachers of English as a second language. *Australasian Journal of Educational Technology*, 27(4).
- [17] Perumal, K., & I, A. (2022). An Exploratory Study on the Difficulties Faced by First-Generation Learners in Writing Skills. *Journal of Higher Education Theory and Practice*, 22(1). <https://doi.org/10.33423/jhetp.v22i1.4972>
- [18] Perumal, K., & Ajit, I. (2020). Enhancing Writing Skills: A Review. *Psychology and Education Journal*, 57(9), 2229-2236.
- [19] Richards, J. C., & Renandya, W. A. (2002). *Methodology in language teaching: An anthology of current practice*. Cambridge: Cambridge University Press.
- [20] Rodliyah, R. S. (2016). Using a Facebook closed group to improve EFL students' writing. *TEFLIN Journal - A Publication on the Teaching and Learning of English*, 27(1), 82. <https://doi.org/10.15639/teflinjournal.v27i1/82-100>
- [21] Shana, Z. A., & Abulibdeh, E. S. (2015). Engaging students through blogs: using blogs to boost a course experience. *International Journal of Emerging Technologies in Learning (IJET)*, 10(1), 30. <https://doi.org/10.3991/ijet.v10i1.4240>
- [22] Smith, P. (2004). *The quite crisis: How higher education is failing America*. Bolton, MA: Anker Publishing.
- [23] Suadah, L. (2014). *Enhancing EFL Learners' Writing Skills Through Blogging*. *Englisia Journal*, 2(1), 20. doi:10.22373/ej.v2i1.135
- [24] Vygotsky, L. S. (1986). *Language and thought*. Cambridge, Mass.: MIT Press.
- [25] Warschauer, M. and Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(02), 57-71.
- [26] Yunus, M. M., Tuan, J. L. K., & Salehi, H. (2013). *Using blogs to promote writing skill in ESL classroom*. arXiv preprint arXiv:1305.6358.
- [27] Zorko, V. (2009). Factors affecting the way students collaborate in a wiki for English language learning. *Australasian Journal of Educational Technology*, 25(5). <https://doi.org/10.14742/ajet.1113>

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# Ultrasound Overlay Video Effectiveness in Teaching Pronunciation to Young EFL Learners

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**Abstract**—Professionals in the language teaching field have recently shown increased interest in using ultrasound technology as a visual feedback tool in pronunciation instruction. It is difficult for students to interpret and for larger learner groups and independent learners to apply. Further, without specialised equipment and expertise, this technology cannot be incorporated into teaching and learning contexts. Developing ultrasound overlay videos is an attempt to address the limitations of the current technology in language teaching contexts. This study compares the /p/ and /b/ production by learners who received ultrasound overlay video training, as compared to those who didn't. All learners participated in recordings and perception quizzes before and after the training and 11 days post-training for the treatment group. No effects were noted regarding the perception and pronunciation of the segments between the groups. The same was observed during their follow-up, suggesting that ultrasound overlay videos may not be effective in helping young female learners perceive and pronounce word segments and retain the benefits of language instruction.

**Index Terms**—pronunciation instruction, ultrasound overlay videos, ultrasound, visual feedback

## I. INTRODUCTION

Effective communication requires a proficient use of the phonological elements of the target language (Moghaddam et al., 2012). Thus, placing great emphasis on knowledge of phonology and phonetics is essential to enhance pronunciation (Hameed & Aslam, 2015). Despite learners' differences in learning L2, the age factor is one of the areas that highly affect pronunciation proficiency (Çakır & Baytar, 2014; Derwing, 2008; Derwing & Munro, 2005; Gilakjani & Ahmadi, 2011; Piske et al., 2001). Based on the widely held Theory of Critical Period hypothesis (Lenneberg, 1967), native-like proficiency, especially in pronunciation, can be achieved between the ages of 2 and 13 (Loewen & Reinders, 2011). The interference of learners' native languages subsequently gets stronger as they get older (Damayanti, 2008). Clearly, mispronunciation habits acquired in childhood becomes resistant to change, and thereby changing them takes a lot of time and effort (Gilakjani & Ahmadi, 2011). Young learners are more likely to achieve flawless, native-like pronunciation with accurate instruction (Reid, 2016).

Thus, it is important to implement special efforts to pronunciation teaching (Çakır & Baytar, 2014), and, most importantly, ensure the effectiveness of the instruction itself (Derwing, 2008). Auditory input, which the listen-and-repeat method heavily draws on, is insufficient to develop metalinguistic awareness (Neri et al., 2002) and straightforwardly map pronunciation from sound to articulation. Besides, Broughton et al. (1993) argue that accurate imitation depends mostly on how accurately someone hears what is imitated. This applies to the segment /p/ which is recognised as a problematic consonant that is commonly mispronounced as /b/ by native Arabic speakers learning English (Elmahdi & Khan, 2015; Hameed & Aslam, 2015). With advances in technology, however, the possibilities of providing accurate and visual feedback on pronunciation are increasing more than ever before. The past decade has witnessed an increased interest in using ultrasound as a visualisation tool in fields such as language teaching, speech therapy, and articulatory phonetics (Bliss et al., 2018).

Ultrasound can be defined as a technology that “emits ultra-high-frequency sound through a transducer or ‘probe’ containing piezoelectric crystals” (Gick et al., 2008, p. 309). Speech ultrasound imaging is a reflection of the sound traveling through the tongue, which is obtained through an ultrasound transducer held against the skin of the neck (Gick et al., 2008). The ultrasound also creates an image of the tongue through high-frequency sound waves emitted by an ultrasound probe (Byun et al., 2014). According to Byun et al. (2014), it is a technique that “allows the client and clinician to observe tongue position and shape to directly cue changes in tongue position or shape and evaluate whether the client has achieved the intended changes” (p. 2,103).

Throughout this research the term ultrasound overlay videos (UOVs) will be used to refer to those videos that show a speaker's tongue movements in speech along with a profile view of the speaker's head (Bliss et al., 2017). UOVs are identified by Yamane et al. (2015) as those that display speech production by incorporating speech tongue movements taken through mid-sagittal ultrasonic images with externally profiled views of the head.



Figure 1 Screenshot of ultrasound overlay videos which explain with visual aid how linguistic sounds are articulated and provide understanding of articulatory differences between similar sounds. Source: <https://enunciate.arts.ubc.ca>.

UOVs could contribute to pronunciation instruction through both top-down and bottom-up teaching methods by demonstrating articulatory settings and enabling learners to view the tongue while producing the sounds (Gick et al., 2008). Furthermore, UOVs provide opportunities for constant listening and watching, thereby leading to improved pronunciation (Bliss et al., 2017). The research undertaken in this study seeks to investigate the effectiveness of UOVs on the pronunciation achievements of EFL learners.

## II. LITERATURE REVIEW

The literature review will examine the main issues regarding ultrasound use in teaching pronunciation. It will focus on three major themes which emerge repeatedly throughout the literature reviewed. These are teaching novel and challenging sounds, teaching contrasts (two sounds with minimal phonetic difference), and controlling tongue movements. Despite the literature addresses these issues in a variety of contexts, this research will mainly target its application to non-clinical interventions. The use of ultrasonic technology in pronunciation adjustments, together with its benefits to pronunciation instruction, will be evaluated.

### A. Teaching Novel and Challenging Sounds

With mixed results, a growing body of literature has investigated ultrasound efficacy in L2 pronunciation instruction. Meadows (2007) explored the potential of ultrasound in addressing common challenging sounds (/o:/, /e:/, and /ʌ/) for English speakers learning Japanese. In a mixed design, four native English speakers received four lessons of ultrasound-based and conventional instruction. The training involved instructional handouts and ultrasound real-time modeling of the sounds. The pre- and post-test productions, although not statistically different, were rated by native speakers as moving toward native-like attainment. This insignificance was possibly due to inadequate numbers of recorded tokens and training sessions. Moreover, with no valid experimental design with control and treatment groups, it is difficult to determine which instruction contributed to the general improvements of the target articulations.

Cleland et al. (2015) argued that ultrasonic visual feedback confers no advantage over traditional articulatory techniques in learning novel articulations. Their study compared the progress of 30 typically developing children randomised on study entry in learning non-English speech sounds with and without ultrasound visual biofeedback. The new articulations were taught through modelling, imitation, feedback and descriptions in addition to using ultrasound for the treatment group. No significant difference for ultrasound was observed between the two groups in the pre-test, teaching condition, or post-test except for the consonant /c/. This rather contradictory result may be attributed to the short 15- to 20-minute training.

In contrast to Cleland et al. (2015), Wu et al. (2015) reported a significant difference between treatment using ultrasound images followed by real-time tongue imaging and traditional, colloquial explanations of the French /r/. Two groups of five Chinese learners were involved in an experiment where preliminary perception tests confirmed their difficulty in identifying between French /r/ and Chinese /x/. Participants were recorded before and after training and better production of the phoneme was significantly found for the treatment group. The observed data confirmed that real-time ultrasound sped up the departure in articulation from Mandarin /x/ to French /r/ more efficiently than the traditional method. This does not appear to corroborate some previous studies (Cleland et al., 2015; Meadows, 2007) that suggested no benefit from ultrasound visualisation in improving L2 language learners' pronunciation. However, there was not a native French speaker involved to identify and rate the produced /r/.

In the same vein, White et al. (2017) examined the effectiveness of ultrasound visual feedback and traditional instruction in teaching dark /l/, an English syllable-final variant, to eight native Cantonese speakers. In an experimental design, two groups received identical instructions on the articulation of the target phoneme, but the experimental group also received ultrasound visual feedback lessons, through the ultrasound scanner, of almost 30 minutes in total. The post-test data highlight a significant improvement in the target sound, indicating a departure from back tongue to front tongue gesture to /l/, with an advantage for ultrasound training over non-ultrasound training.

### B. Teaching Contrasts

In a one-session investigation, Gick et al. (2008) tested how ultrasound would potentially benefit the English approximant contrasts /l/ and /r/ in three native Japanese learners. The sounds were targeted word-initially, medially, and finally through six vowel contexts in a 1-hour session of ultrasound training, along with pre- and post-assessments. The training included ultrasound video recordings of participants' best and troublesome productions compared to images produced by the authors in terms of tongue shape and specific movements of tongue parts. Interestingly, the participants successfully produced the problem segments and generalised the gains in the post-assessment. The results indicated that even a short ultrasound period might have the potential for L2 speech production training. However, the observed improvements were likely caused by the phonetic knowledge the participants applied, as linguistics students, to the training. Moreover, they would have been more convincing if some variables (acquisition age, residency in an English-speaking country, and vowel contexts) had been controlled.

Similar to earlier findings, Tsui (2012) detected a strong evidence for the efficacy of direct ultrasound visual feedback to back up the lingual configurations of the liquids /l/ and /r/, absent from Japanese phonology. Six native Japanese underwent four 45-minute training sessions over two weeks for these segments in different vowel contexts and word positions. The training involved ultrasound modelling and practice of the tongue positioning of /l/ and /r/. The speech samples obtained two weeks after the training and rated by experienced listeners revealed more accurate productions than pre-training tokens. Most importantly, the gains obtained were maintained and generalised to two new words in the follow-up sessions. This appears to support the Noticing Hypothesis (Schmidt, 1990), where awareness is necessary to acquire L2 features, and with visual feedback, language learners can perceive phonemic differences that they would otherwise overlook. The validation of the results, however, was flawed by the absence of randomised and controlled trials and consistency in perceptual tasks. Additionally, the use of a repeated carrier sentence, although useful as a context, may have interacted with the productions of /l/ and /r/ or produced nonsensical sentences.

d'Apolito et al. (2017) study shows a significant advantage for articulatory training (ultrasound images of the tongue gestures and real-time biofeedback of the tongue position) over perceptual training in the acquisition of the American English contrast /ɑ-ʌ/. A comparison between the two was performed to determine their effects on the productions of nine Italian learners divided into three groups. Post-test outcomes showed improvement of the target contrast for the experimental group, suggesting that the 1-hour ultrasound session was more effective and stable than the perceptual training. This result agrees with previous findings in the literature (Gick et al., 2008; Tsui, 2012) in terms of short-term ultrasound training benefits on pronunciation.

These findings fit those of Tateishi and Winters (2013), who suggested that ultrasound training can improve the production of a non-native speech contrast. The researchers explored the significance of ultrasound visual feedback in the production and perception of the English contrasts /r/ and /l/ produced by 10 native Japanese speakers. After ultrasound images were taken for production, discussions began to promote participants' intellectual involvement in the training process and self-awareness of articulations. The five-session experiment led to more distinct productions of the phonemes, with a more native-like /l/ than /r/, but with no improvement noted in perception accuracy. This inconsistency might have been caused by the few training sessions and the reliance on production ability rather than perception tests to assess perception. However, these data must be interpreted with caution because of the few training sessions, and absence of randomised trials to validate the results.

Likewise, Pillot-Loiseau et al. (2015) investigated the effects of ultrasound visual feedback, at the word level, on the French contrast /y-u/ produced by seven Japanese learners. The subjects participated in a 12-week conventional pronunciation training with three additional 45-minute ultrasound lessons. Productions were recorded before and after training and between these recordings, ultrasound feedback of position and shape was given for the experimental group who were seen again two months after second recording. Productions improved after training and further improvements were noticed later. The researchers concluded that ultrasound visual feedback can change the production of challenging vowels over time depending on the utterance type. The results suggest that the adopted articulatory approach of production training may improve perception and, in this regard, contradict the earlier findings of Tateishi and Winters (2013).

### C. Controlling Tongue Movement

Ouni's (2014) study investigated whether real-time ultrasound visual feedback would raise human awareness of tongue control. Using a randomised design, 24 native French speakers performed 12 tongue gestures of the three phonemes /a/, /i/, and /k/ in the absence of sound. After a 15-minute observation of real-time ultrasound visual feedback, the experimental group performed 10 out of 12 gestures, with no improvement for the control group on any of them. These findings match those of d'Apolito et al. (2017), Gick et al. (2008), Tsui (2012), and White et al. (2017) regarding the benefit of short sessions of practice with ultrasound on pronunciation.

The literature review shows the potential of ultrasound imaging technology in L2 pronunciation as a visualisation tool. While most of the works reviewed above agree on ultrasound's efficacy in acquiring, discriminating, or adjusting the tongue movement for novel and challenging speech sounds, others hold the view that it presents no advantage in learning pronunciation compared with other instructional contexts. A key problem with much of the literature regarding this issue is that most ultrasound imaging is difficult to employ in most teaching conditions due to the prohibitive cost

of acquiring enough ultrasound equipment for large classes. The ultrasound is also difficult for learners to interpret without specialised training. Due to technological challenges, most studies have tended to focus on one-on-one settings, formal laboratory teaching, and adults rather than younger learners.

A closer examination of the literature also reveals a number of gaps and shortcomings. The generalisability of some published research is problematic, as it is limited to a small sample size (d'Apolito et al., 2017; Gick et al., 2008; Meadows, 2007; Pillot-Loiseau et al., 2015; Tateishi & Winters, 2013; Tsui, 2012; White et al., 2017; Wu et al., 2015). Ouni (2014) failed to provide adequate proof of his findings that pronunciation improvement is related to visual feedback. The empirical design of Meadows (2007), Tateishi and Winters (2013) and Tsui (2012) did not validate the results in randomised control trials. Moreover, d'Apolito et al. (2017), Gick et al. (2008) and White et al. (2017) did not consider long-term effects on knowledge at the phonological level.

### III. METHODOLOGY

Within the specific context of young learners, this research seeks to answer the following questions:

1. What is the difference in the perception of /b/ and /p/ when pronunciation is taught with and without UOVs?

Hypothesis: High accuracy occurs with UOVs training.

2. What is the difference in the pronunciation of /b/ and /p/ when they are taught with and without UOVs?

Hypothesis: High accuracy occurs with UOVs training.

An important aspect in this study relates to these questions: The need to study the implementation of UOVs in pronunciation practice contexts, despite being in demand, is in its embryonic stages in terms of research and usage in primary education. The necessity to assess the effectiveness of UOVs as a resource of language teaching and learning is acknowledged by Bliss et al. (2017). The literature review chapter also identifies a gap in the existing knowledge in that, until recently, the impact of UOVs on the pronunciation of young learners has been unclear. This study seeks to contribute to this growing area of research by investigating the impact of UOVs on the pronunciation of young learners. According to the researcher's knowledge, no previous study has examined this area. The opportunity, therefore, to investigate their efficiency with young learners should significantly contribute not only to this field in general but also to a richer understanding of their broader effects on the young in particular.

#### A. Data Collection

##### (a). Site and Sample Selection

The study was conducted in a public primary school that controls any factors of language experience, making it suitable for the experiment. Primary public schools are known for their limited and late introduction of language classes compared with private schools. The students, specifically Grade 6, became the core of the recordings and perception quizzes. This group also provided an achievable approach to the experiment. Questionnaires, similar to those used by Tsui (2012) were provided to obtain information on the participants' characteristics and language experience.

Because of time constraints, a total of 10 students who speak Arabic as a native language were randomly split into two groups: the comparison group (CG) with no training and the experimental group (EG) with UOV training. In their questionnaires, all the participants reported no hearing problems or speech or language disorders. All the participants were aged between 11 and 12 (mean age = 11.30) and were female.

All the participants had no experience living in an English-speaking country. They were asked to rate their productions of the segments /p/ and /b/ in the questionnaire. The segments were rated on a four-point scale: (1) not at all on target, (2) somewhat on target, (3) almost on target, and (4) exactly on target. Regarding motivation to participate in the study, the questionnaire involved another four-point self-rating scale. The participants were asked to choose among (1) not motivated at all, (2) somewhat motivated, (3) extremely motivated, and (4) very motivated. Table 1 demonstrates the subjects' characteristics based on their answers to the questionnaire.

TABLE 1  
SUBJECTS' CHARACTERISTICS OBTAINED FROM QUESTIONNAIRES

Subjects	Age	Age of First Exposure	Living in English-speaking Country	Spoken English in Daily Life	Motivation
EG1	12	3 years	No experience	75%	Very motivated
EG2	12	9 years	No experience	25%	Extremely motivated
EG3	11	10 years	No experience	25%	Very motivated
EG4	11	4 years	No experience	50%	Extremely motivated
EG5	11	5 years	No experience	25%	Very motivated
CG6	11	10 years	No experience	25%	Somewhat motivated
CG7	11	6 years	No experience	25%	Very motivated
CG8	12	9 years	No experience	50%	Very motivated
CG9	11	7 years	No experience	50%	Very motivated
CG10	11	5 years	No experience	25%	Very motivated

Quantitative data were primarily collected through pre- and post-training recordings and perception quizzes. Perception quizzes were utilized since production interacts with perception (Flege, 1995) and recordings allowed for measuring production intelligibility and accuracy. This approach achieved triangulation at its simplest level by

providing data from more than one standpoint (Cohen et al., 2002).

(b). *Validity of the Perception Quiz*

The Pearson coefficient was calculated to identify the validity of the study tool, whereas the correlation coefficient was calculated between every item and the total degree of the quiz, as shown in Table 2.

TABLE 2  
PEARSON CORRELATION FOR THE QUIZ ITEMS OF /B/ AND /P/ PERCEPTION WITH THE TOTAL DEGREE OF THE QUIZ

Items	Pearson correlation	Items	Pearson correlation
1	.709**	8	.562**
2	.682**	9	.529**
3	.612**	10	.672**
4	.628**	11	.790**
5	.503**	12	.541**
6	.741**	13	.587**
7	.760**	14	.595**

\*\* Correlation is significant at the 0.01 level

Tables 3 shows that all the statements are significant at the 0.01 level, meaning a high internal consistency as well as high and adequate validity indicators that can be trusted when applying the current study.

(c). *Reliability of the Perception Quiz*

To check the reliability of the study tool, a retest measure was used as shown in Table 3.

TABLE 3  
RETEST FOR MEASURING THE STABILITY OF THE STUDY TOOL

	Number of items	Pearson correlation
Overall reliability	14	0.862**

Table 3 shows that the study quiz has a statistically acceptable stability. The value of the overall stability coefficient (Pearson correlation) was 0.862, which is a high degree of stability and indicates consistent results when applied to the present study.

(d). *Equivalence of Groups*

To determine group equivalence, the Mann–Whitney test was used to compare the mean scores of the EG and CG in the pretest, as shown in Tables 4 and 5.

TABLE 4  
MEAN AND STANDARD DEVIATION OF THE PRETEST FOR BOTH EG AND CG IN THE PERCEPTION QUIZ OF /b/ AND /p/

Groups	n	Mean	Standard deviation
Control	5	6.80	2.17
Experimental	5	7.20	2.05

TABLE 5  
MANN–WHITNEY TEST RESULTS OF THE PRETEST CONCERNING THE DIFFERENCES BETWEEN THE MEAN SCORES OF BOTH EG AND CG IN THE PERCEPTION OF /b/ AND /p/

Groups	n	Mean rank	Sum of ranks	z	p
Control	5	5.30	26.05	0.217	0.828
Experimental	5	5.70	28.50		

It is apparent from Table 5 that there are no statistically significant differences between the mean scores of the EG and CG in the pretest of /b/ and /p/ perception. The previous result indicates that there is consistency between the groups.

(e). *Baseline Assessment*

The assessment process, in both the pretest and posttest sessions, and the training were conducted in the school. One week prior to the commencement of the study, each participant's guardian signed a consent and participants were individually assessed through a number of tasks:

- A. Perception quiz
- B. Audio recording of word list #1
- C. Audio recording of word list #2
- D. Audio recording of word list #3

The participants identified /p/ or /b/ in 14 minimal pairs in a perception quiz. Each segment pair was depicted through pictures and displayed side by side in Microsoft Office PowerPoint 2016 and on sheets handed to the subjects. An audio recording by a native speaker was played for one word of the pair, and then the participants marked the image representing the spoken word. They were allowed to replay the recording whenever needed. To avoid orthographical

interference, no written words were shown.

Once the quiz was completed, a list containing 24 words, 12 each for /p/ and /b/, was used for recording. The two segments were elicited in different word positions and vowel contexts and were presented initially, medially, and finally, with four words each. The vowel contexts included were low-front /æ/, mid-back /ʌ/, mid-central /ɜ:/, mid-front /e/, high front /i:/, and /ɪ/ as well as the diphthongs /eɪ/ and /əʊ/. Following this, each participant was recorded three times per word to increase the reliability of the elicited samples. This process of making a representative sample through three tokens per word was adopted from Lotto et al. (2004); Aoyama et al. (2004); and Tsui (2012). In the analysis, data from the third elicitation were used, given the increased familiarity with the word list and the reduced need for cueing.

Using Microsoft Office PowerPoint 2016, pictures of the chosen words were displayed. Afterwards, word elicitation was performed without any carrier phrases to avoid any interaction between the production of target sound and that of the carrier phrase. Again, to avoid the effects of orthography on pronunciation, the participants were shown the list only once to identify any unfamiliar words and later during elicitation whenever needed. The participants were recorded over two consecutive days because of the limited time available.

#### (f). *Treatment Sessions*

Each participant in both groups had four five-minute training sessions, with UOVs being provided for the EG and no intervention for the CG. The sessions were held over four consecutive weeks and included modeling, having the subjects practice the sounds using silent gestures and then their voice, and finally checking the word lists, with the provision of UOVs for EG. The first training session was composed of the following:

- A. Instruction on the gestural configurations of /p/ and /b/ for both groups
- B. Description of how UOVs work for the EG
- C. Practice with both groups with UOVs being provided for the EG

Each participant in the EG received an informational illustration on how the technology works and an orientation of the tongue tip and root on UOVs. Furthermore, they were provided with a link to the University of British Columbia website (<http://enunciate.arts.ubc.ca/>) where they could review the videos. Afterwards, the training began with instructions on the lingual components of the segments accompanied by UOV demonstrations. To avoid list effects, target sounds with different word positions were distributed across the list (Gick et al., 2008). The participants had the opportunity to practice the learned articulation position in a pattern that progressively increased in difficulty, thereby helping to tailor training to their learning styles:

- A. Segments in isolation without voice
- B. Segments in isolation with voice
- C. Segments in word-initial position in open syllables
- D. Segments in word-initial position in closed syllables
- E. Segments in word-final position in closed syllables
- F. Segments in word-medial position

In every session, the EG had the opportunity to practice with UOVs. UOVs of the segments were displayed and the researcher demonstrated the correct configurations of the two. After that, participants practised the correct positioning of /p/ and /b/ in reading the lists. The progression through training stages depended on how the participants progressed in each training meeting. At the end of every session, lists of the words were handed to the participants for practice at home. They were instructed to practice the word lists up to a maximum of 10 minutes each day. As reported by them, the word lists were practiced between 2 and 10 minutes (mean = 6.6 minutes) between 1 and 10 days (mean = 2.9 days) from the last training session to the post-assessment.

#### (g). *Post-Assessment*

To assess the learned segments, participants were seen again individually two weeks after the training. As in Tsui's study (2012), the lingual components of the two segments were practiced for five minutes prior to the assessment. This stage involved the same perception quiz and word list included in the initial assessment as well as the same procedure.

#### (h). *Follow-Up Assessment*

The EG participants were seen 11 days following the post-assessment session for an individual follow-up evaluation. This final session included the same perception quiz and recording list.

### B. *Data Analysis*

The analysis was a two-pronged approach of describing and analysing both the recorded word judgments and the perception quizzes for both groups. To judge the recorded tokens, two native English speakers were recruited as they are adept at detecting non-native pronunciation (Derwing & Munro, 2005). As Tsui's study (2012), productions were judged on a four-point rating scale. The choices included were first recording is better, second recording is better, both equally accurate, and both equally inaccurate. The pre- and post-training audio files of each target segment were inserted into Microsoft PowerPoint 2016 and the judges were asked to play the two words on each slide unknowing which assessment the audio file belonged to. By randomising the presentation of the words, the listeners were unable to identify the pre- or post-training tokens.

The judges were able to replay each word a maximum of three times to ensure thoughtful ratings. However, they were urged to make their judgments after the first listening. The listener's choice was recorded immediately. Each judge spent approximately 2 hours listening and judging 24 words per subject for pre- and post-assessment and 24 words per EG participant for the follow-up session. To judge perceptual ability, the scores of 14 minimal pairs in the pre- and post-assessments were included in the analysis. Only correct choices on the answer sheet were calculated for each participant. The number of correct choices of pre-assessment was compared to that of post-assessment. To measure the difference, the data were statistically analysed using the Mann–Whitney U and Wilcoxon tests as it is the best test for two independent samples that are small and not normally distributed (Nachar, 2008).

As for recordings, the results were examined by comparing the EG findings against the CG findings. A total of 24 words for each participant (12 pre-training and 12 post-training) in both groups were used in the analysis. The words included /p/ and /b/ in word-initial, word-medial and word-final positions two words each. The target words for the analysis were semi-randomly chosen to ensure that the final analysis included all word shapes (Tsui, 2012). Similarly, data analysis of the follow-up session followed the same procedure, comparing the post- and follow-up training gains of the EG.

### Reliability

To measure the inter-rater reliability, a comparison was made between the two listeners' choices. An agreement was considered to exist whenever the two judges rated the same word as belonging to the same category identified above, while disagreement was noted when one judge's response for a word was different from the other one. The inter-rater reliability was 78% for both /p/ and /b/ words in the pre- and post-assessment and 76% for the follow-up session. According to Cohen et al. (2002), when agreement is between 64-81% of the data being analyzed, the level of agreement is strong (McHugh, 2012). Inter-rater disagreements were mostly in words rated as more accurate in post-training by a judge and equally accurate or inaccurate by the other. It was rare that the two judges disagree that a particular word would fit the category of pre-training more accurate or post-training more accurate.

Moreover, without the judges being informed, two tokens for each subject were replayed as soon as the judgments for all the listed words had been conducted to determine intra-rater reliability. The repeated words were 14% of the whole pre- and post-assessment tokens and 16% of the whole follow-up tokens. The intra-rater reliability in the pre- and post-assessment was 60% for Judge 1 and 85% for Judge 2. In the follow-up session, it was 80% for Judge 1 and 100% for Judge 2.

## IV. RESULTS

### A. Perception Quiz Results

The perception quiz included 14 minimal pairs, and the analysis targeted subjects' correct responses in the quiz. The research in this regard sought to determine the effectiveness of UOVs in the perception of /p/ and /b/ through the following question: "What is the difference in the perception of /b/ and /p/ when pronunciation is taught with and without UOVs?" To determine the difference in the perception of /b/ and /p/ when pronunciation is taught with and without UOVs, the Mann–Whitney test was used, as shown in Tables 6 and 7.

TABLE 6  
MEAN AND STANDARD DEVIATION OF THE POSTTEST FOR THE DIFFERENCE IN THE PERCEPTION OF /b/ AND /p/ WHEN PRONUNCIATION IS TAUGHT WITH AND WITHOUT UOVs

Groups	<i>n</i>	Mean	Standard deviation
Control	5	8.20	2.17
Experimental	5	8.20	1.30

TABLE 7  
MANN–WHITNEY TEST RESULTS OF THE POSTTEST CONCERNING THE DIFFERENCES IN THE PERCEPTION OF /b/ AND /p/ WHEN PRONUNCIATION IS TAUGHT WITH AND WITHOUT UOVs

Groups	<i>n</i>	Mean rank	Sum of ranks	<i>z</i>	<i>p</i>	Eta squared
Control	5	5.70	28.50	0.213	0.831	0.0
Experimental	5	5.30	26.50			

Tables 7 and 8 reveal that there were no statistically significant differences in the perception of /b/ and /p/ when pronunciation was taught with and without UOVs. The mean score for both groups was 8.20. No effectiveness of UOVs for the perception of /b/ and /p/ was observed for female young learners. As shown in Table 7, the value of the eta squared in the posttest was 0.0. This did not surpass 0.14, the value indicating the educational importance of statistical results in psychological and educational research (Murad, 2000). The value of eta squared revealed no effect of UOVs on the perception of /b/ and /p/ for female young learners.

### B. General Results of the Accuracy of /p/ and /b/ Recordings

Of all the /p/ productions, 26% were rated by both judges as more accurate in post-training, whereas 10% of the words were judged as more accurate in pre-training. Both judges rated 31% of the words as equally accurate and 10% as equally inaccurate. Accurate post-training productions of the segment /p/ were targeted in the analysis of both groups.

The next part of the recordings was concerned with /b/ productions. Both judges rated three words (5%) of all /b/ productions as more accurate in post-training. Also, only 1% across word positions was judged as more accurate in pre-training. Most of the ratings (48%) indicate an equal accuracy of both pre- and post-productions. Both judges rated 21% of all the /b/ tokens as equally inaccurate in both assessments. Accurate post-training productions of the segment /b/ were targeted in the analysis for both groups.

On the questions of “What is the difference in the pronunciation of /p/ when it is taught with and without UOVs?” and “What is the difference in the pronunciation of /b/ when it is taught with and without UOVs?” Tables 8, 9, 10 and 11 demonstrate the difference using the Mann–Whitney test.

TABLE 8  
MEAN AND STANDARD DEVIATION OF THE DIFFERENCE IN THE PRONUNCIATION OF /p/ WHEN IT IS TAUGHT WITH AND WITHOUT UOV

Groups	<i>n</i>	Mean	Standard deviation
Control	5	1.80	1.48
Experimental	5	1.40	1.34

TABLE 9  
MANN–WHITNEY TEST RESULTS CONCERNING THE DIFFERENCES IN THE PRONUNCIATION OF /p/ WHEN IT IS TAUGHT WITH AND WITHOUT UOVs

Groups	<i>n</i>	Mean rank	Sum of ranks	<i>z</i>	<i>p</i>	Eta squared
Control	5	5.80	29.0	0.328	0.743	0.02
Experimental	5	5.20	26.0			

TABLE 10  
MEAN AND STANDARD DEVIATION OF THE DIFFERENCE IN THE PRONUNCIATION OF /b/ WHEN IT IS TAUGHT WITH AND WITHOUT UOV

Groups	<i>n</i>	Mean	Standard deviation
Control	5	0.0	0.0
Experimental	5	0.60	0.89

TABLE 11  
MANN–WHITNEY TEST RESULTS CONCERNING THE DIFFERENCES IN THE PRONUNCIATION OF /b/ WHEN IT IS TAUGHT WITH AND WITHOUT UOV

Groups	<i>n</i>	Mean rank	Sum of ranks	<i>z</i>	<i>p</i>	Eta Squared
Control	5	4.50	22.50	1.491	0.136	0.12
Experimental	5	6.50	32.50			

The results shown in the tables indicate that there were no statistically significant differences between both groups' pronunciation of /p/ and /b/ when they were taught with and without UOVs. For /p/, the mean scores for the CG and EG were 1.80 and 1.40, respectively. As for /b/, the mean scores for the CG and EG were 0.0 and 0.60, respectively. These results reveal no effectiveness for UOVs in the pronunciation of /p/ and /b/ for female young learners. The value of the eta squared was 0.02 for /p/ and 0.12 for /b/. These did not surpass 0.14, the value indicating the educational importance of statistical results in psychological and educational research (Murad, 2000).

## V. DISCUSSION

### A. Perception Accuracy of /p/ And /b/

Learning to improve production of foreign sounds results in adjusting the perception of the same sounds (Kartushina et al., 2015) as each perceptual unit is a produced or intended gesture (Best, 1995). In pronunciation, both auditory and visual information greatly benefit L2 learners in terms of acquiring speech sounds and patterns (Bliss et al., 2016). The information provided by visual representations can serve as scaffolding and help to overcome perceptual limitations imposed on production (Kartushina et al., 2015). However, no evidence for UOVs' influence, as a visualizing tool, on female young learners' perception accuracy of /p/ and /b/ was found.

The accuracy score reveals that the treatment was unsuccessful to establish categories for the segments in participants' perception. A possible explanation for this result may be the lack of perceptual training of the targets. In this study, perception was only assessed but not trained; therefore, it was not possible to demonstrate that production training provided by UOVs positively affects the perception of /p/ and /b/. Even though these results differ from those of some other studies (Pillot-Loiseau et al., 2015) suggesting that ultrasound can improve perception, they are consistent with those of Tateishi and Winters (2013) showing that ultrasound has no positive influence on perception accuracy.

Given that these findings are based on a limited number of minimal pairs (14 minimal pairs in total), the results should be treated with the utmost caution. This small number limits an adequate representation of the subjects' actual ability. It is not inconceivable that different evaluations would have been obtained if a larger number of minimal pairs had been included in the assessments. Despite this, an important insight emerged from the perception quiz. As in Tsui's study (2012), none of the word-initial (WI), word-medial (WM), or word-final (WF) positions in which /p/ and /b/ appeared demonstrated a difficulty for perception.

### B. Pronunciation of /p/ and /b/

Contrary to expectations, the results of using UOVs in the pronunciation instruction of /p/ and /b/ did not reveal

significant differences between the two groups. This result matches the findings of Cleland et al. (2015) and Abel et al. (2016). There are several explanations for the lack of differences between the groups. In L2 acquisition, some theoretical perspectives assume that perception is necessary to produce new sounds or discriminate between L2 and L1 sounds and achieve accuracy through identifying phonetic features of a given sound or a contrast between two sounds (Best, 1995; Flege, 1995). As perception accuracy was not achieved in this study, it was possibly difficult for participants to perceive the difference between the two sounds, thereby leading to no significant improvements in production. This further supports the idea of Flege's Speech Learning Model (1995), which state that no accurate L2 production surpasses perceiving L2 and L1 (dis)similarities.

Additionally, the lack of group differences was likely due to the subjects' short training sessions (20 minutes in total). Participants also reported short intervals of homework practice with UOVs and with word lists provided throughout training of 2–10 minutes (mean = 6.6 minutes) for 1 to 10 days (mean = 2.9 days). However, in contrast to earlier findings by d'Apolito et al. (2017), Gick et al. (2008), Ouni (2014), Tsui (2012), and White et al. (2017), this research result showed that practice sessions, even short, with UOVs' visual feedback had no benefit on the segments' accuracy.

## VI. CONCLUSION

In sum, the comparison between the two groups indicated no advantage of UOVs in the perception accuracy of /p/ and /b/. The evidence from this finding supports the idea that using the visual feedback of UOVs does not ameliorate perception accuracy for young learners. Contrary to previous findings, no effects of UOVs training on young learners were noted for the pronunciation of the targets. This leads to the conclusion that short UOV training and practice has no benefit on young learners' pronunciation of the segments.

Importantly, the findings significantly differ from previous results reported in the literature in that the benefits of UOV training were not only unobserved but also not even retained at the 11-day follow-up. The follow-up, despite being soon after the training, also suggests that UOVs are ineffective for young learners to retain the segments over time. Together, these results provide important insights into using UOVs as a pronunciation tool. Within the context of young learners, the tool is not useful in teaching and discriminating between /p/ and /b/.

### Limitations and Recommendations

With a small sample size, the findings of this study might not be transferable to larger populations. Future studies on the current topic with large sample sizes are recommended for all levels, including beginners, and not just advanced primary learners. Another barrier is the difficulty in accessing participants, particularly on busy school days, when they are needed. Therefore, the training duration, 20 minutes in total, was shorter than it was planned for as the subjects were seen during short intervals throughout the day. Such a duration is perhaps not long enough to determine the effectiveness of UOVs in pronunciation instruction for young learners. Therefore, future studies with long training sessions with UOVs combined with perceptual training to ameliorate production should be considered.

Although the results do not support the usage of UOVs for female young learners, more research is needed to evaluate the technology for other speech sounds and retention over time. In future investigations, it would also be interesting to undertake other computer-assisted pronunciation resources with challenging phonetic segments for English as a Foreign Language learners such as /ŋ/, /v/ and /tʃ/ as that topic may be more responsive to different tools. In addition, this research set out to compare UOVs instruction with traditional instruction. Further studies employing large randomised controlled trials and comparing UOVs with other computer-assisted pronunciation tools remain to be seen.

## REFERENCES

- [1] Abel, J., Bliss, H., Gick, B., Noguchi, M., Schellenberg, M., & Yamane, N. (2016). *Comparing Instructional Reinforcements in Phonetics Pedagogy*. Paper presented at the Proc. ISAPh 2016 International Symposium on Applied Phonetics.
- [2] Aoyama, K., Flege, J. E., Guion, S. G., Akahane-Yamada, R., & Yamada, T. (2004). Perceived phonetic dissimilarity and L2 speech learning: The case of Japanese/r/and English/l/and/r. *Journal of Phonetics*, 32(2), 233–250.
- [3] Best, C. T. (1995). "A direct cross-realist view of cross-language speech perception," in *Speech Perception and Linguistic Experience: Theoretical and Methodological Issues*, edited by W. Strange (York Press, Baltimore, MD), pp. 171–204.
- [4] Bliss, H., Abel, J., & Gick, B. (2018). Computer-assisted visual articulation feedback in L2 pronunciation instruction: A review. *Journal of Second Language Pronunciation*, 4(1), 129-153.
- [5] Bliss, H., Burton, S., & Gick, B. (2016). Ultrasound overlay videos and their application in Indigenous language learning and revitalization. *Canadian Acoustics*, 44(3), 136-37.
- [6] Bliss, H., Johnson, K., Burton, S., Yamane, N., & Gick, B. (2017). Using multimedia resources to integrate ultrasound visualization for pronunciation instruction into postsecondary language classes. *Journal of Linguistics and Language Teaching*, 8(2), 47–62.
- [7] Broughton, G., Brumfit, C., Pincas, A., & Wilde, R. D. (1993). *Teaching English As a Foreign Language*. London, United Kingdom: Routledge.
- [8] Byun, T. M., Hitchcock, E. R., & Swartzb, M. T. (2014). Retroflex versus bunched in treatment for rhotic misarticulation: Evidence from ultrasound biofeedback intervention. *Journal of Speech, Language, and Hearing Research*, 57, 2116–2130.
- [9] Çakır, İ., & Baytar, B. (2014). Foreign language learners' views on the importance of learning the target language pronunciation. *Journal of Language & Linguistics Studies*, 10(1), 99-110.

- [10] Cleland, J., Scobbie, J. M., Nakai, S., & Wrench, A. A. (2015). *Helping children learn non-native articulations: the implications for ultrasound-based clinical intervention*. Paper presented at the Proceedings of the 18th International Congress of Phonetic Sciences (ICPhS), Glasgow, 10-14 August 2015.
- [11] Cohen, L., Manion, L., & Morrison, K. (2002). *Research Methods in Education*: Routledge.
- [12] d'Apolito, I. S., Sisinni, B., Grimaldi, M., & Fivela, B. G. (2017). Perceptual and Ultrasound Articulatory Training Effects on English L2 Vowels Production by Italian Learners. *World Academy of Science, Engineering and Technology, International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering*, 11(8), 2120–2127.
- [13] Damayanti, I. L. (2008). Is the younger the better? Teaching English to young learners in the Indonesian context. *Educare*, 1(1), 31-38.
- [14] Derwing, T. M. (2008). Curriculum issues in teaching pronunciation to second language learners. In J. G. Edwards & M. L. Zampini (Eds.), *Phonology and Second Language Acquisition* (Vol. 36, pp. 347-369). Philadelphia: John Benjamins Publishing Company.
- [15] Derwing, T. M., & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39, 379–397. doi:10.2307/3588486
- [16] Elmahdi, O., & Khan, W. (2015). The Pronunciation Problems Faced by Saudi EFL Learners at Secondary Schools. *Education and Linguistics Research*, 1, 85. doi:10.5296/elr.v1i2.7783
- [17] Flege, J. E. (1995). Second language speech learning: Theory, findings, and problems. *Speech Perception and Linguistic Experience: Issues in Cross-Language Research*, 92, 233–277.
- [18] Gick, B., Bernhardt, B., Bacsfalvi, P., & Wilson, I. (2008). Ultrasound imaging applications in second language acquisition. In J. G. Edwards & M. L. Zampini (Eds.), *Phonology and second language acquisition* (Vol. 36, pp. 309–322). Philadelphia: John Benjamins Publishing Company.
- [19] Gilakjani, A. P., & Ahmadi, M. R. (2011). Why is pronunciation so difficult to learn? *English Language Teaching*, 4(3), 74-83.
- [20] Hameed, P. F., & Aslam, M. S. (2015). Pronunciation as a stumbling block for the Saudi English learners: An analysis of the problems and some remedies. *Theory and Practice in Language Studies*, 5(8), 1578–1585 doi:http://dx.doi.org.sdl.idm.oclc.org/10.17507/tpls.0508.06
- [21] Kartushina, N., Hervais-Adelman, A., Frauenfelder, U. H., & Golestani, N. (2015). The effect of phonetic production training with visual feedback on the perception and production of foreign speech sounds. *The journal of the acoustical society of America*, 138(2), 817-832.
- [22] Lenneberg, E. H. (1967). *Biological Foundations of Language*. New York: John Wiley and Sons.
- [23] Loewen, S., & Reinders, H. (2011). *Key concepts in second language acquisition*. Houndmills, Basingstoke, Hampshire: Palgrave Macmillan.
- [24] Lotto, A. J., Sato, M., & Diehl, R. L. (2004). Mapping the task for the second language learner: The case of Japanese acquisition of /r/ and /l/. *From sound to sense*, 50(2004), C381-C386.
- [25] McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica: Biochemia medica*, 22(3), 276-282.
- [26] Moghaddam, M. S., Nasiri, M., Zarea, A., & Sepehrinia, S. (2012). Teaching pronunciation: The lost ring of the chain. *Journal of Language Teaching and Research*, 3(1), 215-219. doi:10.4304/jltr.3.1.215-219
- [27] Murad, S. (2013). *Methods of Scientific Research "Designs and Procedures."* Cairo: Modern Book Publishing House.
- [28] Nachar, N. (2008). The Mann-Whitney U: A test for assessing whether two independent samples come from the same distribution. *Tutorials in quantitative Methods for Psychology*, 4(1), 13-20.
- [29] Neri, A., Cucchiari, C., Strik, H., & Boves, L. (2002). The pedagogy-technology interface in computer assisted pronunciation training. *Computer assisted language learning*, 15(5), 441-467.
- [30] Ouni, S. (2014). Tongue control and its implication in pronunciation training. *Computer-Assisted Language Learning*, 27(5), 439–453.
- [31] Pillot-Loiseau, C., Kamiyama, T., & Antolík, T. K. (2015). *French /y/-/u/ contrast in Japanese learners with/without ultrasound feedback: vowels, non-words and words*. Paper presented at the International Congress of Phonetic Sciences (ICPhS) 2015.
- [32] Piske, T., MacKay, I. R., & Flege, J. E. (2001). Factors affecting degree of foreign accent in an L2: A review. *Journal of phonetics*, 29(2), 191-215.
- [33] Reid, E. (2016). Teaching English pronunciation to different age groups. In *Jazykovedné literárnovedné a didaktické kolokvium xxxixi: Zborník vedeckých prác a vedeckých štúdií* (pp. 19-30): Bratislava Z-F LINGUA.
- [34] Schmidt, R. W. (1990). The role of consciousness in second language learning. *Applied linguistics*, 11(2), 129-158.
- [35] Tateishi, M., & Winters, S. (2013). *Does ultrasound training lead to improved perception of a non-native sound contrast? Evidence from Japanese learners of English*. Paper presented at the Proc. 2013 annual conference of the Canadian Linguistic Association.
- [36] Tsui, H. M.-L. (2012). *Ultrasound speech training for Japanese adults learning English as a second language*. (Master Thesis), University of British Columbia.
- [37] White, D., Ganathan, R., & Mok, P. (2017). *Teaching dark /l/ with ultrasound technology*. Paper presented at the Proceedings of the 8th Pronunciation in Second Language Learning and Teaching Conference, Calgary, Alberta, Canada.
- [38] Wu, Y., Gendrot, C., Hallé, P., & Adda-Decker, M. (2015). *On Improving the Pronunciation of French /r/ in Chinese Learners by Using Real-Time Ultrasound Visualization*. Paper presented at the ICPhS 2015 (18th International Congress of Phonetic Sciences).
- [39] Yamane, N., Abel, J., Allen, B., Burton, S., Kazama, M., Noguchi, M., Gick, B. (2015). *Ultrasound-integrated pronunciation teaching and learning*. Ultrafest VII, Hong Kong.

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# Investigating the Effectiveness of Web-Based Peer Review in Students' Drafts Revision: A Critical EAP Perspective

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**Abstract**—Previous research on peer review considered it as a strategy of improving students' writing (Baker, 2016; Hu, 2005). To investigate its effectiveness, this research has established a small corpus based on the data from the 22 students' writing drafts and their corresponding written comments of 13,9261 words in total on the Peerceptiv National Writing and Feedback Contest (PNWFC). Then, Python was utilized as a tool to calculate the difference between four dimensions including accuracy, helpfulness, reviewing and writing. According to the quantitative analysis, it showed that students could hardly benefit from peer feedback. After that, three online structured interviews were arranged to further explore the development of English as a Second Language (L2) students' discourse competence development. Given the consequence of qualitative data, students could revise their grammatical errors and language inaccuracies through peer review. They might implicitly develop their ability to think critically, which is the core of the formation of discursual awareness in an English for Academic Purposes (EAP) course. More importantly, receivers could know of their weaknesses, and also perceive the accuracy and fairness of their discourses. Finally, essential implications might be helpful for teachers to carry out peer review and writing tasks in the future.

**Index Terms**—peer review, corpus linguistics, EAP, critical thinking, written discourse competence

## I. INTRODUCTION

Peer review in the instruction of L2 university writing has been frequently conducted and researched. Nonetheless, this article aims at investigating the effectiveness of L2 students' peer review at a university. First, it presents a review of relevant concepts and existing research articles (e.g., the definition of peer review or peer feedback in the instruction of L2 writing). Research questions and methods are then followed, which lead to a proposal that statistics in four dimensions that have been mentioned above from the PNWFC are calculated to generate contrastive results. The study also presents analyses of the consequences of the difference in four dimensions, written comments sampling, and interviews. Finally, the results are then discussed, followed by suggested pedagogical implications on the development of knowledge in L2 writing instruction.

## II. LITERATURE REVIEW

### A. Peer Review in L2 Writing Instruction

#### (a). The Definition of Peer Review

As an assessment approach of writing, conducting an instructional activity of providing peer feedback is usually very common either in the English as a second language (ESOL) or non-ESOL classrooms. Peer review, which is also known as peer feedback or peer evaluation, is predominately advocated by many teachers who take the initiative to create a collaborative and student-centered learning environment (Zhang et al., 2020). More specifically, in the L2 instruction context, peer feedback is to be seen as an educational procedure through which students evaluate and make an oral or written comment on the content and quality of their cohorts' writing samples with certain individual assertive affirmation or practical suggestions (Dochy et al., 1999).

#### (b). The Evolution of Relevant Research

Peer feedback has been researched extensively in L2 writing research and teaching activities. As numerous convincing theories have been established through a great variety of practical activities as well as have been examined in extensive observations and instructional activities, the application of peer review in the L2 teaching and learning classroom has already been underpinned theoretically and empirically (Fan & Xu, 2020). In the theoretical facet, peer feedback has been given a bunch of support in theories such as sociocultural theory, process writing theory, and internationalist theory (Yu & Lee, 2016b). Moreover, from the empirical perspective, the application of peer feedback has showcased multiple advantages in assisting L2 students to improve their writing (Yu & Lee, 2016b). Therefore, the

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praxis of peer feedback has experienced a process from a less supported stage by theories to a substantially supported phase by theories and experience substantially.

Although research has found that peer feedback has questionable validity, reliability, and accuracy, and some instructors have considered much of it too uncritical, superficial, vague, and content-focused (Nilson, 2003), peer feedback has been proposed and recommended for more than four decades (Bruffee, 1980; Chang 2016; Gao et al., 2018), and the last three decades have witnessed an increasing trend in research of both first language writing and L2 writing (Hyland & Hyland, 2006; Min, 2008; Hu & Lam, 2010; Zheng, 2012; Yu & Lee, 2016; Gao et al., 2018). Over the last two decades, research on peer feedback has been involved in various issues in relation to the perceptions, process and product of peer review (Li et al., 2016; Gao et al., 2018; Zou et al., 2018). In particular, previous studies have been mainly concerned with the focus on the effectiveness based on rubric dimension of a reviewer or reviewee's comments, a pedagogical syllabus design of a peer feedback course, reviewers' or reviewees' identify, or even the reasonableness and accuracy of comments towards L2 writing problems (Tsui & Ng, 2000; Rollinson, 2005; Lundstrom & Baker, 2009; Cho & Cho, 2011; Zhao, 2014; Berggren, 2015; Walker, 2015; Gao et al., 2018; Huisman et al., 2018).

### *B. The Development of Discourse Competence through Written Peer Feedback*

Januin and Stephan's (2015) defined that the concept of discourse competence first derives from the theory of communicative competence, and the notion of discourse competence occurs in all models of communicative competence in a language. The view that communicative competence in a language includes a number of different dimensions was first proposed by Hymes (1972, p. 390), as a response to Chomsky's concept of competence as distinct from performance (Chomsky, 1965). The process of providing peer feedback means inherently a method of constructing a critically cognitive perspective with written words, and this kind of words itself is also a discourse capability that L2 students have possessed.

The goal of EAP courses is to enable students to develop a complex integration of knowledge and skills, which sometimes are understood as discourse competence to communicate and participate effectively in higher education as students and researchers (Bhatia, 2004; Ding & Bruce, 2017). Additionally, Bhatia's (2004) concept of discursive competence includes three subsuming areas of social competence, generic competence and textual competence. Presumably, various reasons or perspectives have facilitated a number of researchers to implement their investigation into peer feedback under a theory. However, underpinned by the notion of the development of discourse or discursive competence Bhatia's (2004), the present study has been planned and designed.

### *C. A Critical EAP Approach and Corpus-Based Analysis on Written Peer Feedback*

Given some previous research about L2 writing instruction, Chandler (2003) and Bitchener et al. (2005) examined the efficacy and effect of various kinds of corrective feedback. Storch (2005), Lundstrom and Baker (2009) explored the benefits of peer review to reviewers' own writing, language improvements and students' attitudes towards English as a second language (ESL) students' collaborative writing. Moreover, Hyland (2004) and Hyland (2007) focused more on metadiscourse markers and genre pedagogies. Therefore, it is common that, in the teaching of L2 writing, English as a foreign language (EFL) or ESL researchers, teachers or practitioners are always struggling to find a balance of making students both understand the meanings, connotations or ideological issues of a text and take account of linguistic and discursive issues. Nonetheless, critical EAP, as a pedagogical method, has convincingly given EFL or ESL teachers or practitioners a hint of granting students more freedom to think from their own perspectives.

Critical EAP can be first traced back to North America, emerging in a debate about the differences between the first language (L1) writing and the teaching of L2 writing in the inaugural issues of the *Journal of Second Language Writing* (Santos, 1992; Ding & Bruce, 2017). Later on, in developing critical EAP, Benesch (2001) proposes that teachers should assist students in being aware of their social identities and rights and encourage them to face resistance or voice their opinion towards unfavorable circumstances.

In line with the concept of development of discourse or discursive competence (Bhatia, 2004), the critical EAP approach enhances the necessity of implementation of peer feedback instruction, especially the realization of social competence in calling for individual legitimate rights and social justice.

In addition to different notions which underpin teaching or research of peer feedback, the investigation of peer feedback has presented diverse research perspectives and methods. To examine the effectiveness of peer feedback, Liu and Carless (2006) studied the processes of peer assessment and further explored the issue of using grades in the peer assessment by a large-scale questionnaire survey of 1740 tertiary students and 460 academics in Hong Kong, and supplementary interviews, and they find that a significant number of academics and students resist peer assessment using grades. Lin and Chien (2009) researched a prerequisite environment of peer feedback that English writing teachers have obligations to create and the factors of influencing the role of peer reviewers through a questionnaire. With this quantitative method, they have known that most language learners have positive attitudes towards the pedagogy of peer feedback, and social interactions through writing and peer feedback provide them more inspiration and motivations.

In terms of the aspect of learning mechanics research, Huisman et al. (2018) used both pre-test and post-test questionnaires to investigate eighty-three students' peer feedback role, peer feedback perceptions and essay performance. As a result, both providing and receiving feedback led to similar improvements in writing performance,

the presence of explanatory comments positively related both to how adequate students perceived the peer feedback to be, as well as to students' willingness to improve based upon it and no direct relation was found between these peer feedback perceptions and students' writing performance increase. From the perspective of scalar culture, Hu (2019) explains the macrocultural, mesocultural and microcultural influences of scalar culture on L2 peer feedback with data drawn upon from a written survey and written feedback comments of writing drafts in an Advanced English course of 116 junior English language majors at a major university in China, a combination of semi-structured interviews, video recordings of peer-feedback sessions, stimulated recalls and drafts in a case study of two first-semester freshmen and a three-year action research at a Singaporean university. As a result, Hu (2019) finds that students have a strong preference for teacher feedback as it often is regarded as authoritative, trusted and knowledgeable, students' social interaction with learning resources also shape their peer feedback, and students' peer feedback can be guided by new culture practices. Considering the potential approaches of peer feedback, Liu's (2021) research focuses on a combination of face-to-face peer feedback and technology-based peer feedback mainly with a qualitative method to analyze the data collected from interviews, peer feedback on drafts and electronic platforms, observations and students' assignments in a comprehensive public university in China, so it mainly reveals that Chinese students are reluctant to listen to and provide negative feedback, a combination of incorporated approaches of face-to-face peer feedback and electronic peer feedback can help overcome their reluctance to express frank opinions and attitudes and manner of peer feedback can nurture a positive attitude towards their willingness to proactively seek help from each other.

As is stated above, from a variety of research perspectives of peer feedback, many researchers have contributed to a number of cutting-edge studies that L2 writing teachers can create for facilitating an effective peer feedback classroom, the cultural influences on peer feedback, and potential approaches that can help peer feedback activities to be implemented more effectively. Nonetheless, few studies have been referred to the investigation into the effectiveness of peer feedback in terms of accuracy and helpfulness and students' feedback annotations and comments themselves. Moreover, many researchers are inclined to resort to qualitative methods such as interviews and observations. Even if some researchers have used a combined qualitative and quantitative method, they have depended on surveys to analyze the statistics.

Similarly, based on a combined qualitative and quantitative method, the current study however explores how much peer feedback assists students' writing performances as a whole through a Python-based calculation on the scores of each of two pieces of draft feedback, analyses the qualities and features of effective peer feedback in terms of accuracy and helpfulness and investigates how effective the annotations and comments students have made are with a corpus-based approach and an interview.

### III. RESEARCH QUESTIONS

- When considering accuracy, helpfulness, reviewing and writing as four grading criteria, in which criterion do students make the greatest progress? Why?
- To what extent do students make progress through peer review?
- What is the effectiveness of students' peer-reviewed feedback?

### IV. METHOD

The present study has mainly focused on the peer feedback processes and productions (including two drafts, rubric-based scores and written comments) of twenty-two students in a research-intensive university in China who are not majoring in English but have still actively participated in the PNWFC in 2021. Also, their English proficiency level is on average estimated at the range from A2 to B1, based on the Global Scale of Common European Framework of Reference for Languages (CEFR). Even though they are from other a variety of disciplines such as Main Science and Applied Chemistry, they are the students who are attending my English course. Within the designed syllabus of my English course, the instruction of peer review has been arranged after the first persuasive essay writing task, thereby aiming to tackle some confusing issues and achieve ideal results. Before the contest, I have conducted a one-hour online peer review training course through Tencent Meeting Platform for those twenty-two participants. No matter how the courses of peer feedback take on, these courses are admittedly English for General Academic Purposes (EGAP) (Jordan, 1997) courses, which are one of the two domains (English for General Academic Purposes (EGAP) and English for Specific Academic Purposes (ESAP)) (Jordan, 1997) of EAP courses.

To examine a more accurate improvement result, this study has employed a corpus method to conduct my research on the effectiveness of peer feedback. Data in this research are from the two drafts, rubric-based scores and comments, as well as rubric-based back-evaluation scores and comments of twenty-two participants of the PNWFC in 2021, which are all collected and stored in my self-established corpus.

### V. DATA ANALYSIS

Based on the data collected from the online platform of PNWFC in 2021, this study examines the difference of grades of four dimensions --- accuracy grades, helpfulness grades, reviewing grades and writing grades of twenty-two students' peer feedback tasks including two drafts and peer feedback comments.

Altogether there are twenty-two first-year non-English major students participating in this contest, and they all have accomplished their writing and feedback-giving tasks. On account of the unfamiliarity with the contest requirements, the operational platform, and process, after receiving a series of online training sessions, teachers also more or less arranged training sessions, in whichever form, online or on-site for their students who were aiming at participating in the contest. Then, teachers released and assigned the topic of writing tasks and feedback requirements, and students had to accomplish and deliver their first draft of writing tasks through the online platform of PNWFC within a given time, and each of them could see three drafts from other different students, and then gave them corresponding scores and written feedback. After that, once students received their scores and feedback, they had to re-evaluate the effectiveness of the scores and feedback that other students gave with scores or written feedback as well. Students had to revise their first draft according to students' plausible and agreeable feedback and then delivered their second draft. Likewise, each of them should mark and provide feedback to three drafts, and once they received their own feedback, they had to re-evaluate the effectiveness of the grades and feedback. Therefore, depending on their two rounds of grades and feedback, the platform of PNWFC has recorded and calculated their rating marks as a direct database.

## VI. RESULTS

### A. Research Question 1 and 2: The Dimension in Which Students Have Made the Greatest Progress and the Holistic Helpfulness of Peer Feedback

To investigate the effectiveness of peer review outcomes, the data of four dimensions --- accuracy grades, helpfulness grades, revision grades and writing grades, which were generated and transformed from the performance in providing their feedback and re-evaluating the feedback that they have received through PNWFC were analysed and compared. With regard to the generation of these results, Python was resorted to calculating the statistics at first, and then those statistics were verified by the manual calculation formula within Microsoft Excel. As is shown below, Table 1 shows the results of difference and difference rate between two rounds of accuracy grades and helpfulness grades, and Table 2 shows the results of difference and difference rate between two rounds of reviewing grades and writing grades. In this case, Python was utilized as a tool to help calculate the results effectively.

TABLE 1  
RESULTS OF COMPARISON WITHIN TWO ROUNDS OF ACCURACY GRADES AND HELPFULNESS GRADES

	Accuracy	Accuracy Rate	Helpfulness	Helpfulness Rate
<b>Positive</b>	A(17) H(21) I(1) K(16) L(1) O(12) S(7) T(9) U(16)	A(0.27) <b>H(0.33) I(0.013)</b> K(0.23) L(0.014) O(0.17) S(0.10) T(0.11) U(0.23)	B(3) D(1) F(2) M(5) N(1) P(2) Q(5) S(1)	B(0.03) D(0.0119) F(0.03) <b>M(0.062)</b> N(0.0118) P(0.02) Q(0.061) S(0.012)
<b>Negative</b>	C(-7) E(-11) F(-15) G(-4) J(-9) M(-20) N(-8) P(-9) R(-4) V(-6)		A(-2) C(-2) E(-2) G(-1) K(-1) L(-2) O(-4) R(-5) T(-2) U(-1) V(-1)	
<b>Zero</b>	B D Q		H I J	

From the Table 1, the numbers refer to students' second performance rate minus their first performance rate. If the number is large than 0, it means that this student made progress on the second try. The figure in accuracy difference --- 0 appearing in three students (B, D, and Q), figures in accuracy difference which are positive are presented in nine students. More specifically, the highest accuracy difference rate is pertaining to student H (0.33), while the lowest is pertaining to student I (0.01). Concerning the figures in helpfulness difference, 0 appears in students H, I and J, and eight students (B, D, F, M, N, P, Q and S) have positive numbers which are 3, 1, 2, 5, 1, 2, 5 and 1. Correspondingly, student M displays the highest helpfulness difference rate at around 6%, while student N shows the lowest helpfulness difference rate at 1.1% approximately. It is strikingly noted that within nine accuracy difference ratios, only three rates are below 0.1, but within eight helpfulness difference rates, all rates are below 0.1.

TABLE 2  
RESULTS OF COMPARISON WITHIN TWO ROUNDS OF REVIEWING GRADES AND WRITING GRADES

	Reviewing	Reviewing Rate	Writing	Writing Rate
<b>Positive</b>	A(7) B(1)	A(0.09)	B(13) C(17)	B(0.17)
	H(10) I(1) K(8)	<b>B(0.01)</b> <b>H(0.14)</b>	F(17) J(13) K(20)	C(0.22) F(0.24)
	O(5) Q(2) S(4)	I(0.01) K(0.10)	P(1) Q(12)	J(0.16) K(0.28)
	T(4) U(8)	O(0.06) Q(0.03)		P(0.01) Q(0.21)
		S(0.05) T(0.04)		
		U(0.10)		
<b>Negative</b>	C(-5) E(-6)		A(-8) E(-3)	
	F(-7) G(-2) J(-4)		G(-4) L(-9)	
	L(-1) M(-7) N(-4)		M(-12) N(-11)	
	P(-4) R(-5) V(-3)		R(-6) S(-8)	
			T(-16) U(-13)	
<b>Zero</b>	D		D H I	

As the Table 2 shows, with only one student (D) having 0 in the reviewing difference, ten students (A, B, H, I, K, O, Q, S, T, and U) have positive numbers, which are 7, 1, 10, 1, 8, 5, 2, 4, 4, and 8. Regarding the reviewing difference rate, student H has the highest reviewing difference rate (about 14%), but student B has the lowest reviewing difference rate (about 1.1%). With respect to the writing difference, five students (D, H, I, O, and V) have 0 and seven students have positive numbers. More specifically, student H has the highest writing difference rate, which is 0.28, while student P has the lowest writing difference rate, which is 0.01.

From the two tables shown above, less than half of all participants (N<11) have positive numbers in four dimensions of criteria, which means participants can hardly enjoy the effective benefits of peer feedback in a holistic way, but with ten students having positive numbers, reviewing difference which is mainly related to a student's reviewing punctuality, accuracy and accomplishment relatively show its process in which participants have tried to engage. "Feedback from a high competent peer resulted in more willingness to improve" (Berndt et al., 2017). When students finish the first-draft revision and receive the online written feedback from other peers, they are able to understand better both the errors that they have made and the clarification of accurate comments that they should provide to other students. More specifically, student H with the highest accuracy difference rate (around 3.3%) among the four dimensions of criteria, has made the greatest progress in accuracy. Likewise, compared with the number of participants who have made progress in writing grades (N=7), more participants (N=9) have made progress in accuracy grades. Therefore, in accuracy grades, participants have made the greatest progress.

To understand the helpfulness of students' feedback, students' written comments based on given rubrics from my self-established corpus have been analyzed. There were two rounds of reviewing and commenting for draft one and draft two respectively. Once a participant submits his/her draft, his/her draft will be reviewed and commented by other three participants. Even though within two rounds of providing feedback, one participant probably has to review and comment two drafts from two different participants, the ability of making comments can be reasonably considered. Accuracy scores, as one of four grading dimensions, are seen as the direct reflection of the quality of reviews, so a detailed analysis on this dimension is shown below. According to Table 1, student H has achieved the largest positive difference, standing for a decent quality of his/her feedback.

TABLE 3  
STUDENT H'S COMMENTS ON DRAFT 1 AND DRAFT 2

Comments on the Draft 1	Comments on the Draft 2
<p><b>Content</b> 1. The explanation of the first opinion should precede the example. 2. The explanation of the second opinion is inaccurate, because responsibility and social responsibility are different. I think you can substitute "in daily life" for "in society".</p> <p><b>Organisation</b> 1. In the second paragraph, "s" should be removed from "For the common examples" and remove "and go through the red light" from "if parents often break the traffic rules and go through the red light". 2. In the last paragraph, the author should add a comma behind "In short".</p> <p><b>Language</b> 1. I think the author should remove "the" from "For most of the children" in the second paragraph. 2. "helping" should be a substitute for "help" in the last sentence of the second paragraph. 3. In the third paragraph, it is a past simple tense in your example. So the "punish" should be substituted for "punished", and substitute "anything" for "thing". I think you can add "which" before "let me know" or substitute "to" for the comma. 4. In the last paragraph, because "teach" is before "distinguish", so it should be "distinguishing" and then remove "to" from "to shoulder their responsibility in society" and use "shouldering" instead of "shoulder".</p> <p><b>Mechanics</b> There are few or no errors in standard writing conventions per paragraph.</p>	<p><b>Content</b> 1. Thesis has two main points, but the second point can be included in the first point. A warm home atmosphere can help children develop well. You can think of another debatable point. 2. I think you can repeat your opinion at the beginning of each body paragraph and emphasize your opinion in each body paragraph. 3. Personally, you can add your own experiences in the third paragraph.</p> <p><b>Organisation</b> 1. In the third paragraph, maybe you want to write a sentence. If so, you should add "and" in front of "thereby" and add the subject in front of the "causes". If not, you should add a comma in front of the "thereby" and use "causing" instead of "causes". 2. In the last paragraph, you should substitute "encouraging education" for the second "it", otherwise others can't understand your meaning. 3. In the last paragraph, I think you can remove "After that", because its front part isn't associated with the following part. 4. In the second sentence of the second paragraph, I think if you use "Although" instead of "though" and use a period instead of the second comma, it would be better.</p> <p><b>Language</b> There are errors in the third paragraph. First, you shouldn't use "feel" and "be" together and you can remove the "be". Second, "key" is an adjective in the first sentence, so you should remove "s" from "keys". Third, "against" is a preposition, so you should add "be" in front of "against". Fourth, maybe you want to use "ragard" instead of "regrade". And I hope you can use the attributive clause in your essay.</p> <p><b>Mechanics</b> There are few or no errors in standard writing conventions per paragraph.</p>

As can be seen from Table 3, as a whole, student H's comments on Draft 2 tend to be seemingly longer than the original comments on Draft 1. More specifically, in the part of Content of Draft 2, student H has discovered more accurately the overlapped idea, and has proposed his/her solution. For example, "Thesis has two main points, but the second point can be included in the first point. A warm home atmosphere can help children develop well". In contrast to its counterpart of Draft 1, student H's explanation appears to be a bit objective, without sufficient examples and suggestions. Also, in the part of Organisation of Draft 2, student H starts to focus on the logical flow of writing, especially cohesion and coherence, like "3. In the last paragraph, I think you can remove "After that", because its front part isn't associated with the following part". However, in its counterpart of Draft1, student H has only picked up a few inappropriate language problems. For the part of Language of Draft 2, the comments become more accurate and heterogeneous. Not only have some errors been picked up, but also a suggestion on the use of sentence patterns has been added. Zhang and Cheng (2021) proposed that students' grammatical accuracy in English writing improved because of comprehensive written corrective feedback. Whoever has to comment or receive comments, participants have already benefited from the process of providing and receiving more accurate feedback.

#### B. Research Question 3: The Effectiveness in Students' Annotation of Peer Feedback

An online interview, as a further investigation on the effects that peer feedback has brought to students, has been conducted, especially to explore the specific aspects of writing rubric requirements in which students have made great progress. Due to the above table containing dimension differences that have been calculated with Python, it has been easier to identify those students who have achieved much larger breakthroughs and improvements. Students with distinct differences in writing itself have been invited to participate in the online interview and they are student C, student F, and student K.

##### (a). Students' Attitudes towards the Engagement in Peer Feedback

In this online interview, three students have expressed their own surprisingly different attitudes towards peer feedback on writing when they knew about peer feedback initially. Some audio transcripts are as follows,

**Student C:** ... at first, I was not very willing to review writing drafts of other cohorts, because it's a little bit troublesome, but when I participated in this writing and feedback contest, I felt that I learned and harvested something from it.

**Student F:** I was holding a neutral belief in peer feedback...

**Student K:** I think that I tend to be in favor of this contest, or peer feedback very much. Through peer feedback, we can share our views with others and make them revise and modify their writing, and we are not only reviewing other students' writing, but also reviewing our own writing. Peer review can help us retrospect what we need to improve...

Fan and Xu (2020) claimed that peer feedback has been increasingly utilized and favored in the second or foreign language writing classrooms because it has brought facilitative effects to students and teachers. Even though these three participants have shown different attitudes towards peer feedback at the beginning, two of them (i.e., student C and student K) have already acknowledged and found the benefits before and after the contest, and one participant has

showed his/her neutral preference about peer feedback at the beginning. Notably, despite the different attitudes or views expressed at the beginning, three participants have participated in this contest voluntarily. Hence, peer feedback is now becoming more acceptable in second or foreign language writing classrooms.

(b). *Language Enhancement and Development of Written Discourse Competence*

Students often pay much attention to linguistic aspects in second language writing, because linguistic features are the most straightforward and conspicuous elements that can be able to take on in a writing text. Concerning the most significantly improved aspect that participants have considered in their writing, three students all have proclaimed that their language knowledge has been improved such as grammatical accuracy, vocabulary fluency, and diverse sentence structures. Some audio transcripts are as follows:

**Student C:** ... *language organization (is the part where I have greatly improved), I think my weakest aspect of writing is language organization. When I read other participants' writing drafts, I can discover some grammar that I have never used, and some advanced expressions...*

**Student F:** *the usage of sentences (is the part where I have made remarkable progress), I have spotted different sentences... and also structure...*

**Student K:** *I think I have made great progress in grammar and the use of vocabulary... I am not that good at grammar... through viewing other participants' writing drafts, I found that I never used this grammar ever before, so when viewing or commenting their writing drafts, I also learned their grammar and the use of vocabulary... my perception on a certain word was merely onefold, and then I realized that the use of a certain word could be manifold...*

Three participants have all mentioned language features such as grammar, vocabulary and sentences, so it is clear that linguistic knowledge is still the mainstream aspects that students focus on in second language writing activities.

With respect to the less improved aspect that participants have considered in their writing, two students started focusing on the logic and writing perspectives, but one student still cares about grammar and vocabulary. Some audio transcripts are as follows,

**Student C:** ... *grammar and vocabulary are also two aspects that I have worried, because students may resort to other e-dictionaries or grammar-modifying websites to check...*

**Student F:** *I think the angle of participants' writing, as it seems to be similar, not very unique...*

**Student K:** *I feel that I have made little progress in logic within paragraphs. In most cases, three writing drafts that I have viewed have similar logics. If the perspectives are always the same, it will be easy to lead to fatigue in appreciating the charm of writing tasks.*

Apart from language aspects, students have started thinking more of text ideas, and perspectives. Even though students have been concerned about these aspects in which they might feel relatively unskillful, they have not only considered those micro linguistic features, but also moved towards social, cognitive and textual analysis. Tuzi's (2004) research shows that "e-feedback had helped L2 writers to focus on larger chunks of text involving ideas, introduction, conclusions or examples rather than smaller elements such as grammar, and punctuation, and hence, might incline them towards making macro revisions" (as cited in Lam, 2021, p. 2). This transition from a focus on micro linguistic features to macro cognitive features marks an implicit development of discourse competence. Canale (1983) proposed his sociolinguistic competence to include discourse competence, as mastery of combining grammatical forms and meanings to achieve a unified spoken or written text in different genres. Therefore, online written feedback itself does not only provide students opportunities to know of and modify their language mistakes, but also facilitates students to seek specific meanings in a social context.

C. *Pedagogical Implications*

Even though students are from various subjects, needs analysis is always central to the EAP classroom teaching. The genre of tasks in this writing and feedback contest is about an argumentative essay, which is in alignment with the content of the participants' English writing class. At their level of English writing class, students are required to write a persuasive essay or argumentative essay with a clear structure and cohesive words and a peer review task has also to be implemented. Furthermore, Bruce's (2016) framework for EAP course design that links needs analysis and course development with theories of discourse, teaching and learning has revealed, in addition to writing tasks, the necessity of teaching the knowledge of providing peer feedback. More specifically, students with different majors may encounter situations of assessing themselves or others in future careers, so EAP courses should provide students with an opportunity of making assessments in an appropriate and critical way.

In terms of students' written discourse competence, students do not only develop their own linguistic, cognitive and social abilities through writing itself, but from the results of qualitative and quantitative analysis, they can also improve their discursal competence by writing comments to their cohorts. Under the genre-based approach and constructive teaching methods, specific language knowledge can be arranged to the sessions of writing and peer feedback, such as suggestive sentence patterns, interactive and interactional metadiscourse resources (Hyland & Tse, 2004). Furthermore, given one of the distinct results in relation to the improvement of lexicogrammatical issues, Hyland and Tse (2004) and Hyland (2005)'s interactive and interactional resources, which include transition markers, frame markers, code glosses, hedges, boosters, attitude markers and engagement markers, can systematically help students address their confusion in

the usage of grammar, discursual organizations (sequencing, addition, comparison and contrast, elaborating), and expressions of engaging writers themselves or readers.

With respect to the instruction of critical thinking, it is a challenging but important part for an EAP course. However, many L2 teachers are used to omitting or skipping the section of peer review in a writing class no matter what reasons they are able to rely on, such as limited time or no trust in the effectiveness of peer review. The process of providing comments is closely associated with the process of thinking critically, as L2 teachers could train or lead students to express their own ideas in a given context. Therefore, the section of peer review is worth being remained or embarked.

## VII. CONCLUSION

This study has examined through a survey how one group of students has conducted their writing feedback and reacted to the feedback from their cohorts in a writing and feedback contest. Results show that based on the quantitative analysis, the study has first found that overall, it is hard for participants, by and large, to feel the great efficiency in peer feedback, but for a few participants, they have made colossal progress in accuracy of giving feedback. Besides, based on the qualitative analysis, the study has found that students still have more trust in the authority of teachers' comments rather than peers' comments. Instead, more delightfully, the study has also found that students' language mistakes have been revised and their linguistic knowledge has been improved with a large extent. Based on qualitative and quantitative data, in terms of written language literacy and discursual knowledge, as an ultimate goal of an EAP class, the study has discovered that students' discourse competence has been improved in the process of both completing writing tasks and writing comments.

### APPENDIX 1. PEERCEPTIV WRITING REVIEW RUBRICS

**Review Rubrics:** Comments and ratings should consider four dimensions: content, organization, language, and mechanics. Within each dimension, the detailed instructions on commenting and rating are given as shown in **Table 1**.

Table 1 Review Rubrics

No.	Dimensions	Description of dimension: Commenting on the response to the prompt (with "●") and Rating the response to the prompt (with "◆")
1	<b>Content</b>	<ul style="list-style-type: none"> <li>● <u>Is there a thesis statement on family education in the essay? Is the thesis statement well supported? Are there sentences or details that do not support the thesis statement and therefore should be eliminated or rewritten? Be specific about your suggestion.</u></li> <li>◆ <b>Thesis: Is the thesis statement about family education stated clearly? #weight=1</b>            Rating 1:1-The thesis statement is not clear.            Rating 2:2            Rating 3:3-The thesis statement is somewhat clear.            Rating 4:4            Rating 5:5-The thesis statement stands out.            Rating 6:6            Rating 7:7-The thesis statement is clearly stated.</li> <li>◆ <b>Thesis: Is the thesis adequately supported in each paragraph? #weight=1</b>            Rating 1:1-Not supported.            Rating 2:2            Rating 3:3-Somewhat supported.            Rating 4:4            Rating 5:5-Mostly supported.            Rating 6:6            Rating 7:7-Fully supported.</li> <li>◆ <b>Relevance: Are relevant personal experiences developed regarding family education? #weight=1</b>            Rating 1:1-Not relevant OR not enough to evaluate.            Rating 2:2            Rating 3:3-A little bit relevant.            Rating 4:4            Rating 5:5-Mostly relevant to family education.            Rating 6:6            Rating 7:7-Relevant to the assigned topic.</li> </ul>
2	<b>Organization</b>	<ul style="list-style-type: none"> <li>● <u>COHERENCE: Do transitional words and phrases help make the sentences and paragraphs coherent? Please be specific about your suggestion.</u></li> <li>◆ <b>Coherence: Are the paragraphs organized coherently? #weight=1</b>            Rating 1:1-In random, repetitive, or illogical ways.            Rating 2:2            Rating 3:3-With jumps in logic, or repetition.            Rating 4:4            Rating 5:5-Somewhat coherently.            Rating 6:6            Rating 7:7-Coherently.</li> <li>◆ <b>Coherence: Are the sentences in each paragraph organized coherently? #weight=1</b>            Rating 1:1-In random, repetitive, or illogical ways.</li> </ul>

		<p>Rating 2:2  Rating 3:3-With jumps in logic, or repetition.  Rating 4:4  Rating 5:5-Somewhat coherently.  Rating 6:6  Rating 7:7-Coherently.</p> <p>◆ <b>Cohesion:</b> How well are transitional words and phrases used? #weight=1  Rating 1:1-A very limited range of transitional words and phrases are used.  Rating 2:2  Rating 3:3-Many inadequate transitional words and phrases are used.  Rating 4:4  Rating 5:5-Most transitional words and phrases are used appropriately.  Rating 6:6  Rating 7:7-Transitional words and phrases are used appropriately.</p>
3	Language	<p>● <b>WORDING AND SENTENCE SKILLS:</b> <i>Is the essay concise? Are there a variety of sentence structures in the essay? Are there any errors regarding gender, tense, agreement, comparative construction, non-predicate verb, parallel structure, inconsistent point of view in the essay? Please describe the type of problem including the location of one instance and how they should be fixed.</i></p> <p>◆ <b>Word Choice:</b> Words convey the intended message in a specific, precise, and engaging manner. #weight=1  Rating 1:Words are too limited or difficult to understand.  Rating 2:2  Rating 3:Many words are not understandable.  Rating 4:4  Rating 5:Most words are understandable and specific in this context.  Rating 6:6  Rating 7:Words are specific, precise and engaging.</p> <p>◆ <b>Word Count:</b> Does the essay meet the requirement of word tokens? #weight=1  Rating 1:Less than 100 words.  Rating 2:2  Rating 3:At least 100 words but less than 140 words.  Rating 4:4  Rating 5:At least 140 words but less than 180 words.  Rating 6:6  Rating 7:At least 180 words and no more than 250 words.</p> <p>◆ <b>Sentence Structure:</b> Are there a variety of sentence structures in the essay? #weight=1  Rating 1:A very limited range of sentence structures.  Rating 2:2  Rating 3:A limited range of sentence structures with some improper usages.  Rating 4:4  Rating 5:A variety of sentence structures with few errors.  Rating 6:6  Rating 7:A wide range of sentence structures with full flexibility and accuracy.</p>
4	Mechanics	<p>● <i>Are there any common problems in terms of punctuation, spelling, capitalization, paragraphing in the essay? Please describe the type of problem including the location of one instance and indicate how it should be fixed.</i></p> <p>◆ <b>Writing Convention:</b> Standard writing conventions (e.g., spelling, punctuation, capitalization, paragraphing) are used effectively to enhance readability in the essay. #weight=1  Rating 1:There are many serious errors in standard writing conventions; these errors frequently obscure meaning.  Rating 2:2  Rating 3:There are occasional major errors or frequent minor errors in standard writing conventions; these errors can interfere with meaning. Three to five errors might occur per paragraph.  Rating 4:4  Rating 5:There is one or two errors in standard writing conventions per paragraph.  Rating 6:6  Rating 7:There is few or no errors in standard writing conventions per paragraph.</p>

## APPENDIX 2

TABLE 4  
GRADE REPORTS OF DRAFT 1 EXTRACTING FROM THE PEERCEPTIV PLATFORM

2021 Peerceptiv English Writing and Teaching Contest - Spring 2021 - (06/28/2021)													
Student Name	Document	Task Grade	Weighted Task Grade	Accuracy Grade	Helpfulness Grade	Reviewing Grade	Reviewing Late	Weighted Reviewing	Writing Grade	Writing Late	Weighted Writing Grade	OVERALL DRAFT GRADE	
A	Document 1, Draft 1	100	20	64	85	75	0	30	77	0	31	81	
B	Document 1, Draft 1	100	20	82	87	85	0	34	77	0	31	85	
C	Document 1, Draft 1	100	20	75	82	79	0	31	76	0	30	82	
D	Document 1, Draft 1	100	20	88	84	86	0	34	68	0	27	82	
E	Document 1, Draft 1	100	20	67	80	73	0	29	96	0	38	88	
F	Document 1, Draft 1	100	20	86	80	83	0	33	72	0	29	82	
G	Document 1, Draft 1	100	20	81	79	80	0	32	65	0	26	78	
H	Document 1, Draft 1	100	20	63	81	72	0	29	71	0	28	77	
I	Document 1, Draft 1	100	20	78	83	80	0	32	92	0	37	89	
J	Document 1, Draft 1	100	20	87	88	87	0	35	82	0	33	88	
K	Document 1, Draft 1	100	20	69	87	78	0	31	71	0	29	80	
L	Document 1, Draft 1	100	20	72	83	78	0	31	80	0	32	83	
M	Document 1, Draft 1	100	20	85	81	83	0	33	96	0	38	92	
N	Document 1, Draft 1	100	20	85	85	85	0	34	87	0	35	89	
O	Document 1, Draft 1	100	20	69	88	78	0	31	84	0	33	85	
P	Document 1, Draft 1	100	20	81	87	84	0	34	78	0	31	85	
Q	Document 1, Draft 1	100	20	77	82	80	0	32	58	0	23	75	
R	Document 1, Draft 1	100	20	81	89	85	0	34	80	0	32	86	
S	Document 1, Draft 1	100	20	73	83	78	0	31	85	0	34	85	
T	Document 1, Draft 1	100	20	83	82	82	0	33	88	0	35	88	
U	Document 1, Draft 1	100	20	70	87	78	0	31	92	0	37	88	
V	Document 1, Draft 1	100	20	77	88	82	0	33	84	0	34	87	

TABLE 5  
GRADE REPORTS OF DRAFT 2 EXTRACTING FROM THE PEERCEPTIV PLATFORM

2021 Peerceptiv English Writing and Teaching Contest - Spring 2021 - (06/28/2021)													
Student Name	Document	Task Grade	Weighted Task Grade	Accuracy Grade	Helpfulness Grade	Reviewing Grade	Reviewing Late	Weighted Reviewing	Writing Grade	Writing Late	Weighted Writing Grade	OVERALL DRAFT GRADE	
A	Document 1, Draft 2	100	20	81	83	82	0	33	69	0	28	80	
B	Document 1, Draft 2	100	20	82	90	86	0	34	90	0	36	90	
C	Document 1, Draft 2	100	20	68	80	74	0	30	93	0	37	87	
D	Document 1, Draft 2	100	20	88	85	86	0	35	68	0	27	82	
E	Document 1, Draft 2	100	20	56	78	67	0	27	93	0	37	84	
F	Document 1, Draft 2	100	20	71	82	76	0	30	89	0	36	86	
G	Document 1, Draft 2	100	20	77	78	78	0	31	61	0	24	75	
H	Document 1, Draft 2	100	20	84	81	82	0	33	71	0	28	81	
I	Document 1, Draft 2	100	20	79	83	81	0	32	92	0	37	89	
J	Document 1, Draft 2	100	20	78	88	83	0	33	95	0	38	91	
K	Document 1, Draft 2	100	20	85	86	86	0	34	91	0	36	90	
L	Document 1, Draft 2	100	20	73	81	77	0	31	71	0	29	79	
M	Document 1, Draft 2	100	20	65	86	76	0	30	84	0	34	84	
N	Document 1, Draft 2	100	20	77	86	81	0	33	76	0	30	83	
O	Document 1, Draft 2	100	20	81	84	83	0	33	84	0	34	87	
P	Document 1, Draft 2	100	20	72	89	80	0	32	79	0	31	84	
Q	Document 1, Draft 2	100	20	77	87	82	0	33	70	0	28	81	
R	Document 1, Draft 2	100	20	77	84	80	0	32	74	0	30	82	
S	Document 1, Draft 2	100	20	80	84	82	0	33	77	0	31	83	
T	Document 1, Draft 2	100	20	92	80	86	0	34	72	0	29	83	
U	Document 1, Draft 2	100	20	86	86	86	0	34	79	0	32	86	
V	Document 1, Draft 2	100	20	71	87	79	0	32	84	0	33	85	

## APPENDIX 3. ONLINE INTERVIEW QUESTIONS

1. Before our peer review course and Peerceptiv writing competition, what was your attitude or opinion about peer feedback? Are you supportive of it, against it or keeping neutral?
2. In general, do you think, peer review can help students improve their writing or not?
3. As a reviewer, in which aspect or aspects, have you made the greatest progress? Why?
4. As a reviewer, in which aspect or aspects, have you made the smallest progress or no progress? Why?
5. As a reviewer, what was your reviewing procedures, criteria and methods?
6. As a reviewer, in the four grading rubric dimensions (*Content, Organisation, Language and Mechanics*) on writing itself, which were given by Peerceptiv writing competition committee, have you had a special focus? If so, on which dimension have you had a special focus? And why have you had a special focus on the dimension? If not, why not expect a dimension? Or have you had another dimension you would like to focus on?
7. As a reviewee, has your writing been improved? How much has it been improved? Why? Please give examples.
8. Do you think the length or elaboration degree of written comments can have an influence on reviewees' writing development? Why?
9. Do you think the positive and negative comments can affect the development of reviewees' writing? Why?
10. Do you think the mood such as indicative, interrogative or imperative mood can affect reviewees' writing improvement? Why?

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## REFERENCES

- [1] Baker, K. M. (2016). Peer review as a strategy for improving students' writing process. *Active Learning in Higher Education*, 17(3), 179-192. <https://doi.org/10.1177/1469787416654794>
- [2] Benesch, S. (2001). *Critical English for academic purposes: Theory, politics, and practice*. Mahwah, NJ: Lawrence Erlbaum.
- [3] Berggren, J. (2014). Learning from giving feedback: a study of secondary-level students. *ELT Journal*, 69(1), 58-70. <https://doi.org/10.1093/elt/ccu036>
- [4] Berndt, M., Strijbos, JW. & Fischer, F. (2018). Effects of written peer-feedback content and sender's competence on perceptions, performance, and mindful cognitive processing. *European Journal of Psychology of Education*, 33, 31-49. <https://doi.org/10.1007/s10212-017-0343-z>
- [5] Bhatia, V. K. (2004). *Worlds of Written Discourse: A Genre-Based View*. London: Bloomsbury Academic. <https://doi.org/10.1017/S027226310633029X>
- [6] Bitchener, J., Young, S. and Cameron, D., (2005). The effect of different types of corrective feedback on ESL student writing. *Journal of Second Language Writing*, 14(3), pp.191-205.
- [7] Bruce, I. (2016). *Theory and Concepts of English for Academic Purposes*. Beijing, China: Tsinghua University Press.
- [8] Bruffee, K. A. (1980). *A Short Course in Writing. Practical Rhetoric for Composition Courses, Writing Workshops, and Tutor Training Programs*. Boston, MA: Little, Brown and Company.
- [9] Canale, M. (1983). From communicative competence to communicative language pedagogy. In J. C. Richards & R. W. Schmidt (Eds.), *Language and communication* (pp. 2-28). London, UK: Longman.
- [10] Chandler, J., (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of Second Language Writing*, 12(3), pp.267-296. [https://doi.org/10.1016/S1060-3743\(03\)00038-9](https://doi.org/10.1016/S1060-3743(03)00038-9)
- [11] Chang, C. (2016). Two Decades of Research in L2 Peer Review. *Journal of Writing Research*, 8(1), 81-117. <https://doi.org/10.17239/jowr-2016.08.01.03>
- [12] Cho, Y., & Cho, K. (2010). Peer reviewers learn from giving comments. *Instructional Science*, 39(5), 629-643. <https://doi.org/10.1007/s11251-010-9146-1>
- [13] Chomsky, N. (1965). Persistent Topics in Linguistic Theory. *Diogenes*, 13(51), 13-20. <https://doi.org/10.1177/039219216501305102>
- [14] Council of Europe. (2022). *Common European Framework of Reference for Languages*. <https://www.coe.int/en/web/common-european-framework-reference-languages/table-1-cefr-3.3-common-reference-levels-global-scale>
- [15] Ding, A., & Bruce, I. (2017) *The English for Academic Purposes Practitioner*. Cham, Switzerland: Palgrave Macmillan. <https://doi.org/10.1007/978-3-319-59737-9>
- [16] Dochy, F., Segers, M., & Sluijsmans, D. (1999). The use of self-, peer- and co- assessment in higher education: A review. *Studies in Higher Education*, 24, 331-350. <https://doi.org/10.1080/03075079912331379935>
- [17] Fan, Y., & Xu, J. (2020). Exploring student engagement with peer feedback on L2 writing. *Journal of Second Language Writing*, 50, 100775. <https://doi.org/10.1016/j.jslw.2020.100775>
- [18] Gao, Y., Schunn, C., & Yu, Q. (2018). The alignment of written peer feedback with draft problems and its impact on revision in peer assessment. *Assessment & Evaluation In Higher Education*, 44(2), 294-308. <https://doi.org/10.1080/02602938.2018.1499075>
- [19] Hu, G. (2005). Using peer review with Chinese ESL student writers. *Language teaching research*, 9(3), 321-342.

- [20] Hu, G. (2019). Culture and Peer Feedback. *Feedback in Second Language Writing*. (1st ed., pp. 45-63). Cambridge, UK: Cambridge University Press. <https://doi.org/10.1017/9781108635547.005>
- [21] Hu, G., & Lam, S. T. E. (2010). Issues of Cultural Appropriateness and Pedagogical Efficacy: Exploring Peer Review in a Second Language Writing Class. *Instructional Science*, 38 (4), 371–394. <https://doi.org/10.1007/s11251-008-9086-1>
- [22] Huisman, B., Saab, N., Driel, J., & Broek, P. (2018). Peer feedback on academic writing: undergraduate students' peer feedback role, peer feedback perceptions and essay performance. *Assessment & Evaluation In Higher Education*, 43(6), 955-968. <https://doi.org/10.1080/02602938.2018.1424318>
- [23] Hyland, K. (2004). Disciplinary interactions: metadiscourse in L2 postgraduate writing. *Journal of Second Language Writing*, 13(2), pp.133-151. <https://doi.org/10.1016/j.jslw.2004.02.001>
- [24] Hyland, K. (2005). *Metadiscourse: Exploring interaction in writing*. Continuum.
- [25] Hyland, K. (2007). Genre pedagogy: Language, literacy and L2 writing instruction. *Journal of Second Language Writing*, 16(3), pp.148-164. <https://doi.org/10.1016/j.jslw.2007.07.005>
- [26] Hyland, K., & Hyland, F. (2006). Feedback on Second Language Students' Writing. *Language Teaching*, 39 (2), 83–101. <https://doi.org/10.1017/S0261444806003399>
- [27] Hyland, K., Tse, P. (2004). Metadiscourse in academic writing: A reappraisal. *Applied Linguistics*, 25(2), 156-177. <https://doi.org/10.1093/applin/25.2.156>
- [28] Hymes, D. (1972). On communicative competence. In J. B. Pride & J. Holmes (Eds.), *Sociolinguistics* (pp. 269-293). Harmondsworth, UK: Penguin Books.
- [29] Januin, J., & Stephen, J. (2015). Exploring Discourse Competence Elements in EAP Class Presentations through Document and Ethnographic Analyses. *Procedia - Social And Behavioral Sciences*, 208, 157-166. <https://doi.org/10.1016/j.sbspro.2015.11.192>
- [30] Jordan, R. R. (1997). *English for Academic Purposes: A Guide and Resource Book for Teachers*. Cambridge, England: Cambridge University Press.
- [31] Lam, S. (2021). A web-based feedback platform for peer and teacher feedback on writing: An Activity Theory perspective. *Computers and Composition*, 62, 102666. <https://doi.org/10.1016/j.compcom.2021.102666>
- [32] Lin, G. H. C., & Chien, P. S. C. (2009). An investigation into effectiveness of peer feedback. *Journal of Applied Foreign Languages Fortune Institute of Technology*, 3, 79-87.
- [33] Liu, N. F., & Carless, D. (2006). Peer feedback: the learning element of peer assessment. *Teaching in Higher Education*, 11, (3), 279-290. <https://doi.org/10.1080/13562510600680582>
- [34] Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of Second Language Writing*, 18(1), 30-43. <https://doi.org/10.1016/j.jslw.2008.06.002>
- [35] Min, H. T. (2008). Reviewer Stances and Writer Perceptions in EFL Peer Review Training. *English for Specific Purposes*, 27 (3), 285–305. <https://doi.org/10.1016/j.esp.2008.02.002>
- [36] Nilson, L. (2003). Improving Student Peer Feedback. *College Teaching*, 51(1), 34-38. <https://doi.org/10.1080/87567550309596408>
- [37] Rollinson, P. (2005). Using peer feedback in the ESL writing class. *ELT Journal*, 59(1), 23-30. <https://doi.org/10.1093/elt/ccj003>
- [38] Santos, T. (1992). Ideology in composition: L1 and ESL. *Journal of Second Language Writing*, 1, 1–15.
- [39] Storch, N., 2005. Collaborative writing: Product, process, and students' reflections. *Journal of Second Language Writing*, 14(3), pp. 153-173. <https://doi.org/10.1016/j.jslw.2005.05.002>
- [40] Tsui, A., & Ng, M. (2000). Do Secondary L2 Writers Benefit from Peer Comments?. *Journal of Second Language Writing*, 9(2), 147-170. [https://doi.org/10.1016/s1060-3743\(00\)00022-9](https://doi.org/10.1016/s1060-3743(00)00022-9)
- [41] Tuzi, Frank. (2004). The impact of feedback on the revisions of L2 writers in an academic writing course. *Computers and Composition*, 21(2), 217–235.
- [42] Walker, M. (2014). The quality of written peer feedback on undergraduates' draft answers to an assignment, and the use made of the feedback. *Assessment & Evaluation In Higher Education*, 40(2), 232-247. <https://doi.org/10.1080/02602938.2014.898737>
- [43] Yu, S., & Lee, I. (2016b). Peer feedback in second language writing (2005-2014). *Language Teaching*, 49(4), 461–493. <https://doi.org/10.1017/S0261444816000161>
- [44] Zhang, F., Schunn, C., Li, W., & Long, M. (2020) Changes in the reliability and validity of peer assessment across the college years. *Assessment & Evaluation in Higher Education*, 45 (8), 1073-1087. <https://doi.org/10.1080/02602938.2020.1724260>
- [45] Zhang, L., & Cheng, X. (2021). Examining the effects of comprehensive written corrective feedback on L2 EAP students' linguistic performance: A mixed-methods study. *Journal of English for Academic Purposes*, 54, 101043. <https://doi.org/10.1016/j.jeap.2021.101043>
- [46] Zhao, H. (2014). Investigating teacher-supported peer assessment for EFL writing. *ELT Journal*, 68(2), 155-168. <https://doi.org/10.1093/elt/cct068>
- [47] Zheng, C. (2012). Understanding the Learning Process of Peer Feedback Activity: An Ethnographic Study of Exploratory Practice. *Language Teaching Research*, 16 (1), 109–126. <https://doi.org/10.1177/1362168811426248>

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# The Positive Impact of Pandemics in Two Selected Speculative Narratives

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**Abstract**—This article examines Stephen Soderbergh’s film *Contagion* (2011) and Emily St. John Mandel’s *Station Eleven* (2014) as a critique of the uncivilized culture of our modern society, which depends on fragile connections and lack of solidarity. Although global pandemics annihilate the world and shatter families, this study demonstrates how they are depicted as a positive tool of change, serving as a force that exposes then undermines the deep-rooted cultural flaws in society and finally offers lessons that help in rebuilding a new civilized world based on human values. Such representation of pandemics in these selected narratives is allegorical, functioning as a mirror that reflects our COVID-19 reality, teaching moral lessons, and contributing to our understanding of the crisis and how we think and act in response.

**Index Terms**—global pandemic, speculative narratives, fragile connections, flaws, values of humanity

## I. INTRODUCTION

Pandemics have attracted worldwide interest and have been largely studied by scientists, historians, and anthropologists. In literature and cinematography, some writers and film producers revisit the historical events of worldwide pandemics and compose them in fictional narratives. However, literature does not only remember the past but also speculates the future to add value to the present. Since the global occurrence of COVID-19, people’s interest in speculative films and novels about pandemics has increased because such works could make sense of the current pandemic real-life experience. At the same time, this reflects people’s desire for a deeper understanding of the crisis and a sense of comfort in the face of uncertainty. This article examines Stephen Soderbergh’s film *Contagion* (2011) and Emily St. John Mandel’s *Station Eleven* (2014) as a critique of the uncivilized culture of our modern society, built on fragile connections and lack of solidarity. It shows the role of pandemics in revealing and questioning these social and cultural flaws, raising people’s awareness of the necessity of cooperation to rebuild a new post-pandemic world that cultivates humanitarian and selfless values.

Before examining pandemics in the selected narratives, it would be convenient to overview the genre of speculative fiction, which works as an umbrella of all fantasy narratives that are interchangeable with science fiction. Parrinder (1980) describes science fiction as a thinking machine that “has been widely regarded as a “literature of ideas”, especially political and scientific ones. Often these ideas are in advance of their time, and sometimes the speculative form of science fiction has enabled them to avoid the censorship they would otherwise attract” (p. 43). Further, Margaret Atwood (2011) in her book *In Other Worlds: SF and the Human Imagination* states that the terms of “science fiction” and “speculative fiction” are fluid, yet science fiction is related to “the things that could not possibly happen” whereas speculative fiction concerns about the “things that really could happen but just hadn’t completely happened when the authors wrote the books” (p. 14). That is why she classifies her books *Oryx and Crake* and *The Year of the Flood* under speculative fiction. In this regard, the ‘Outbreak Narrative’ is a sub-genre of speculative science fiction that suggests for readers a tale that firstly carries knowledge about the causes and effects of an overwhelming virus, and secondly observes human life from a distanced and alienated perspective, one that realistic fiction, with its everyday relations of existing events, does not allow.

Concerning its types over history, some speculative outbreak narratives are non-science fictional and set shortly in the real world. Such narratives have created a direction for both the past and future in treating the psychological and social consequences. They attract people because they draw inspiration from unusual events, offer an imaginative space to reality, and add a sense of meaning to human existence. Besides, they provide us with the questions people would have when confronted with real emerging infectious diseases. Both Frank G. Slaughter’s *Epidemic!* (1961) and Michael Crichton’s *The Andromeda Strain* (1969) are examples of such pandemic narratives that are mundane in speculation. However, the speed of spreading pandemics and the resulted coming of a predicted apocalypse have been discussed in the speculative apocalyptic narratives, which highlight issues of serious concern related to people’s obsession with the end of the world and their ongoing fear of the possibility that a tragic furious pandemic will strike the world and alter human life. The early origins of the apocalyptic speculative pandemic fiction begin with Mary Shelley’s novel *The Last Man* (1826), which speculates a global pandemic annihilating the European civilization in the late 21<sup>st</sup> century. Another

form of the speculative pandemic narrative is post-apocalyptic in scale since they are concerned about the life aftermath collapse and the best examples of such fiction are Jack London's *The Scarlet Plague* (1912) and George Stewart's *Earth Abides* (1949) which are interested in the post-pandemic fall of civilization and human survival.

Critically speaking, in *It Came From Outer Space: the Virus, Cultural Anxiety, and Speculative Fiction*, Thomas (2002) traces outbreak narratives of the 1990s and builds her study of viral invasions on poststructuralist standards by seeing the virus as "a touchstone for postmodern preoccupations with self and other" (p. 6). She argues that the virus, in most speculative fiction of the 1990s, acquires properties that are not possible according to the standards of realistic naturalistic fiction. Speculative fiction engages with the intricacy of the virus itself and how the infection has the potential to revitalize people rather than weaken them, leading to a kind of 'post-humanity'. She also argues how the virus is "a mirror of our own postmodern moment. Both as a metaphor and as a liminal agent, it can lead us to deconstruct the central binary of self and other in ways that other "speculative" postmodern metaphors ... cannot" (p. 19). Still, although such transformation to the posthuman world might have a utopian purpose, it creates a sense of fear that makes it difficult for people to accept their new status. In parallel, such debate applies to all contemporary post-pandemic narratives that give purpose to the past pandemics by offering a conclusion to the story and simultaneously serving as a starting point for the new world.

The emergence of different new outbreaks in the past two decades, like the SARS pandemic of 2002–2003, the swine flu of 2009, and the Zika epidemic of 2015, has inspired more contemporary speculative pandemic fiction in literature and film. In *Coughing and sneezing to the end of the world*, Schut (2013) argues how "the 21<sup>st</sup> century brought the fear of disease back into prominence and moved it from baseless paranoia to practical fear as technology and the global economy began to accelerate and enable the natural mutation and spread of new pandemics" (p. 12). In contemporary novels like Colson Whitehead's *Zone One* (2011), Peter Heller's *The Dog Stars* (2012), Amber Kizer's *A Matter of Days* (2013), Emily St John Mandel's *Station Eleven* (2014), and Meg Elison's *The Book of the Unnamed Midwife* (2016), the post-apocalyptic, post-pandemic vision relies on imaginative breakthroughs to create a new world different in a large scale from our own but anticipate the same cultural and social concerns of reality.

Similarly, in the cinematic realm, film directors have given significant attention to pandemics and their challenges to the world. They speculate about the existence of invisible creatures (germs or viruses) that invade the body's immunity (physically and psychologically) and cause the collapse of society. Curtis and Han (2020) in their article "Social Responses to Epidemics Depicted by Cinema," classify films that are related to pandemics into three broad categories connected to science fiction or horror: "Apocalyptic destruction or near-destruction of the whole of humanity, rising concerns over bioterrorism, and the rise of an undead or form of zombie existence" (p. 389). For example, *28 Days Later* (2002) is a post-apocalyptic horror film in which humanity has been destroyed, and only four people survive. *Blindness* (2008) is an apocalyptic dystopian film, which "considers the human capacity for prejudice, indifference, selfishness, and an easy resort to aggression and violence" (p. 392). And *Contagion* (2011) is a speculative narrative of a highly contagious mysterious virus that kills people within two days. The film examines social movements from below and criticizes current trends toward materialism and self-interest.

The following argument in the article examines Stephen Soderbergh's film *Contagion* (2011) in the first section and Emily St. John Mandel's post-apocalyptic novel *Station Eleven* (2014) in the second. Structurally, the first phase of each section discusses the role of the pandemic in exposing the uncivilized cultural behaviors represented in the deep-rooted social stereotypical misconceptions, the dissemination of misinformation, and the socioeconomic inequities of the contemporary world in *Contagion* and the pursuit for celebrity and the blind dependence on technology in *Station Eleven*, while the second phase examines the post-collapse society and the positive impact of pandemics in offering solutions for building a new civilized society appreciating humanity over anything else.

## II. STEPHEN SODERBERGH'S *CONTAGION* (2011)

*Contagion* is a speculative pandemic film released in 2011. It is a horror disaster film that deals with the social destruction caused by a worldwide spread of a fatal mysterious virus. The film is admired for its inspiration from real-life events and for its accuracy in portraying the transmission of the virus from one person to another. It spreads through coughing, sneezing, or touching contaminated objects, killing people who are not necessarily suffering from health issues. As a result, it appears frightening and dangerous, to the extent that 26 million people died in the first month. The film is "a faux pandemic history which situates itself in an imagined future, drawing on the powers of vivid prognostication which come with narrativity and cinematic imaginary" (Davis, 2014, p. 6). It is also seen as public health propaganda that is designed "to make people fear and better prepare for pandemics [and] allows us to rethink the film as a cultural placeholder marking a shift from post-9/11 security politics to the pandemic moment" (Moore, 2020, p. 1). Yet, the disasters caused by this fictional pandemic are viewed differently in academic articles.

Most critics investigate the negative impact of the pandemic on the individual's body, society, and economy. For example, Sundaram (2012) studies the representation of the biological disaster caused by pandemics in contemporary film narratives, including Soderbergh's *Contagion*. She studies the viral invasion of the individual's body, which is "seen as a permeable system, one that is unable to withstand viral invasion and also unable to contain it" (p. 147). The film visualizes the body's vulnerability to a virus and emphasizes the risks associated with man's ability to manufacture viral material in a laboratory setting. In the end, such biological disasters, as Sundaram argues, will inevitably lead to a

social, cultural, and economic breakdown. Similarly, Cebalo (2019) views the infected social body as a metaphor for illness from a biopolitical perspective. He argues that “the intensifying social strife caused by the pandemic is analogous to its biological spread in the body. Disruption at one sector of the social organism necessitates crises in others, resulting in looting and violence” (Cembalo). Although the virus is not able to kill the head of the body, it has affected the whole organism, like when the pandemic fails in reaching the head of the social state but has left it paralyzed for generations.

From an economic perspective, Beaumont (2014) responds to the capitalist crisis caused by the pandemic and applies some of Fredric Jameson’s Marxist theories to the film. Since Jameson and Slavoj Žižek provocatively claim that the end of the world is easier to imagine than the end of capitalism, Beaumont interprets the virus in the film as an “unstoppable natural cataclysm that smashes a metropolitan city and its population to pieces... as a coded attempt to contemplate the implosion of capitalism” (p. 83). The scenes of rubbish everywhere, shoplifters destroying stores, corpses stacking up on the streets, and soldiers unsuccessfully enforcing curfews reflect the chaos and social disorder that resemble the aftermaths of an economic catastrophe. Furthermore, Abdul Rub (2020) shows how the movie “reasserts the plight of human nature where a microscopic organism plays its game” (p. 1584). The article describes the public health crisis caused by the pandemic and emphasizes more on the virus as a societal nightmare that leads society to fall apart with panic. He describes how “a sub microscopic virus can be more devastating than an entire army ... it is something that simply kills anyone without any consideration” (p. 1587). From the same angle, Arifa (2021) uses a descriptive qualitative research method to examine the impact of pandemics on social issues in the film and the society to find out that misleading information and rumors play a major role in spreading fear and panic added to the pandemic itself.

As perceived from the literature review above, most critics describe the negative impact of the pandemic on the individual, social, and economic body. This article displays how the virus depicted in the film is a source of a global pandemic but is worsened further along with cultural and social flaws. The fictional pandemic in the film is portrayed as a tool of positive change, working as a force that comes to expose then undermine the deep-rooted cultural shortcomings in society to rebuild a new civilized one based on human values. Beginning from the title, ‘contagion’ as a term is a foundational concept, which has a long history of cultural and social connotations explaining how beliefs circulate in social interactions. Wald (2008) in her book, *Contagious*, explains how the term refers “to the circulation of ideas and attitudes. It frequently connoted danger or corruption. Revolutionary ideas were contagious, as were heretical beliefs and practices. Folly and immorality were more often labeled contagious than were wisdom or virtue” (p. 12). For Wald, the circulation of both disease and ideas displays the danger and strength of bodies in contact, but it also indicates the fragility of social relationships. In the film, Soderbergh focuses on the circulation of contagious contaminated ideas that are just as contagious as the deadly virus. The pandemic of cultural ideologies can easily affect individuals connected by different means of communication, and the virus comes to question their social interactions.

Soderbergh’s film critiques the social stereotypical misconceptions, the dissemination of misinformation, and the socioeconomic inequities that are already deep-rooted in the pre-pandemic world. From the beginning, the film illustrates a decline of morality represented in the American marketing administrative, Beth Emhoff, the ill-advisedly patient zero or the carrier figure who contracts the virus on a business trip to China and whose extramarital affair spreads the virus further. It seems that what happens to her is a direct consequence of immorality and wrongdoing. However, from a larger sense, the immoral scenario is to see epidemics as a result of foreign invasions only because the virus takes the direction from the east to the west. The final episode of the film depicts how the virus originates in China. It spreads when Emhoff shakes hands with a careless chef who has just finished cleaning a pig bitten by an infected bat. According to Wald’s argument, epidemics are usually attached to immoral aspects like stigmatization, scapegoating, and blame, and in outbreak narratives, “it is not unusual for a virus to be described as a foreigner or even an immigrant” (Wald, 2008, p. 42). During crises, attempts of identifying strangers as enemies and scapegoats are familiar because it is easier to assign blame than to accept disasters. Therefore, China in the film, as a host country of disease, is stigmatized and identified as an enemy.

The pandemic does not create such tension between America and China, the force and the counterforce, but it comes to expose the pre-existing supremacy of the Anglo-American civilization over the other ethnicities and cultures. This might be reflected in a crucial scene in the film when the Chinese official, Sun Feng, kidnaps the WHO epidemiologist, Dr. Leonora Orantes, who is sent to Hong Kong to search for the origins of the pathogen. He shows her his village and says: “While they cure each other, we are here at the end of the line” (00:51:50). He believes that America and France will find the vaccine and obtain it for themselves, leaving the other inferior world to the last, so by kidnapping her, they can press these industrial countries to distribute the vaccine to their country. Such an attitude indicates how the rest of the world, “the other,” views America and Europe as industrialized nations and birthplaces of civilization. However, by sending the Chinese village a fake vaccine, America proves to be uncivilized and inhuman. Back to Wald’s theories: “communicable diseases are a part of life; they will continue to emerge and circulate, and people will suffer and die. Yet suffering and death should not be accepted as inevitable in one place and unthinkable in another” (p. 270). America’s immoral attitude also reflects how unwise it is because the impoverished conditions in the world will fuel the spread of disease which will easily reach America via different means of transportation.

In addition to the socioeconomic inequities, the American failure to manage the crisis globally will result in another failure on the local level. The United States government deals dishonestly with its citizens, beginning with those who sacrifice their lives to fulfill their duties. For example, Dr. Erin Mears, who works with the Department of National Security, is sent to Minnesota to coordinate the containment of the virus. After she contracts the virus, a plane is supposed to bring her back but is redirected to pick up prominent politicians instead. Moreover, the government fails in vaccinating citizens fairly. Most doses are sent for the elite and officials, and the other amounts are distributed according to people's birthdates which suggests how ordinary people are ultimately labeled as second-class citizens. Such discrimination already exists but it becomes more obvious when the pandemic puts the country in crisis. In brief, when the above authorities hold corrupted ideologies, fear spreads everywhere. The restrictions that governments impose upon people, like limiting mobility and restricting food distribution, lead people to stand in the streets and struggle for survival. The government encourages self-centered individualism instead of motivating values of altruism and cooperation that enhance social bonds. Some of the film's scenes depict the social collapse in images of people showing all modes of violence by robbing houses, burning pharmacies down, and killing each other for food or drugs. The American response to the catastrophe determines a lack of democratic principles, leaving the chance for people to be Darwinist in thinking with no deterrent to eliminate their greed and violence.

Besides the government's poor crisis management and lack of authenticity, Soderbergh demonstrates how the dissemination of misinformation causes greater public panic than the pandemic itself. During the crisis, unscrupulous people with extreme Darwinist beliefs seek to manipulate circumstances to further their own goals. For instance, Alan Krumwiede has circulated a rumor via the internet pretending that he contracted the virus and cured himself with the remedy of "forsythia". He also claims that American laboratories have manipulated the virus for their benefit. He uses online media to distribute lies and let millions of people follow him. "Forsythia is a lie, it is a lie, and you made four and a half millions of dollars for telling it" (1:30:40) as told by a police officer. Although media and journalism are supposed to protect people by offering them true information, they aggravate societal unrest and get people to their extreme behaviors. The lack of information and the appearance of untrusted social media trigger social disorder and mass hysteria and allow conspiracy theorists to propagate disinformation among the general public.

So far, the film depicts the contagious pandemic as a tool for revealing the negative cultural structures of the American society until it reaches a moment when it becomes crucial to make sense of chaos by constructing new meanings in a new post-pandemic world. "While catastrophic infections can result in the annihilation of an existing community, the devastation will, in turn, precipitate new communal affiliations" (Wald, 2008, p. 49). The bright side of the pandemic is revealed when humanitarian and selfless values ultimately emerge because survival requires a new society based on morality and sacrifice in such a post-disaster context. In short, people need to revise their relationships, work together, stick to morality, and think of matters selflessly to regulate the state of disintegration. Such moral behaviors support Wald's argument, which depicts pandemics as fundamentally transformative. In treating the matter locally, Soderbergh draws attention to the necessity of obliterating all kinds of discrimination against unprivileged people by showing them solidarity and empathy. Such moral principles are embodied in Dr. Ellis Cheever, who decides to give his dose of vaccine to the janitor's son, although vaccination is limited to those privileged people. Such an attitude indicates the necessity of surrounding the ones on the margins with the socioeconomic safety of any collapse.

Moreover, regarding the xenophobic and underestimated view of the Chinese people as strangers and carriers of disease, Soderbergh suggests the necessity of accepting them and rescuing them for a global revival. As Wald points out: "in the outbreak narrative the stranger/carrier materializes, and amplifies, the disequilibrium that strangers characteristically represent. The process through which the stranger is incorporated into the community converts the threatening disequilibrium into a principle of renewal" (Wald p. 57). Such belief is embraced in the film by the character Leonora Orantes, who by the end refuses the American schemes of giving placebos to the Chinese, so she voluntarily returns to help them, sacrificing her freedom in exchange for a genuine vaccine. As noticed, the virus, which is depicted as a demolishing force, allows people to form a sense of solidarity and collaboration, and it inspires in most of them a sense of self-sacrifice. Dr. Ally Hextall is the best example of the scientists and microbiologists who act selflessly to save humanity by racing to find a cure. She tracks down the source of the virus to develop a potion, and when she succeeds, she disobeys the rules and risks her life by self-testing the vaccination. The vaccine in the film signifies immunity, which is required to create societal balance and a sense of utopian reassurance. This optimism that the film ends with in the form of a successful vaccine indicates the importance of morality and the communion work to get the final redemption.

### III. EMILY ST. JOHN MANDEL'S *STATION ELEVEN* (2014)

By moving to Emily St. John Mandel's *Station Eleven*, we move to a world full of "What if?" possibilities, a world where a furious virus can annihilate the globe leaving scientists no chance to develop vaccines or even to understand what is happening. "It's a fast incubation period. If you're exposed, you're sick in three or four hours and dead in a day or two" (Mandel, 2014, p. 235). The novel is a contemporary speculative post-apocalyptic novel that vividly moves in time back and forth between the pre-pandemic and post-pandemic years to reflect people's different responses toward the civilized old world and the primitive new one. It begins with the present moment when a famous actor, Arthur Leander, dies on stage while performing *King Lear* just before a deadly virus wipes out humanity. Then it moves

forwards to the future after twenty years of the collapse of civilization to return to the past to learn more about the old world. It seems that the virus comes to offer a conclusion to the modern world with its industry and technology to let people search for beauty in the new world.

In terms of the novel's literary criticism and literature review, critics vary in inspecting the worlds before and after the collapse. Through remembering, one can see how the characters in the post-apocalyptic era are still connected to past events. However, the novel also emphasizes the future through the act of imagining. This tension between remembering and imagining is examined in Leggatt's article, "Another World Just out of Sight" (2018), in which he argues that remembering is obvious through Clark's creation of the museum of civilization and the Travelling Symphony's performance of Shakespeare on stage after twenty years of the collapse. While imagining is embodied in Miranda's comic book, *Dr. Eleven*, which she published before the collapse but is still read by Kirstin and Tylor after twenty years of it. Leggatt bases his argument for the novel's optimistic tone on the survival of Miranda's comics which represents a break from the past's dominance. Moreover, the importance of imagination in Mandel's novel is also discussed in Feldner's article "'Survival is insufficient': The Postapocalyptic Imagination of Emily St. John Mandel's *Station Eleven*" (2018), in which he refers to Briohny Doyle's argument on the post-apocalyptic imagination to explore the elements that make the novel typical to the genre. Feldner concludes that the "possibility and necessity of cultural expression in a post-apocalyptic setting, demonstrating the importance and value of art and memory even in strained circumstances" (p. 166). Therefore, he sees that survival without culture and memory is insufficient.

On the other hand, away from the thematic analysis of the novel, Cristofaro (2018), in "Critical Temporalities: *Station Eleven* and the Contemporary Post-Apocalyptic Novel" studies the novel as part of the contemporary dystopian literature contrary to what traditional apocalyptic logic claims by considering 'time' as the fundamental of its imagination. She argues that the novel is a dystopian beginning from the moment the catastrophe happens, exactly when television newscasters call the pandemic 'apocalypse' in the sense of dystopian tragedy. Moreover, by comparing *Station Eleven* to McCarthy's dystopian novel, *The Road*, Cristofaro refers to the chapters of the immediate aftermath of the collapse through the eyes of Jeevan, who witnesses people stepping over corpses and killing to survive. Later, after twenty years, the dystopia is embodied by Tylor, who calls himself the prophet, and his followers who commit all kinds of killing, enslaving, and violating as if they do nothing wrong only "because they see themselves as the only rightful interpreters and agents of the apocalyptic goal of history, the utopian renewal of the new world" (p. 9). Further, from the novel's non-linear narrative sense of an ending, Cristofaro finds out that "rather than stressing the end, the emphasis is on the present and its ethical value" (p. 23), and this indicates how the novel celebrates the beauty of the old world and mourns its loss.

Moreover, Punkari (2019), in her Master thesis, *We Long Only to Go Home*, analyzes the novel from a nostalgic perspective by looking at the pre-apocalyptic world as a lost utopia. *Station Eleven* scrutinizes the American society as an entity for the nostalgic yearning, motivates readers to respond nostalgically to its representation, and works brilliantly in resolving social issues. Punkari finds out that "the lost pre-apocalyptic world is reminisced through the nostalgic lens of post-apocalyptic retrospect... This temporal feature of post-apocalyptic fiction allows for the reader to examine their contemporary world as a lost utopia, which creates an immediate nostalgic window into their present moment." (p. 73). So, for Punkari, the lost utopia is related to the present modern life, and such an aspect of longing has functional purposes and idealizing impact that encourages readers to appreciate their contemporary world.

The present article begins its argument with the real dystopia in *Station Eleven*. Is it the postapocalyptic world as Cristofaro argues, or the old world, "the lost utopia" as Punkari terms it? Since this study tends to examine the representation of pandemics in the novel, it is preferred to call the preapocalyptic a pre-pandemic and the postapocalyptic a post-pandemic to show how the virus comes to expose the flaws of the old world by questioning the real meaning of civilization and technology and in what sense they can help in rescuing people from redemption. In the third section, chapter 13 of the novel, the timeline leaps back fourteen years before the pandemic describing Arthur Leander's early struggle in Toronto seeking celebrity and fame. He is originally from Delano Island. "It's the kind of place that practically no one Arthur encounters in New York, Toronto, or Los Angeles can fathom, and he gets a lot of uncomprehending stares when he talks about it" (Mandel, 2014, p. 74). It is a place far away from being civilized like those big cities, and this makes Arthur live "in a permanent state of disorientation like a low-grade fever, the question hanging over everything being How did I get from there to here?" (p. 77). The idea of being from an idyllic, isolated island that nobody from the civilized world recognizes makes Arthur feel ashamed of his past and struggle to adapt to his new world. Through Arthur Leander, the novel critiques modern society's obsession with celebrity and critiques the mundane civilization which misleads people and ruins their lives socially and psychologically. The glittering life and the celebrity culture that Arthur has obtained spoil his social connections and make him unable to get any family stability, as noticed by his three-time marriages and divorces.

Moreover, Arthur's infidelity and neglect cause instability in his relationship with his first wife, Miranda Carroll, although they have grown up on the same island and share the same past. However, Miranda has inner troubles related to her choice of the right partner. Before meeting Arthur, she has been in a relationship with an abusive boyfriend, Pablo, who hates her success although she enters the corporate world to support him financially. He always disdains her job and her art out of jealousy, unlike Arthur, who admires her talent and offers her hope to find freedom. However, deep inside, she is aware of the coming traps everywhere. "She's too soft for this world or perhaps just for this city, she

feels so small here. There are tears in her eyes now. Miranda is a person with very few certainties, but one of them is that only the dishonorable leave when things get difficult” (Mandel, 2014, p. 89). She feels out of place in Arthur’s world. She once expressed that what makes her stand the life in the city is that “the anonymity of city life feels like freedom,” but now by being the wife of a famous Hollywood actor, her privacy and freedom cost her dearly. “She knows she’ll never belong here no matter how hard she tries. These are not her people. She is marooned on a strange planet. The best she can do is pretend to be unflappable when she isn’t” (p. 92). Mandel indicates here that feeling out of place indicates how civilization disconnects people from each other. In such a world, Miranda cannot find herself and cannot find the right person who can understand her, so she always pretends to be unflappable to living among them.

The urban civilized world does not only detach people from each other but also separates humanity from nature. By leaving Delano Island, both Arthur and Miranda disconnect themselves from the serenity of nature. Lewis (1993) in his article “On Human Connectedness with Nature,” reveals how being “cut off from nature’s own healing powers, city-dwellers are subject to a host of specifically urban maladies, both physical and psychological. As a result, they become profoundly alienated from both their fellow human and their fellow nonhuman beings (p. 805). In the final weeks of his life, Arthur grows to regret his misdeeds and loses interest in his fame in the city. When he learns about his father’s death, he phones Miranda expressing his longing for his homeland.

Once we lived on an island in the ocean. Once we took the ferry to go to high school, and at night the sky was brilliant in the absence of all these city lights. Once we paddled canoes to the lighthouse to look at petroglyphs and fished for salmon and walked through deep forests, but all of this was completely unremarkable because everyone else we knew did these things too, and here in these lives we’ve built for ourselves, here in these hard and glittering cities, none of this would seem real if it wasn’t for you. (Mandel, 2014, p. 207)

Arthur’s desire to return home stems from his dissatisfaction with the metropolitan modernity, which deceives him by consuming everything in its path. The description of the city indicates how Mandel criticizes the superficiality and shaky moral standards of modern society, especially when it comes to the laws that shape one’s social status. On the other hand, Miranda regrets nothing because she finds refuge in her art, in the realm of imagination that she creates to feel entirely at home.

Moreover, Mandel criticizes people’s misuse of technology in the modern civilized world and how it becomes a means of social disconnection from each other and their environment. For example, while walking in the street, Clark “kept getting trapped behind iPhone zombies, people half his age who wandered in a dream with their eyes fixed on their screens” (Mandel, 2014, p. 160). The word “zombies” appears for the first time in this post-apocalyptic novel. Using it to describe the cellphone users in the old pre-collapse world emphasizes how lost those people are as they walk around entirely unaware of their surroundings. Ironically, although iPhones are designed to be communication devices, they lead people to live virtually as sleepwalkers. Antonucci et al. (2017) consider the positive and negative aspects of the new technologies and “caution that these new technologies can have the dehumanizing effect of distance thus creating the potential for insensitivity and increased negativity” (p. 1). The dehumanizing effect of technology happens when it expands to replace the traditional forms of social interaction through face-to-face contact. Therefore, people’s dependence on technology weakens their connectedness and dehumanizes them.

The most eloquent evidence of the fragility of modern life and technology lies in its failure to stop the flu from spreading. The Georgia flu has struck the world and exploded “like a neutron bomb over the surface of the earth” (Mandel, 2014, p. 37), killing 99% of humanity, damaging, and changing everything. Mandel intends to let such an invisible virus defeat human bodies without finding any force to stop it. Only those who kept themselves in homes having enough provisions may physically survive, but not for long. When Jeevan hears the news of the coming pandemic, he goes to the market and fills seven carts with supplies enough for months. After the pandemic, Jeevan and his brother know that it is the end of the world, realizing how human the modern world is and how “when people stop going to work, the entire operation grinds to a halt. No one delivers fuel to the gas stations or the airports. Cars are stranded. Airplanes cannot fly... Food never reaches the cities; grocery stores close... No one comes to work at the power plants or the substations, no one removes fallen trees from electrical lines” (p. 177). Such description shows how all the technological advances can never build a real civilization since all technological devices of laptops, iPhones, credit cards, and passports, later on, have become antiques in Clark’s museum of civilization. Accordingly, because there is no industry or technology without humanity, the flu comes to examine the fragility of such a modern world by making people’s bodies its target for destruction. However, one may ask where the hope is in all of this gloom.

To answer the question, one can refer to Leonhard’s book *Technology vs. Humanity* (2016), in which he explains that technology can never become us since it “knows no ethics, norms, or beliefs, the effective functioning of every human and every society is entirely predicated upon them” (p. 17). Besides, people live according to their values and mindsets, while machines might simulate them through algorithms and data that cannot work without people. Therefore, when machinery stops working, people still have their ethics and moral principles to build another righteous society. Similarly, Mandel asserts the importance of these morals as fundamental human essences required for the survival of humanity in the post-pandemic world. The novel’s optimism stems from the fact that a few people survive, reviving the possibility of building a harmonious, stable, and peaceful society. It seems that creating a new world based on morality and cooperation is impossible without annihilating the old one. Mandel believes that humanity without principles is not enough for survival, so she applies her attitude to the Traveling Symphony who borrows from Shakespeare’s *Star Trek*:

*Voyager* the line that says, “survival is insufficient” (Mandel, 2014, p. 137) and makes it their slogan along with their trips.

The nature of people’s values and ethics are examined by Leonhard as “a human signifier and differentiator, transcending differences of religion and culture” (2016, p. III). He encourages people to seek happiness that cannot be acquired through machines since technological progress is meaningless “if we as a species do not flourish if we do not achieve something that genuinely lifts all of us onto another plane of happiness” (2016, p. 122). In *Station Eleven*, it seems that the absence of technology in the post-pandemic world is a blessing because it urges people to search for true happiness that transcends the structures of culture and religion. In literary terms, she lets the survivors build their new utopian society on morality, which exists in art where beauty and happiness stand. Such morality that Mandel calls for transcends the standards of religion. In the novel, Tylor calls himself ‘the prophet,’ believing that God sends the virus as a divine agent of death to cleanse the old world, so their survival has a purpose. In his sermon, he says that the plague was “only an initial culling of the impure, that last year’s pestilence was but further preview and there will be more cullings, far more cullings to come” (Mandel, 2014, p. 61). Mandel depicts the misrepresentation of the bible when it appears only in the context of an extremist person like Tylor, who makes the matter more destructive and violent. By killing Tyler, Mandel displays her rejection of any radical religious interference in building the new world because it moves society in the wrong direction.

To survive through art means to pursue the brighter side of life. “What was lost in the collapse, almost everything, almost everyone, but there is still such beauty” (Mandel, 2014, p. 57). The beauty of art will always survive in Shakespeare’s plays, Miranda’s comic book, the musical symphony, and the museum exhibition that all, in turn, help survivors maintain their humanity within society. Yet, Mandel reveals how survivors can be sustained and nurtured back to their best selves by combining the power of art with strong social relationships and cooperation. For example, the traveling symphony depicts a united small community seeking beauty and happiness through art by staging Shakespeare and playing music. When Kirsten and August get accidentally apart from the traveling symphony, they are at grave risk of being killed by the prophet at any moment, but when they reunite with others, they replenish their strength and search for a larger safe community to embrace them. In the Severn City Airport, Clark brings people together in his museum because he realizes the importance of rebuilding larger communities for the survival of humankind. Those survivors are lucky to “not just the mere fact of survival, which was, of course, remarkable in and of itself, but to have seen one world end and another begin” (p. 231). Therefore, art and communal work provide vital hope for peace and prosperity in the new world.

#### IV. COVID-19 RESPONSE

Studying *Contagion* (2011) and *Station Eleven* (2014) in the context of the COVID-19 pandemic helps audiences to evaluate the parallels between fiction and reality and consider the applicable moral lessons they provide. Although fiction deals with the unreal, it is not the same as lying. A lie intentionally denies the truth, whereas fiction aims to depict reality through implied meanings. Released a decade ago, Soderbergh’s *Contagion* comes up with striking similarities to the Covid-19 outbreak. In her CNN report, “‘Contagion’ vs. coronavirus,” Kristen Rogers (2020) studies the film’s connections to the real-life coronavirus pandemic to find how both have a great similarity in transmission, symptoms, mortality rate, and how both share the same place origin.

Most importantly, the film addresses the same negative fragilities of our modern world. For example, it warns about the danger of spreading misinformation that arouses panic and causes disorder more than the disease itself, and it draws attention to themes of discrimination and economic inequities that result in global and local chaos. Such critique in fiction is reflected in reality when the UN (2020) documents that “state authorities are having to deploy maximum resources to combat the spread of the disease and protect lives... [they have to] reconstruct relations between people and leaders; and to achieve the global stability, solidarity, pluralism, and inclusion on which we all depend” (p. 3). In parallel, as based on scientific reality and preserves cultural relevance, the film calls for these human values and appreciates them.

On the other hand, post-apocalyptic pandemic narratives can also make sense of the present real-life experience of the pandemic. Although Mandel’s *Station Eleven* is dystopian because it is a pandemic story, it makes sense of chaos, weaves beautiful stories of human relationships amid the devastation, and inspires us to search for beauty in our modern world. The work raises the question of whether the true civilization belongs to the pre-collapsed fascinating world or the post-collapsed one, which is primitive but based on human values. Readers of the novel during the crisis of COVID-19 may apply the same question to our modern world. “There are various damages COVID-19 has brought with all over the world, but the most important ones are bio-ecological damages in the light of modern means of communication and transportation along with socio-economic collapse due to the rapid spread of the pandemic all over the world” (Farooq et al., 2021, p. 118). Such global connectivity makes it easy for the coronavirus to spread worldwide. In such a case, to survive, as the novel suggests, people should not depend on modernity but search for beauty in their human relationships and solidarity.

From a speculative perspective, studying *Contagion* (2011) and *Station Eleven* (2014) in the context of the COVID-19 pandemic lets one consider the future possibilities in light of the current challenges and speculate whether our modern world will result in a dystopia or utopia. When the Canadian novelist Margaret Atwood, who is best known for

writing dystopian fiction, was asked in an interview about whether our contemporary world under the circumstances of COVID-19 is dystopian, she answered: "A dystopia, technically, is an arranged unpleasant society that you don't want to be living in. This one was not arranged. So, people may be making arrangements that aren't too pleasant, but it's not a deliberate totalitarianism" (Flood, 2020). Atwood believes that what we are living in today is "an emergency crisis" but not a dystopia.

In response to Atwood's comments, an open letter by Privacy International skeptically questions the actions followed by governments that rapidly reshape societies. The letter says that "a government may not set out to design a dystopia, but that doesn't mean it won't happen by accident." When misinformation spreads and the official narrative is misplaced, people face a collective threat. "Covid-19 has brutally exposed the fault-lines that have existed in our societies for so long" in addition to the faults that have appeared during the crisis like "punitive benefits systems, inadequate healthcare, ravaged economies, and bleak futures with opportunities atrophying" (Privacy International 1). Further, the letter includes a critique of the government's misuse of technology, the surveillance technology, in particular, that is used for profit and power. In the end, the letter calls for people to be aware enough to reject the status quo and protect their freedom to be human.

## V. CONCLUSION

Although the narrative structures and plots of *Contagion* (2011) and *Station Eleven* (2014) are set up differently, both describe the dystopian social constructions of the pre-pandemic world and how a contagious disease disturbs these constructions to offer lessons about how society ought to be in the future. In both speculative narratives, the two pandemics are imaginary and allegorical as they stand for ideologies that put the world in an ongoing cultural crisis. Both represent a means for exposing and criticizing the pre-pandemic uncivilized cultural behaviors represented in the deep-rooted social stereotypical misconceptions, the socioeconomic inequities, and the personal manipulative behaviors in *Contagion* and the pursuit for celebrity, self-interested tendencies, and blind dependence on technology in *Station Eleven*. In both fictional narratives, the post-pandemic society seems better with the positive impact of pandemics that allow survivors to reconstruct a new utopian world based on the values of humanity.

## REFERENCES

- [1] Antonucci, T. C., Ajrouch, K. J., & Manalel, J. A. (2017). Social relations and technology: Continuity, context, and change. *Innovation in Aging*, 1(3), 1-9.
- [2] Arifa, F. I., & Waluyo, S. (2021). 'Contagion'(2011): The Portrayal of Society during COVID-19 Pandemic. *E3S Web of Conferences*. Vol. 317 <https://doi.org/10.1051/e3sconf/202131703007>
- [3] Atwood, M. (2011). *In other worlds: SF and the human imagination*. Anchor.
- [4] Beaumont, M. (2014). Imagining the End Times: Ideology, the Contemporary Disaster Movie, *Contagion*. *Žižek and Media Studies*. Palgrave Macmillan, New York, 79-89.
- [5] Cebalo, A. (2019). Blog Post: The State as an Organism: The Biopolitics of 'Contagion'. *Blog Rethinking Disability*. Retrieved Jan 13, 2022, from <https://rethinkingdisability.net/blog-post-the-state-as-an-organism-the-biopolitics-of-contagion/>
- [6] De Cristofaro, D. (2018). Critical Temporalities: Station Eleven and the Contemporary Post-Apocalyptic Novel. *Open Library of Humanities* 4 (2), 1-26.
- [7] Davis, M. (2014). 'Is it going to be real?' Narrative and media on a pandemic. *Narrative Matters*. Paris, France. Hal-01160761. Retrieved Jan 24, 2022, from <https://hal.archives-ouvertes.fr/hal-01160761>
- [8] Farooq, M., Rahman, G., Sohaib, M., & Maheen, I. (2021). Risk Society: A Pandemic Face of the Modern World Emily John Mandel's Station Eleven and COVID-19 in relation to Ulrich Beck's. *Pakistan Journal of Social Research*, 3(4), 113-119.
- [9] Flood, A. (2020). Margaret Atwood: Covid-19 lockdown is not a dystopia. *The Guardian*. Retrieved Feb 27, 2022, from <https://www.theguardian.com/books/2020/apr/16/margaret-atwood-covid-19-lockdown-is-not-a-dystopia-handmaid-s-tale>
- [10] Han, Q., & Curtis, D. R. (2020). Social responses to epidemics depicted by cinema. *Emerging Infectious Diseases*, 26(2), 389-394.
- [11] Leggatt, M. (2018). 'Another World Just out of Sight': Remembering or Imagining Utopia in Emily St. John Mandel's Station Eleven. *Open Library of Humanities*, 4(2), 1-23.
- [12] Leonhard, G. (2016). *Technology vs. Humanity: The coming clash between man and machine*. The Futures Agency, Zurich, Switzerland
- [13] Lewis, M. W. (1993). "On human connectedness with nature". *New Literary History*, 24(4), 797-809.
- [14] Mandel, E. S. J. (2014). *Station Eleven*. London: Picador.
- [15] Moore, K. C. (2020). "Readapting pandemic premeditation and propaganda: Soderbergh's Contagion amid COVID-19." *Arts*. Vol. 9, No. 4. Multidisciplinary Digital Publishing Institute.
- [16] Parrinder, P. (1980). *Science Fiction: Its Criticism and Teaching*. London: Routledge Taylor & Francis Group.
- [17] Punkari, E. (2019). "We long only to go home"-Post-apocalyptic Nostalgia in Emily St. John Mandel's Station Eleven (Master's thesis).
- [18] PI. (2020). An open letter to Margaret Atwood about a future Covid-19 dystopia. *Privacy International*. Retrieved March 3, 2022, from <https://privacyinternational.org/long-read/3670/open-letter-margaret-atwood-about-future-covid-19-dystopia>
- [19] Rogers, K. (2020). "'Contagion' vs. coronavirus: The film's connections to a real life pandemic." CNN
- [20] Schut, L. D. (2013). *Coughing and sneezing to the end of the world: Apocalyptic pandemic narratives in the 21<sup>st</sup> century* (Doctoral dissertation, Iowa State University).
- [21] Soderbergh, S. (2011). *Contagion* [Film]. EEUU: Warner Bros Pictures

- [22] Sundaram, N. (2012). Imagining bio-disaster, reproducing social order: Epidemics in contemporary Hollywood. *Journal of Creative Communications*, 7(1-2), 135-151.
- [23] Thomas, A. M. (2002). *It came from outer space: the virus, cultural anxiety, and speculative fiction*. Louisiana State University and Agricultural & Mechanical College.
- [24] United Nations. (2020). "COVID-19 and Human Rights: We are all in this together." Retrieved March 16, 2022, from <https://www.sdg16hub.org/system/files/2020-06/COVID-19%20and%20Human%20Rights%20We%20are%20all%20in%20this%20together.pdf>
- [25] Wald, P. (2008). *Contagious*. Duke University Press.

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# Self-Reflexivity in Baby Kamble's *The Prisons We Broke*: A Phenomenological Approach

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**Abstract**—Space is man-made socially constructed locations, without which they cannot have a comfortable life. Reflecting on the life experiences of the people who exist in the margins of the society, autobiography appears to be the appropriate genre that reflects the lived experiences of the characters as they live through them. It reflects not only the author's personal experiences but also the people whom they meet in their lifeworld. In other words, it is a narration of both individual and collective lived experiences. Dalit writing in Indian literature has become the most controversial topic in recent times, taking autobiography as its predominant form of writing. This paper attempts to explore Baby Kamble's *The Prisons We Broke* as a self-reflexive narrative. The characters experience extreme humiliation in the public and private spheres of their lives. The purpose of the paper is to categorise their absolute humiliation experience using Van Manen's lifeworld existentialism and self-reflexivity as a theoretical framework.

**Index Terms**—autobiography, discrimination, dominance, experience, humiliation, marginalization, patriarchy

## I. INTRODUCTION

Initially, the marginalized people of Indian society experienced the worst form of treatment. They were on the verge of losing their identity. That is when Marathi writers of the late 1960s and early 1970s began writing their pain and agony. However, they still lack space both geographically and in the mainstream literary arena (Abraham & Barak, 2018). Phenomenologist and Sociologist Mav Van Manen believes that it is essential to provide people the space they feel they need around themselves to feel comfortable (Manen, 2016). Many research studies have addressed the core issues of these people like discrimination based on caste and gender, oppression, identity crisis, slavery, and so on. Yet, there is a need of research in analyzing their lived experience from a phenomenological perspective.

## II. LITERATURE REVIEW

*The Prisons We Broke* is a significant work of its kind. Therefore, a broad literature review will provide a profound understanding of the book. Dr. C. Jothi in her research paper depicts how the life of the characters in the book especially the author's drifted from exploitation to exploration and the role of the dominant gender, emphasizing the patriarchal social system. Bringing in women issues in literature, the paper finds that, Kamble denies the fact that women are nothing without their husbands. The central character Baby Kamble gained her identity as an author and social worker, proving the fact that one can achieve identity through self-realization and introspection of the self (Jothi, 2020). Mohd Nageen Rather's research paper finds that women face multilayer suffering from the time of birth, which in the select work becomes the significant theme. (Rather, 2017). Anandita Pan's research article infers that a study from Dalit women's perspective is highly essential because she depicts the actual condition of the society she lives in and her sufferings due to the dominant power structure (Pan, 2015). P. Revathi and Dr. M. R. Bindu in their research paper 'Kamble in a New Horizon: The Prisons we Broke as a Bildungsroman Genre' highlights their finding that, for Kamble writing was a tool for her survival and her autobiography functioned as a gate of freedom to many suffering women (Revathi & Bindu, 2021). Amit Nerula's research represents the collective condition of the Dalit community, highlighting how they equipped themselves to reconstruct an alternate society for themselves. Emphasizing the role of the autobiographical genre in providing a platform for Dalit to enter the public space to voice out their need for freedom and equality, the paper finds that, through their struggle in the public and private sphere, women protested against the power structure and brought a transformation in the society (Nerula, 2019). Kunj Bihari Ahirwar's research paper examines Dalit women's pain and suffering highlighting the double marginalization of women because of their caste and gender. The Hindu religion and its principles are responsible for the pathetic condition of Dalits. Therefore, giving up those customs and rituals is the only way to live a perfectly normal life in this society (Ahirwar, 2019). After a brief analysis of existing research studies in the area of study, the inferred research gap is that there is a need for research in Dalit literature using Van Manen's existential theme and self-reflexivity. Therefore this research paper will take up these two in analyzing the select work. This paper attempts to explore Baby Kamble's *The Prisons We Broke* as a self-

reflexive narrative. The characters experience extreme humiliation in the public and private spheres of their lives. Having Van Manen's lifeworld existentialism as a theoretical framework, the paper aims to identify the category in which Dalits experience absolute humiliation.

### III. DALIT WRITING

Dalit writing is a highly controversial genre in Indian writing in English. The Marathi writers of the late 1960s and early 1970s were the first ones to represent their pain, exploitation, and protest in the form of autobiographies, testimonies, narratives, and short stories (Abraham & Barak, 2018). This controversial genre certainly protects the power of narration and indicates that the subject is independent, affirmative, and self-reflexive (Abraham & Barak, 2018). While Sharmila Rege argues about Dalit autobiography, she says that Dalit narratives consciously neglected the principles of the traditional elite, autobiography and began to narrate their testimonies that convey the truth from the past, about how they were vulnerable to poverty during the pre-Ambedkarite period and their constant battling and development in the Ambedkarite period (Abraham & Barak, 2018). They aim to reflect the pain and agony of their people from their perspective. Most of their writings are autobiographical which carries the individual sufferings of the author and collective sufferings of the people. The common feature in these writings is the reflection of the self. The author reflects on the life experiences of the 'self' and of their community. As 'phenomenology is the study of lived experience' (Manen, 2016), the research paper will use this to analyze and reflect upon the lived experiences of the characters in the select work.

### IV. EXISTENTIALISM AND PHENOMENOLOGY

Human existence occupies an important place in Existentialism, a philosophical movement that began soon after the Second World War. According to Martin Heidegger existence means to live along with other beings in the world as one concrete individual (Gualeni & Vella, 2021). Sartre's 'Existentialism is a Humanism' (2007) denotes that being in this world is the base and founding principal condition of every individual (Gualeni & Vella, 2021). Initially, western philosophy is the philosophy of ideas and things where the man gets neglected and existentialism is a response to this feature. Man and his being in this world are given utmost importance. Existentialism focuses on the experiences of a concrete human being rather than the problems of humanity or universal humanity. Traditional philosophy never emphasized this part. Therefore, the primary concern of Existentialism is the lived experience of a concrete man (Cogswell & Lee 2008).

'Phenomenological research is the study of lived experience' (Manen, 2016). In other words, it is the study of lifeworld. The German word 'erlebnis' is translated in English as Lived experience. While looking into the etymology of the word 'experience' in English it does not include the word 'lived'. However, the Latin word 'experientia' means 'experience'. Therefore, the term 'erlebnis' refers to 'living through something', which as well denotes the active and passive life experiences (Manen, 2016). All the human experiences such as the ordinary and extraordinary, the standard and unusual, the monotonous and unexpected, the gloomy and sparkling moments are all the lived experiences of humans as they live through them. Hence, phenomenology explores the lifeworld as experienced in everyday situations. All phenomenological research explores the structure of the human lifeworld or lived experience as experienced in day-to-day life. Thus, phenomenology seeks to capture 'lived experience' (Manen, 2016). Hermeneutic phenomenology is a branch in phenomenology which also explores the lifeworld and studies lived experience with its meaning. Within hermeneutic phenomenology, Van Manen's lifeworld themes serve as a theoretical framework to study lived experience. He identifies four fundamental lifeworld existential which are suitable to everyone, irrespective of the 'historic, ethnic, and societal structure' to which they belong. They are 'helpful guides for reflection in the research processes. They are Lived Space (Spatiality), Lived Body (Corporeality), Lived time (Temporality), and Lived Human Relations (Relationality or Communalilty). Van Manen highlights that the four themes 'can be differentiated but cannot be separated' (Manen, 2016). All human beings experience this fundamental existential in different ways because it differs from person to person.

### V. SELF-REFLEXIVITY

In literature, critics gave different roles to self-reflexivity. Some argue that it is a 'practice of self-inquiry through reflection on everyday lived experiences that enable a person to gain insight toward self-realization' (John, 2020). In the field of philosophy, self-reflexivity is 'a discursive, abstract, and symbolic form of communication with oneself' (Agarwal, 2020). Self-Reflexivity according to J. G. Fichte is 'a reflection of the subject onto itself' (Huber et al., 2005). This research has used Niklas Luhmann's definition of self-reflexivity. He argues,

*Self-Reflexivity denotes the ability of the individuals of a social system to reflect on and evaluate both their conception of the system and their role in it and to choose activities from among the available options according to their own personal evaluation(Huber et al., 2005)*

Unlike other definitions of Self-reflexivity, Niklas Luhmann's definition emphasizes the 'concrete individual' which is the significant characteristic feature of existentialism. Therefore this definition is widely used in this research paper. Every individual belongs to a social system and self-reflexivity is the individual's ability to reflect and interrogate the

social system and the role they play within that social system. The social system refers to the space to which they belong. Space is the human-constructed social location and their experience with space 'influences their understanding of the space' (Kumar, 2018). The space in which humans experience a certain phenomenon reflects not only their spatial experience of that location but also the influence of that space over their lived body and temporality. In the Indian concept, the human experience of a particular space or social system is directly related to the cultural setup (Kumar, 2018). To reflect, there is a need for an object, and here it is the lived experience of the 'self'. The 'self' mentioned in this research paper refers to the Dalit 'self'. In this process of reflecting the lived experience of the self, the character will evaluate their notion about the system and their part in it. As Dalits belong to the lowest stratum of the society, the social system to which they belong determines their fate. Therefore, by evaluating their conception of the system, Dalits face caste-based discrimination in the public sphere and gender-based discrimination in the private sphere. And by interrogating the role they play, Dalits are the untouchables in the public sphere and slaves in the private sphere. Baby Kamble wrote about the experience of the people of her community. Their sufferings became her sufferings and eventually, their experience became her experience. Therefore she found it extremely challenging to separate herself from her community (Kamble, 2020). Since the author had also experienced similar sufferings of her people, her experiences and her representation of the community became the experience and representation of the self. Dalit writings uncover the discrimination that exists in the social system which falls under the self-reflexive narrative aiming to explore the spatial, corporeal, temporal, and relational experience of the self.

## VI. ANALYSIS

Baby Kamble in *The Prisons We Broke* reflects on the physical and psychological violence as they experience them both in the public and private sphere. This research paper aims to analyze the lived experience of the individuals in every sphere and identifies the sphere in which they experience absolute humiliation. Since the aim of the paper is to reflect on the lived experience, Max Van Manen's four lifeworld existential elucidate the lived experience of individuals in spatial, corporeal, temporal, and relational categories. As self-reflexivity denotes the individual's conception of the system and their role in it, the paper identifies the self-reflexive features in Van Manen's lifeworld existential and concludes that spatiality is the significant theme because all the other lifeworld experiences occur in the lived space of the individual.

### A. Conception of the System

Evaluating Dalit's conception of the system, they experience caste-based discrimination in the public sphere. The whole village of Maharwada is infested with caste and gender discrimination. Lived Space (Spatiality) is the experience of space in a particular phenomenon (Manen, 2016). It examines the individual's experience of a particular space. Through lived space, one can identify the ways in experiencing the space. Dalit lived in the 'dirty pits on the periphery of the village, like discarded rags, completely ignored by the society' (Kamble, 2020). So eventually, the space in which they lived made them feel unwanted and ignored. Dalit's experience of space they share on the road with the upper caste is excruciating. Walking in such a space itself gave them an untouchable feeling because for generations they have been treated in such away. So the moment they enter that space the body automatically starts behaving in such a manner. Here Manen's theme of Lived Body is profoundly evident. Lived Body (Corporeality) refers to the physical body because it is through this body that one experiences the world. While people meet others in their landscape through their bodies, they reveal or conceal something concurrently. Kamble describes Yeskar Mahar who goes to the village every evening to collect the leftover food. He used to depart from his part of the village with so much pride, that his chest would swell. But the moment he enters the space of the upper caste his chest would deflate like a balloon and he will make sure that he doesn't offend anyone. Manen's concept of 'Home' becomes significant here. The yeskar Mahar felt 'home' while he was at his part of the village. But the moment he entered the caste-infested space, it created a diminishing impact on him. He cannot be whom he wanted to be because the space itself has created a negative impact on him. The physical body experiences a painful compression that affects the psychology of the self as well. The relationship that existed between the upper caste and the lower caste is excruciatingly painful and humiliating. Manen's Lived Human Relations (Relationality or Communitality) refers to the lived relationship that exists among people sharing the same space (Manen, 2016). Kamble painfully declares that animals have a better life when compared to the Dalits in her village. At least animals get good food and someone to look after them, but Dalits don't even have a better place to live. They lived in the ditches and pits away from the village.

In Dalit's conception of the social system, women are highly vulnerable to gender discrimination in the private sphere. The bodily experience of a newly-married girl is a complete disaster. The husband flogged her until she collapsed and if she tried to escape her husband would chop off her nose. They experience 'the worst form of exploitation and physical torture that Dalit men inflicted upon Dalit women. The physical torture not only involved physical injuries but also deep psychological pain, leaving a scar of humiliation in the minds of Dalit women' (Kamble, 2020). Her legs were chained like a slave so that she wouldn't escape. The body experiences tremendous physical pain and agony, which in turn affects them mentally. Kamble questions, 'when our very bodies were considered worthless, who was going to spare a thought about our minds?' (Kamble, 2020). Kamble in her interview with the translator emphasizes that it is not just the Dalit women who are going through these tortures and agony, 'All women are facing

problem' including 'both upper and lower caste' (Kamble, 2020). The bodily experience of untouchability is awful. The upper caste flogged them 'with the whip of pollution' (Kamble, 2020). Manen points out that, the bodily experience occurs in a sensory manner. So the pain inflicted upon them affects them both physically and psychologically. While reflecting the temporal landscape of children, their childhood memories are filled with pain and distress instead of happiness and bliss. Even the tiny tots faced caste discrimination in its worst form. Manen's lived time is apparent here. Lived Time (Temporality) refers to the experience of subjective time in the lifeworld. The three dimensions of time, the past, the present, and the future constitute the temporal landscape of a person. Van Manen avers that 'the past changes under the pressure and influence of the present' (Manen, 2016). The past changes itself because human beings live toward a future which already started taking shape. Gender discrimination in the private sphere affects the victim in multiple ways both physically and psychologically. They have been submissive in the past and today it has taken up an invisible existence. Therefore, the temporal landscape of women is the same in the past and the present. In Dalit families, the mother-in-law treats her daughter-in-law worse than a slave. Manen's lived human relation is evident here. Because of the dominant-submissive relationship that existed between the mother-in-law and the daughter-in-law, the young Mahar women had to live their life with pain and shame throughout. One can have a view on life still to come through dreams and anticipations or they can even lose such perception of life through their lack of determination to survive (Manen, 2016).

### *B. The Role Dalit Play*

On reflecting and evaluating the role of Dalits in the social system, they are untouchables in the public sphere. The upper caste members of the village followed their Hindu scripts and practiced the ideology of purity and pollution. The author's reflection of the 'self' portrays the role they play in the social system. Dalit plays the role of untouchable throughout the country. Kamble narrates an incident where the Mahar woman enters the Brahmin household to sell firewood. She enters the house through the back door to stack the firewood in the kitchen, after which she checks every stick for any hair or thread from her saree. According to the Brahmin ideology, anything that touches the Dalit body pollutes their house and their Gods. So the moment they enter the Brahmin space they would behave in such a way as to not offend them and their Gods. The Brahmin woman stands on a raised platform and drops the coins for the firewood in the Mahar woman's saree pallav. Similar is their condition in the shop and the Mahar marriage ceremony. The shopkeeper throws the grocery from a distance but never fails to take their money from the threshold. During the marriage ceremony, the Brahmin priest never touches the couple fearing pollution but never forgets his Dakshina or return gift. The Mahars are the untouchables and pollutants among the Maharwada community. As Dalits were considered untouchables, the lived human relationship that existed between them is the purest dominant upper caste and untouchable submissive lower caste. Many lower caste people live in disguise lying about their true identity for survival because untouchability is an invisible never-ending entity. Van Manen asserts that the environment we are in has an impact on how we feel (Manen, 2016). It is highly essential to provide the space people need around themselves to keep them comfortable.

Dalit women play the role of slaves in the private sphere. Women now experience slavery in different forms that are unknown to the outside world. Kamble asserts in an2guish that slavery shackles had enslaved them in the other world (Kamble, 2020). Yet, there is a tiny sapling of hope in every Dalit individual that someday in the future their condition would change. Kamble points out that, 'Women are still slaves' (Kamble, 2020). Master-slave is the relationship that existed between the mother-in-law and the daughter-in-law in the private sphere. The relationship occurs in a corporeal manner in the space that is common for the upper caste and the lower caste.

## VII. CONCLUSION

Niklas Luhmann's definition of self-reflexivity is used in this research paper for analysis. Self-reflexivity, according to him, is the individual's ability to reflect on and analyze their perspective of the social system to which they belong and their part in it (Huber et al., 2005). Kamble deeply reflects on the physical and psychological violence that the Dalits of the Indian social system experience in both the public and private sphere. Baby Kamble through her autobiography has honestly reflected her Dalit 'self' and of the people of her community. The lifeworld existentialism of Max Van Manen perfectly coincides with the self-reflexive features of the select work. By reflecting and evaluating the social system, their conception of the system is caste discrimination in the public sphere and gender discrimination in the private sphere. Considering the role they play, in the public sphere, they are untouchables, in the private sphere, they are slaves, especially women. A thorough analysis of the select work with the concept and theory infers that, in both the sphere Dalit experience equal humiliation. The self-reflexive features are correlated with the lifeworld themes of Van Manen. As Van Manen emphasized, 'they can be differentiated but cannot be separated' (Manen, 2016), the themes intersect and convey the meaning. Spatiality is a significant theme because it is where the individual experience the phenomenon in a corporeal, temporal, and relational manner. Through this research paper, it is evident that 'Spatiality' is significant and it is highly essential to provide 'the space people feel that they need around themselves to feel comfortable' (Manen, 2016).

## REFERENCES

- [1] Abraham, J. K., & Barak, J. M. (Eds.). (2018). *Dalit literatures in India: With a new introduction* (2nd ed.). Routledge, Taylor & Francis Group.
- [2] Ahirwar, K. B. (2019, December). *Baby Kamble's The Prisons we Broke: Expression of Pains and Sufferings*. Google Scholar. Retrieved January 14, 2022, from <https://www.ed-intellect.com/2021/08/baby-kambles-prisons-we-broke.html#:~:text=This%20paper%20deals%20with%20the,system%20in%20the%20contemporary%20society>.
- [3] Cogswell, D., & Lee, J. (2008). *Existentialism for beginners*. For Beginners.
- [4] Gualeni, S., & Vella, D. (2021). *Virtual existentialism: Meaning and subjectivity in virtual worlds*. PALGRAVE PIVOT.
- [5] Huber, W., Middeke, M., & Zapf, H. (Eds.). (2005). *Self-Reflexivity in Literature*. Königshausen & Neumann.
- [6] Jothi C. (2020). *From Exploitation to Exploration: Gender Study in Baby Kamble's The Prisons We Broke*. Google Scholar. Retrieved January 14, 2022, from <http://www.autrj.com/gallery/27-aut-dec-4325.pdf>
- [7] Kamble, B. (2020). *The Prisons We Broke*. (M. Pandit, Trans.) (2nd ed.). Orient BlackSwan.
- [8] Kumar, S. (2018). *A Study of Self-Reflexivity in Select Dalit Writings* (thesis). Shodhganga .
- [9] Manen, M. V. (2016). *Phenomenology of Practice: Meaning–Giving Methods in Phenomenological Research Methods* (2nd ed.). Taylor & Francis.
- [10] Manen, M. V. (2016). *Researching Lived Experience: Human Science for an Action Sensitive Pedagogy* (2nd ed.). State University of New York Press.
- [11] Matcas, V. (2017). *Existence*. Retrieved February 2, 2022, from <https://www.google.co.in/books/edition/Existence/pgiiDgAAQBAJ?hl=en&gbpv=1&dq=existence%2Bmeaning&printsec=frontcover>
- [12] Nerula, A. (2019). *Exploring the Horizons of Change: A study of Baby Kamble's The Prisons we Broke*. Google Scholar. Retrieved January 14, 2022, from <https://dialog.puchd.ac.in/wp-content/uploads/2020/10/3.Amit-Narula-The-prisons-we-broke.pdf>
- [13] Pan, A. (2015). *Now the Powerless Speaks: A study of Bama's 'Sangati' and Baby Kamble's 'The Prisons we Broke' from a Dalit Feminist Standpoint*. Google Scholar. Retrieved January 14, 2022, from [http://papers.iafor.org/wp-content/uploads/papers/acas2015/ACAS2015\\_12054.pdf](http://papers.iafor.org/wp-content/uploads/papers/acas2015/ACAS2015_12054.pdf)
- [14] Rather, M. N. (2017). *Analyzing the Painful Recountal of Dalit Women in Baby Kamble's The Prisons we Broke*. Google Scholar. Retrieved January 14, 2022, from <https://www.arjonline.org/papers/arjel/v3-i1/17.pdf>
- [15] Revathi P, & M. R. Bindu. (2021). *Kamble in a New Horizon: The Prisons we Broke as a Bildungsroman Genre*. Google Scholar. Retrieved January 14, 2022, from <https://turcomat.org/index.php/turkbilmat/article/view/6824/5626>

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# PF-Representation of Tense Feature on DPs: Morphosyntax of the $\phi$ -Agreeing T-Marker Tau

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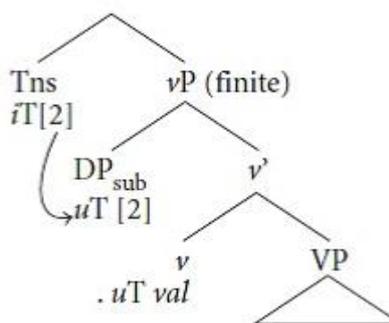
**Abstract**—This research revises, develops and offers empirical evidence to two assumptions discussed in Pesetsky & Torrego's (2007) theory which claims that tense feature [T] is associated with and expressed on DPs in syntax. Investigating the syntax of a T-marker tau, used in Najdi Arabic, in contexts where tau interacts with DPs in the spine of the clause, empirical evidence is provided that [T] assumed to be associated with DPs is generated in syntax and spelled out at PF. This takes place by the minimalist strategy where a clitic  $\phi$ -agreeing with the relevant DP is spelled out on tau.<sup>1</sup>This clitic is a PF device indicating that a DP is marked with Tense information RECENT. This clitic is morphological realisation of  $\phi$ -content on tau that is processed in syntax in turn of tau's valuation to [T] on a DP. Mapping syntax-morphosyntax to LF, Agree (Chomsky 2001) is established between tau and a DP in which i-[T] on tau values u-[T] on the DP on the condition that i-[ $\phi$ ] on the DP value u-[ $\phi$ ] on tau. Furthermore, this analysis, contrary to Pesetsky & Torrego (2007), claims that [ $\phi$ ]-features on T<sup>o</sup> are crucial in valuing [T] feature on DP.<sup>2,3</sup>

**Index Terms**—syntax, tense feature, PF-chain, T-marker, probe goal

## I. INTRODUCTION

One of the consequences of the theory of disentangling the notion of interpretability/valuedness and uninterpretability/unvaluedness associated to syntactic features (Pesetsky & Torrego, 2007) is the assumption that [T] on T<sup>o</sup> is interpretable but unvalued, which needs to probe, in the sense of Chomsky (2001), to receive a value from an occurrence of a valued instance of [T] on a matching goal. Crucial to Pesetsky and Torrego's (2007) theory, though, is the assumption that there exists in syntax an occurrence of [T] on the subject DP, being uninterpretable and unvalued. With this at hand, Pesetsky and Torrego (2007, p.277) submit that, in the sentence deviation of finite clauses, T probes by virtue of an interpretable unvalued [T], finds the subject with an uninterpretable unvalued [T], being the most local goal, and establishes an Agree relation with it (Chomsky, 2001), as in (1) below.<sup>4</sup>

(1)



This Agree relation results in creating a T-link, composed of the T-properties on T and the T-properties on the subject DP. Though this T-link that T and the subject DP now share is interpretable, due to [T] on T being interpretable, it is still unvalued, due to [T] on the subject DP being unvalued. This, consequently, results in requiring syntax to allow for an additional operation of Agree between T and a further goal that has a valued instance of [T] below in the vicinity of the Probe. This is the finite verb contained in v<sup>o</sup>, which has an uninterpretable but valued occurrence of [T], as

<sup>1</sup> T-marker = Tense marker.

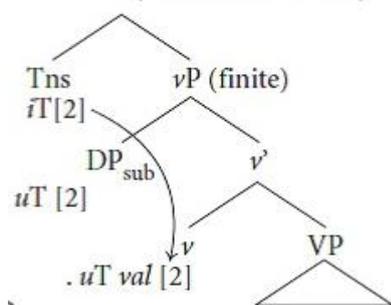
<sup>2</sup> We represent the notion of feature using the convention 'square brackets' with the feature label. So, [T] means Tense feature and [ $\phi$ ] means [ $\phi$ ]-features.

<sup>3</sup> LF = Logical form interface (Thought interface). PF = Phonological form interface (Sound interface).

<sup>4</sup> Head category is marked with the notation 'o'. So, T head of TP is notated as T<sup>o</sup>.

represented in (2) Pesetsky and Torrego (2007, p. 277).

(2)



As a result of this additional Agree relation, Pesetsky and Torrego (2007) claim, valuation of the unvalued [T] on T by the valued [T] on *v* has an additional desired consequence: The uninterpretable unvalued [T] on the subject DP is valued, since T, the subject DP and *v* are now all in a chain.<sup>5</sup>

Having characterised the spirit of this novel, there arise two theoretical wrinkles facing the view of Pesetsky and Torrego's (2007) theory. On the one hand, this theory assumes an occurrence of [T] existing on DPs, which is challenging, for it is only based on conceptual evidence, as evidenced in (1) and (2). From an interface perspective, especially thought-interface, though, there doesn't seem to be empirical evidence that the subject DP has [T] on it. Pesetsky and Torrego's (2007) theory doesn't provide evidence from syntax, morphology, morphosyntax contributing to the semantic-pragmatic interface (or sound interface) that the subject DP shows in some manner that it has an occurrence of [T] and that this [T] has a role in the interpretive properties of the relevant DP that are pretty clear in the overall derivation and interpretation of the DP. Furthermore, Pesetsky and Torrego's (2007) theory assumes that uninterpretable unvalued [ $\phi$ ] on T need not be assumed to take part in Agree between T and the DP since valuation of the unvalued [T] on T is achieved via holding Agree with the valued [T] on *v*.

This research tackles the two theoretical consequences just raised. With evidence from morphosyntax and syntax of a T-marker *tau* and its interaction with clause internal DPs, this research provides empirical, morphological evidence supporting Pesetsky and Torrego's (2007) stipulation that [T] is associated to DPs, which Pesetsky and Torrego's (2007) work already lacks on empirical groundings. On the other hand, this research will argue that, contrary to Pesetsky and Torrego's (2007) argument, it is uninterpretable unvalued [ $\phi$ ] on T° that is crucial to the Agree relation resulting in valuing the uninterpretable unvalued [T] on DPs in a mutual manner of Agree, following (Alshamari & Holmberg, 2019).

The research will be an investigation to the linguistic properties of a T-marker *tau*. Interesting about *tau*, which is equivalent in interpretation to the English aspectual marker *just*, is that it interacts with the clause internal constituents, the subject DP and the object DP. The research will explore data such as those in (3).<sup>67</sup>

(3) a. kamal-at                      **tau**      ?al-muxrid3-ah      ?al-maʃhad

complete.PST-3SG.F   **T.PRT**   DEF-director-3SG.F   DEF-scene.M

'The director just completed the scene.'

b. kamal-at                      **tau-ah**      ?al-muxrid3-ah      ?al-maʃhad  
complete.PST-3SG.F   **T.PRT-3SG.F**   DEF- director-3SG.F   DEF-scene.M

'The director, she just completed the scene.'

c. kamal-at-h                      **tau-h**      ?al-maʃhad      ?al-muxrid3-ah  
complete.PST-3SG.M   **T.PRT-3SG.M**   DEF-scene.M   DEF- director-3SG.F

'The scene, the director just completed it.'

On the groundings that *tau* agrees with DPs, where this agreement is morphologically realised (Ouhalla, 1997) as an agreeing clitic on *tau* associated with and spelling out the  $\phi$ -content of the relevant DP, this clitic will be used as a leading factor for demonstrating the proposal we advance in this paper.

The paper is structured as follows. Section 2 highlights basic assumptions of the minimalist practice of grammar adopted here, including Chomsky's (1995, 2000, 2001) mechanisms and strategies of derivation and interpretation of sentence. Section 3 shows that *tau* is endowed with temporal information, postulating an instance of [T] on it as well as

<sup>5</sup> When discussing and analysing the data in the following sections, we will abstract away from Pesetsky and Torrego's (2007) characterisation of (un)valuedness/(un)interpretability of features, and follow Chomsky's (2001) model. So, a feature being unvalued presupposes its being uninterpretable. Therefore, throughout the paper, we will use the notation *v*-[T], with italicised *v*, for interpretable valued instance of [T] and *u*-[T], with italicised *u*, for uninterpretable unvalued instance of [T]. This is extended to all types of features.

<sup>6</sup> Interlinear glossing for all data in this paper is in accordance with Leipzig Glossing Rules available at <https://www.eva.mpg.de/lingua/pdf/Glossing-Rules>.

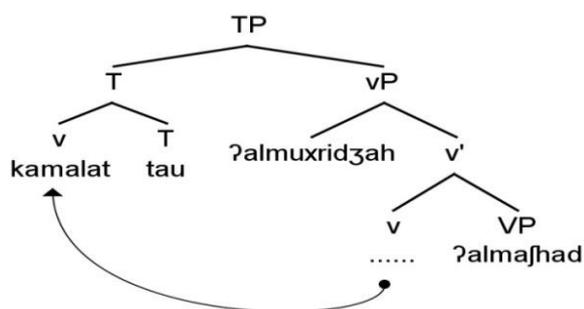
<sup>7</sup> Current version of Leipzig Glossing Rules doesn't provide a notation for the category 'particle', so we follow conventions used in recent the related literature and represent it as PRT in bold font.

[ $\phi$ ]. It also touches on the headedness and cliticisation properties of *tau*. It provides a description of pragmatic distribution of *tau* and syntactic and morphosyntactic properties *tau* displays, including the impact of its semantic import on the proposition of the sentence and the clause DPs. Section 4 advances a proposal on the morphosyntactic properties of *tau*, formulating a proposal that the clitic spelled out on *tau* is a linguistic device that assists LF determine DPs marked with tense. Section 5 is dedicated for a minimalist analysis to *tau*. Section 6 raises some emerging issues that motivate further research. Section 7 concludes the paper.

## II. GENERATIVE ASSUMPTIONS OF MINIMALIST PROGRAM

Processing and producing a linguistic product (be it phrase, clause or sentence) starts life in the computation system of language faculty (Chomsky, 1995 *et seq*). In computation, linguistic items (particle, morpheme or marker) that have been selected for the relevant linguistic product undergo the operation Merge, so they merge together, undergoing conditions and constraints imposed by the interface system: the PF-interface (which interprets the sound component of a linguistic product) and the LF-interface system (which interprets the semantic-pragmatic component of a linguistic product). What also takes place in computation are syntactic operations triggered by discourse interpretive properties and other reasons like marking, including case and aspect. One very universally attested operation is movement, proposing a linguistic item from its first Merge syntactic position to another syntactic position, for formal and discourse reasons. Disguised in every derivation is the operation of Agree, where items agree with each other once merged. At the end of a derivation, the linguistic product is sent over to the interface system for legitimacy, where legitimacy can be translated as judging if a product turns well-formedness and ill-formedness in terms of PF-interface and LF-interface interpretation. Using the schemata implemented in the generative practice of the syntactic theory, in terms of X-bar theory, let us see how (3a) above is derived in (4) below.

(4)



We will assume the scenario in (4), in which the lexical verb undergoes v to T movement, due to rich agreement in Arabic, including dialectal Arabic (Ouhalla, 1988, 1994, 1996, 1997; Ouhalla & Shlonsky, 2002). We will also assume that *tau* is first merged at T, being the lexical realisation (spell out) of [T] on T. It is important here to stress that sentence processing is derivational in this framework, meaning that sentence derivation proceeds in a bottom-top manner. This being so, once T is merged in syntax, *tau* is merged at T and spells out [T] on it. This is immediately followed by movement of the lexical verb to T, left-adjoining to T, following Kayne (1994).<sup>8</sup>

## III. SYNTACTIC AND MORPHOSYNTACTIC PROPERTIES AND PRAGMATIC DISTRIBUTION OF TAU

In this section, we start by addressing the syntactic-pragmatic impact of *tau* on the associate clause and the clause internal DPs. This includes syntactic, semantic wide-scope and pragmatic effect of *tau* on the interpretive properties of the clause and the clause items. We then highlight some syntactic and morphosyntactic properties that provide important evidence for headedness characterization of *tau*.

### A. Syntactic Position, Semantic Scope and Pragmatic Function of Tau

Relating the pragmatic distribution of *tau* to the syntactic position it occupies, *tau* is dubbed a temporal item, T-marker, which marks the proposition expressed by the associate clause, and clause constituents, with TELICITY of an event that has just completed at the utterance time.<sup>9</sup> In syntax, as represented in (4), *tau* is believed to have first merged at T.

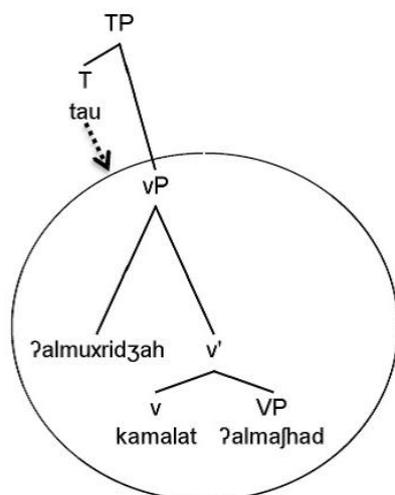
Consider (3a) above, repeated below in (5) and schematically represented in (6) (in (6), we omit irrelevant material here, the lexical verb, to make it easy to follow the semantic wide-scope of *tau*. The propositional content expressed by the clause involved in vP is being circled. The dotted arrow indicates temporal, wide-scoping of *tau*).

<sup>8</sup> See Alshammari (2019) for work on movement, including sideward movement in Najdi Arabic.

<sup>9</sup> *Tau* expresses temporal information referred to as *telicity*, the completion of a state of affairs but, slightly different from the conventional use of *telicity*, *tau* information expresses telicity at a very recent point of time in past with respect to utterance time. For ease of exposition, we refer to the temporal information that *tau* expresses as RECENT and represent it by small caps font throughout the paper.

- (5) kamal-at                      **tau**            ?al-muxridz-ah            ?al-maʃhad  
 complete.PST-3SG.F    **T.PRT**    DEF-director-3SG.F    DEF-scene.M  
 ‘The director just completed the scene.’

(6)



The scenario in (6) represents the point of the derivation at which *tau* merges at T, prior to movement of the lexical verb to T. At this point of the derivation, *tau* is semantically wide-scoping the proposition expressed by vP, assigning the event expressed by vP RECENT interpretation. Put another way, this semantic-pragmatic and syntactic behaviour of *tau* can be explained by assuming that *tau* is the PF-interpretation (or PF-spell out) of the temporal information on T interpreted at the LF-interface system as RECENT on the syntactic position T, where tense is interpreted.

#### B. Morphosyntax of *Tau*: Cliticisation and Headedness Status

Worth noticing here is that *tau* not only interacts with the whole clause, colouring the propositional content of the clause with RECENT interpretation as in (6), it also interacts with nominal items within the clause, entering into an Agree relation with them, in the sense of Chomsky (2001). Consider (3b, c) above, repeated below for convenience as (7a, b) respectively.

- (7) a. kamal-at                      **tau-ah**                      ?al-muxridz-ah            ?al-maʃhad  
 complete.PST-3SG.F    **T.PRT-3SG.F**    DEF- director-3SG.F    DEF-scene.M  
 ‘The director, she just completed the scene.’  
 b. kamal-at-h                      **tau-h**                      ?al-maʃhad            ?al-muxridz-ah  
 complete.PST-3SG.M    **T.PRT-3SG.M**    DEF-scene.M    DEF- director-3SG.F  
 ‘The scene, the director just completed it.’

In addition to the scopal T-properties of *tau* evidenced in (6), gleaned from (7) is the fact that *tau* displays morphosyntactic properties that immediately reflect on its pragmatics and morphological structure. As (7) evidences, *tau* is suffixed with a clitic which agrees in [ $\phi$ ] with the DP that *tau* marks in the relevant clause, *ah* agreeing with the subject DP ?almuxridz-ah in (7a) and *h* agreeing with the object DP ?almaʃhad in (7b).

What can be deduced from these properties is that *tau* is best characterized as a head category, rather than a maximal projection. We base this argument on the widely held assumption that clitic is a property of head, mostly in Semitic languages (Ouhalla, 1988) and that clitic is argued to target the right side of functional T-items, which is evidenced cross-linguistically (Ouhalla, 1988; Boukhris, 1998).<sup>10</sup> Further, in recent minimalist research on particle that have discourse import, the category particle is believed to instantiate a head in vP domain and in CP domain (Bayer, 1996; Bayer & Obenauer, 2011; Biberauer & Sheehan, 2011; Biberauer et al., 2014; Struckmeier, 2014; Bayer & Trotzke, 2015; Coniglio, 2008; Coniglio & Zegrean, 2010; Alshamari, 2017a,b; Bayer & Struckmeier, 2017), hence, a property that can be extended to all particles merged at functional positions, as *tau*.<sup>11</sup>

How morphosyntactic property of *tau*, the temporal information that *tau* has, and the assumption that *tau* sets

<sup>10</sup> Boukhris (1998, p. 318) sets the following Tamazight example to show how clitic targets the Futurity marker (data glossing in this paper is set in compliance with Leipzig Glossing Rules).

(i) is ur    **dad-tn**                      clu-x?  
 Q    NEG    FUT-3P.ACC    see-I  
 ‘Will I not see them?’

<sup>11</sup> Extensive research characterise particles as head based on several properties that particles maintain, including the fact that they are immobile in syntax because they scope in their first merge position, thereby they have accomplished their function. We will not discuss the headedness property of particles further but refer the reader to Bayer & Trotzke (2015), Struckmeier (2014), Bayer & Struckmeier (2017), Jarrah & Alshamari (2017), Alshamari (2017a,b), Alshamari (2021) and Alshamari & Al-Ghamdi (2021).

empirical evidence that DPs have tense information, [T], expressed on them can be portrayed will be tackled in the next sections. For this, we start by highlighting the expressiveness property that *tau* maintains, which is captured by the fact that *tau* hosts clitics that express  $[\varphi]$  features of DPs, which indicates that *tau* is expressive in that it overtly marks DPs in syntax.

#### IV. EXPRESSIVENESS PROPERTY OF TAU: MECHANISMS OF EXPRESSING TENSE ON DPs

Natural language makes extensive use of functional categories like Tense, which in some varieties is encoded in syntax as a morphological item (Ouhalla, 1994, 1997) and viewed as a PF-product component of computation (Sigurðsson, 2009; Zeijlstra, 2012; Jarrah, 2019), for which NA sets morphological example, by *tau*. However, with respect to generative, interface-related considerations, what does it mean for a functional item like the T-marker *tau*, on a functional head like T, to host a clitic that agrees in  $[\varphi]$  with a certain DP in overt syntax? We link this issue to Miyagawa's (2010) logic of expressiveness property of natural language and Alshamari's (2017a,b) topical clitic generalisation. We dedicate the following sub-section to addressing this issue.

##### *Interpretive Properties and LF-Value Value of the Clitic on Tau*

Alshamari (2017a,b) investigates a set of discourse particles that mark various topic values on clause constituents, including DPs, in which case they agree in  $[\varphi]$  with the DPs. He argues that spelling out a clitic on a certain topic particle is a sign that the relevant topic particle marks a certain DP and assigns it a certain topic interpretation, depending on the particle involved in the numeration of the relevant clause. In this way, a clitic spelled out on the topic particle, he concludes, is a by-product of a DP valuing  $u-[\varphi]$  on the topic particle and the topic particle valuing  $u-[\text{Top}]$  on the DP. Furthermore, Miyagawa (2010) argues that  $[\varphi]$  is an aspect of the expressiveness property of natural language, being associated to nominal items, expressing the discourse and non-discourse status they have like subjecthood and topichood, for instance.

Reconciling these two lines of thought, the clitic *tau* can well be assumed a consequence of valuing  $[\varphi]$  of a DP marked by *tau*.<sup>12</sup> Recall that *tau* marks the whole proposition expressed by the vP in (5=6), in which case *tau* is void of a clitic. Compared with the scenario in (5) and (6), it follows from the clitic phenomena in (7) that what *tau* marks with RECENT is DPs, hence, the theory predicts that there is a kind of relation between the two items, *tau* and the subject DP, in some manner, for certain interpretation. On the groundings that *tau* interacts with the subject, it is not a huge leap to assume that tense is expressed on the subject DP in (7a) and the LF-interface interprets the entity expressed by the subject DP as RECENT.

On theoretical assumptions, then, what we see as a morphosyntactic property of *tau*, carrying a clitic spelling out  $[\varphi]$  of a nominal item, mirrors the linguistic expressiveness of *tau* that *tau* performs in overt syntax. This expressiveness property of *tau* indicates that *tau* has a sophisticated mechanism in overt syntax to mark and discharge the functionality it has and the information it carries across the clause. Under this view, the clitic spelled out on *tau* is a linguistic device provided by the grammar of NA in narrow syntax to assist the LF-interface system detect and determine the syntactic item that is endowed with tense information. *tau* serves as a PF-clue that makes LF-interface aware of which clause DP is being marked with RECENT. We therefore advance the proposal in (8) below:

(8) Interface condition on mutual valuation of  $u-[\varphi]$  on *tau* and  $u-[\text{T}]$  on DPs

*In order for  $u-[\text{T}]$  on a DP to be valued, the DP value  $u-[\varphi]$  on *tau* and have its  $\varphi$ -content spelled out on *tau* as a clitic so that RECENT is expressed on the DP at LF-interface.*

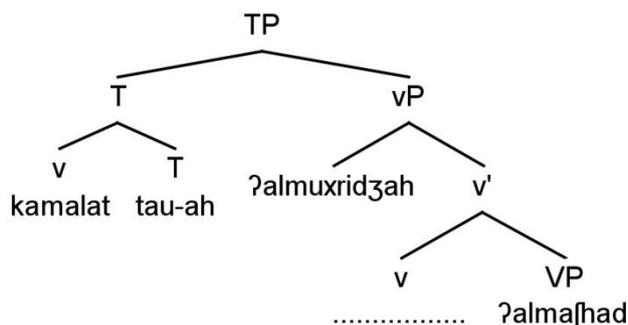
Under the logic in (8), the clitic on *tau* is a by-product of the valuation of  $u-[\text{T}]$  on the subject DP by the  $v-[\text{T}]$  on *tau* at T, which is achieved once the  $v-[\varphi]$  on the relevant DP values the  $u-[\varphi]$  on *tau*. This clitic is a computational linkage of tense interpretation on DPs at the interface system, serving as a detector for DPs being associated with tense interpretation.

Further, as an implication on the minimalist theory, this marking mechanism is in par with the minimalist principles; DPs that *tau* marks are marked as far as they are visible to *tau*, without appealing to a Spec Head configuration to agreement. In this case, movement of a DP is only triggered when probe-goal mechanism is not possible.<sup>13</sup> As we will see, the interaction of *tau* with clause DPs sometimes triggers movement. Compare (7a) represented in (9) with (7b) represented in (10).

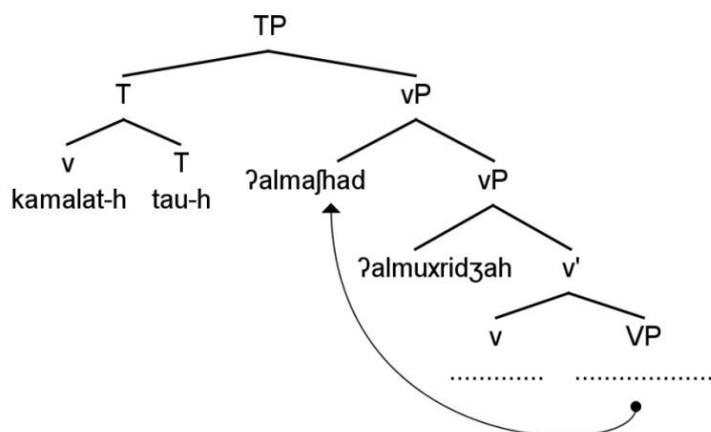
<sup>12</sup> See Alshamari (2017a,b) for argument on this view on clitic in dialectal Arabic context.

<sup>13</sup> This is due to the goal being invisible and distant from the probe, in a lower phase which is invisible to the probe (Chomsky 2001).

(9)



(10)



While in both cases *tau* marks DPs with tense information RECENT, the object DP in (10), unlike the subject DP in (9), moves in syntax to the edge of the vP phase (Chomsky, 2001). The object DP not remaining in its thematic position indicates that syntax activates certain operations whose role is crucial in terms of full interpretation (Chomsky, 2001), subject to locality conditions (Chomsky, 2019). Such operation is movement, being imposed on syntax by the interface system, as will be shortly discussed in the next section.

## V. EXPRESSING [T] ON DPS: MINIMALIST STRATEGIES AND MECHANISMS

With this grasp of the linguistic properties of *tau*, we are now ready to turn to the minimalist investigation to explain how tense is expressed on DPs and how this is achieved in syntax via implementing the expressiveness property that *tau* maintains, as proposed in (8). We first introduce a plausible assumption of the featural grid that *tau* and the associate DPs have, following the model put forth by Chomsky (2001). As a functional T-marker merged on the syntactic position where tense is interpreted, T head of TP, we propose that *tau* has  $v$ -[T], which is valued by theory. Given that *tau* hosts a clitic that agrees with a DP, we propose that *tau* has a set of  $[\varphi]$  which is deemed unvalued, on conceptual groundings, being on a functional head.<sup>14</sup> For this, we develop a minimalist, feature-based analysis to the syntax and morphosyntax of *tau* with respect to the clause and the clause internal DPs, and then incorporate this analysis to advance a logic-related generalisation on how tense is marked on DPs in overt syntax and is interpreted at the interface system.

### A. Feature Valuation and Full Interpretation: Chomsky's (2001) Theory of Agree and Move

We notice in (7a=9) that *tau* agrees in  $[\varphi]$  with the subject DP. This results in spelling out the clitic *h* that expresses the  $[\varphi]$  features THIRD SINGULAR FEMININE, spelling out the  $\varphi$ -content of the subject DP *?almuxridzah*. Within the practice of the current minimalist standard proposal (Chomsky, 2001), this proceeds in syntax as follows. *tau* is merged at T<sup>o</sup> and has  $v$ -[T], interpreted at PF-interface as *tau*, and interpreted at LF-interface as RECENT. This feature and the value it contains suffice to make *tau* licit at the interface system. However, *tau* has an instance of  $u$ - $[\varphi]$ , which needs to receive a value during the course of the derivation and eventually be deleted before the sentence is transferred to the interface system for interpretation and legitimacy. In next sub-section, we provide a minimalist analysis, using

<sup>14</sup> In Chomsky (2001), being uninterpretable presupposes unvaluedness of a feature. We follow this model of Agree, and use an italicised *u* for unvalued/uninterpretable feature while valued/interpretable feature is notated with an italicised *v*. So, unvalued [T] is  $u$ -[T] and valued [T] is  $v$ -[T], unvalued  $[\varphi]$  is  $u$ - $[\varphi]$  and valued  $[\varphi]$  is  $v$ - $[\varphi]$ .

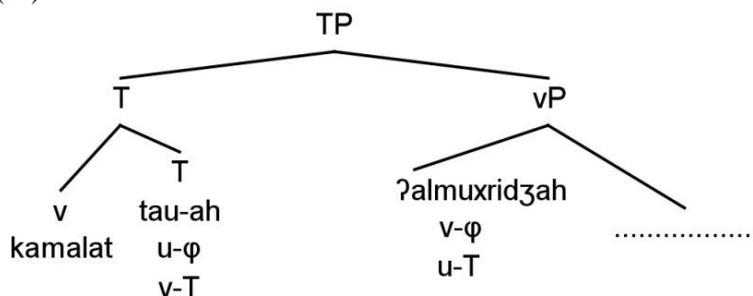
Chomsky's (2001) probe-goal strategy of agreement and further formal Minimalist assumptions and conditions when need be.

### B. Probe-Goal Strategy of Agreement

In the spirit of Minimalism, the syntactic operation Agree, activating a probe-goal relation, is triggered by an occurrence of a *u*-feature on a certain functional head, a probe. This feature needs to get a value during the course of the derivation, by searching in the *c*-command domain of the probing item for a matching *v*-feature on a goal.<sup>15</sup> Perusing this approach to sentence analysis, in practice, with its *u*-[ $\phi$ ], *tau*  $\phi$ -probes in its *c*-command domain and finds the subject with the matching *v*-[ $\phi$ ]. Restricting to facets of this approach, it will be shown that Agree that holds between *tau* and the relevant DP is of mutual manner, which means both of the probe and the goal, each carrying an occurrence of a distinct *u*-feature, needs to get a value (Alshamari, 2017a,b; Alshamari & Holmberg, 2019).

We represent the point of derivation at which Agree holds between *tau* and the subject DP in (11) below.

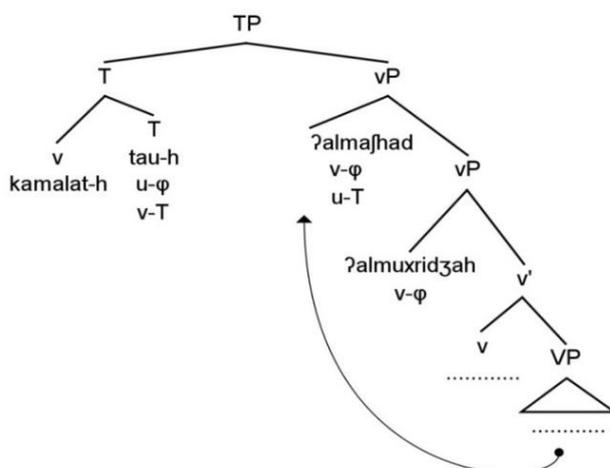
(11)



The schemata in (11) shows that Agree is established between *tau* and the subject DP. *tau*  $\phi$ -probes the subject DP and *v*-[ $\phi$ ] on the subject DP values *u*-[ $\phi$ ] on *tau*. Associating this with the proposal raised in (8), as a result of valuing *u*-[ $\phi$ ] on *tau*, the clitic is spelled out on *tau*, depending on the  $\phi$ -content of the valuator, the goal, which is here being the subject DP. What is more, holding to (8), the fact that the clitic *ah* on *tau* spells out the  $\phi$ -content of the subject DP is explained by the fact that it is the subject DP that values *u*-[ $\phi$ ] on *tau*, which in turn, results in *tau* valuing *u*-[T] on the subject DP and identifying the subject DP as RECENT at the LF-interface system.

The scenario in (7b) is straightforward. Agree takes place between *tau* and the object DP, where evidence is provided by the fact that the clitic *h* spelled out on *tau* agreeing the object DP, spells out the grammatical relation THIRD SINGULAR MASCULINE. We discuss the observation that the object DP moves across the subject DP in the next subsection.

(12)



At this point of the derivation, all the occurrences of unvalued features have received a value during syntax, and are deleted before the sentence is handed over to the interface system. However, a linguistic inquiry that emerges is: what accounts for the assumption that [T] exists on the subject DP in (11) and the object DP in (12)? In more formal way, what is the empirical (syntactic) and conceptual (semantic) evidence that [T] lives on these DPs and, moreover, that [T] is actually expressed on DPs in syntax and interpreted at the LF-interface? How can we peruse this line of reasoning on both conceptual and empirical groundings?

We here develop further the proposal we formulated in (8), on the expressiveness property of *tau* (the clitic on). From

<sup>15</sup> Movement in this sense applies in case the goal is invisible to the probe, be it Greed-driven movement (Bošković 2007) in which case the goal wants to be valued or altruism-triggered movement (Lasnik 1995), in which case the goal moves to value a *u*-feature on the probe.

an interface view, any item derived in syntax needs to be legitimised at the interface system, PF and LF, contributing to the full interpretation of the associated linguistic product (Chomsky, 1995). Under the spirit of this logic, the clitic phenomenon has been extensively analysed in Arabic varieties, though without reasonable groundings, where it is stipulated that a clitic spelled out on lexical verb, for instance, is a sign of movement of the associate DP. Recent generative, minimalist work has shown that clitic is not a consequence of movement but a PF-product that is derived in syntax by an Agree relation held between a functional head, be it PF-spelled or PF-null, and a phrase (Ouhalla, 1994, 1997; Alshamari, 2017a,b) and that it is the output of the Agree for some functional and discursal marking reasons, as in (12) and (12). To formulate a plausible theory, we reconcile this PF-product-view on clitic with Pesetsky and Torrego's (2007) theory.<sup>16</sup> We reformulate (8) above in (13) below, adopting Ouhalla's (1997) principle of morphological realisation.<sup>17</sup>

(13) Clitic is a morphological device for LF-interface interpretation of tense on DPs

*Clitic is a morphological realization of the Tense feature on DPs. It is the PF-output of the process of tense valuation on a DP that links up the marked DP to tau in a PF-chain in syntax and delivers this PF-chain to the LF-interface for tense, RECENT interpretation.*

Under this view, and with the DP being visible to the LF-interface, tense is expressed on DPs in syntax. That is, the subject, not the object DP for instance, is assigned RECENT information at the LF-interface by virtue of the clitic, being co-indexed with the subject DP, spelled out at the PF-interface. This immediately explains the motivation behind the condition the interface system imposes on computation that syntax provides a linguistic device to assist LF-interface to determine what category has a value of tense, which happens to be morphosyntactic tool here, clitic on *tau*. Mapping syntax to interpretive, interface system, then, in (11), once the  $v$ -[ $\phi$ ] on the subject DP values  $u$ -[ $\phi$ ] on *tau*, in turn, simultaneously (Chomsky, 2019),  $v$ -[T] on *tau* values the  $u$ -[T] on the subject, creating a PF-chain that contains a T-link that LF-interface will read at phase Transfer.

We now return to the case of movement of object DP we raised above, shown in (12). Considering the featural grid of the object DP, we can see that it has its [ $\phi$ ] lexically valued. Maintaining current assumption of minimalist practice (Bošković, 2007; Holmberg et al., 2017), It follows that the object DP is not expected to move, for it would only move if it has an unvalued feature that needs to get a value which would have otherwise triggered phasal movement of the object. The phenomenon of movement of the object DP and the clitic on *tau* agreeing with the object DP, then, supports the proposal that (i) the object DP has  $u$ -[T], which can further be explained by the fact that (ii) the object DP moves to the edge of  $v$ P (Chomsky, 2000, 2001) to be local ad potentially visible to *tau*. We discuss this issue in the next subsection.

### C. Movement of the Object DP

It's now already established that there are syntactic strategies and operations, agreement and movement, activated in the computational system and triggered by certain interpretive properties of *tau*, which have direct impact on the associate clause and the clause items, including marking DPs and the clitic spelled out on the DPs. Further, we already highlighted that the derivation of constructions involving *tau* and include such effects is in compliance with the minimalist principles, requiring as less efforts in syntax as possible. This is captured by the fact that the subject DP is marked by *tau* in situ, at the thematic position, Spec  $v$ P. However, evidenced in (12) is the fact that the object DP moves to the phase edge, which is directly explained if we maintain the view that the object DP cannot hold an Agree relation with *tau*, a phenomenon we analyse in terms of phase theory (Chomsky, 2001, 2008). On conceptual groundings, in theory, the object DP has an instance of unvalued feature that would otherwise be transferred to the interface system unvalued, resulting in derivation crash (Chomsky, 1995, 2001). Hence, this movement of the object DP is phasal, escaping the transfer of  $v$ P phase because it has  $u$ -[T] (Bošković, 2007; Holmberg et al., 2017). This means that the object DP would have remained in situ in syntax, had it been visible to the probing *tau*. However, being in the lower  $v$ P phase, it has to move to escape the transfer of the phase complement to get local to *tau*. In practice, then, this movement results in the object DP c-commanding the subject DP and, consequently, being visible to *tau*.

## VI. FURTHER ISSUES

We have proposed that the clitic on *tau* is a PF-product, derived in syntax and interpreted at the LF-interface as a member of a chain that links up *tau* in the tense domain to the DP that *tau* marks with RECENT. Hence, *tau* and the clitic spelled out on *tau* are empirical, diverse evidence, ranging from morphological to morphosyntactic, for Pesetsky and Torrego's (2007) theory that tense feature [T] is associated to and expressed on DPs. Under the view that natural language operates in a minimalist manner (Chomsky, 2001), one of the issues the analyses in this research motivate is that clitic accomplishes more than what is normally assumed to do in the literature. A clitic, as we have seen, has more properties than, for instance, being topical (Ouhalla, 1994, 1997; Frascarelli & Hinterhızl, 2007; Frascarelli, 2008;

<sup>16</sup> See Kramer (2014) for a similar view but without appealing to discourse or functional reasoning to the existence or merge of clitics on object DPs.

<sup>17</sup> A simple characterisation of Ouhalla's (1997) morphological realisation is merger of a particle in the structure.

Bianchi & Frascarelli, 2010; Alshamari, 2017a,b). It is shown in this research that a clitic has an LF-property, being involved in a T-link, linking the T-marker with the tense marked item in syntax while identifying the identity of the tense marked item at the Transfer step of the derivation and the LF-interface. The last valuable insight this research provides into work in natural language is that articulated clausal functional spines in structure can be variable with respect to expressiveness. The distributions of *tau*, being clitic host, and hence, serving as a detector of tense marked items at the interface system can well be an argument for research on language development. Certain varieties might have tense expressed on DPs, as advanced in Pesetsky and Torrego's (2007), but might not have a sophisticated morphologically realised device like *tau*, a property of natural language which can be a good field of research pertinent enough for linguist inquiries in this regard.

## VII. CONCLUSION

This research has investigated the pragmatics, syntax and morphosyntax of a T-marker *tau* in NA, arguing that it marks the associate clause and the clause DPs with tense, RECENT interpretation. As a morphological device derived in syntax, *tau* provides a wealth of empirical evidence to the proposal put forward by Pesetsky and Torrego's (2007) theory that [T] exists on DPs. Holding a range of analyses to the syntax and morphosyntax of *tau*, exploring a set of NA data, output of this research develops Pesetsky and Torrego's (2007) stipulative character of [T] on DPs and advances a proposal that this [T] is morphologically realised and is indeed a property of DPs that sometimes can be overtly encoded in syntax, which can be assumed to be extended to other languages. On the basis that *tau* spells out the  $\phi$ -content of a DP that it marks in syntax, it is proposed that the computational system, narrow syntax activates this morphosyntactic operation, linking the DP marked by *tau* with RECENT interpretation with the T-marker *tau* in a PF-chain, and sending this this PF-chain to the interface systems, where it is interpreted at the LF-interface as RECENT. Furthermore, though, this research abstracts away from one of the core assumptions of Pesetsky and Torrego's (2007) theory and argues that *u*-[ $\phi$ ] on T are crucial in valuing the stipulated instance of *u*-[T] on the relevant DP. Analyses of this research have shown that the clitic on *tau* acts as a morphological device linking the marked DP with the T-marker *tau* being all contained in a PF-chain that has RECENT interpretation, is the source of valuing [T] on DPs.

## REFERENCES

- [1] Alshamari, M. (2017a). *Topic particles in the North Hail dialect of Najdi Arabic*. UK: Newcastle University (Doctoral dissertation).
- [2] Alshamari, M. R. (2017b). A feature-based analysis of the syntax of the clause-initial particle *redi* in North Hail Arabic. *Poznan Studies in Contemporary Linguistics*, 53(3), 305-343.
- [3] Alshamari, M. & Holmberg, A. (2019). *Topic particles, agreement and movement in an Arabic dialect*. In 42nd GLOW (Generative Linguistics in the Old World) Conference. Newcastle University.
- [4] Alshamari Murdhy. (2021). *Contrastive Focus particles, CF-chain interpretation and multiple agreement in North Hail dialect of Arabic*. CamCoS 9 New (Cambridge Comparative Syntax in Newcastle 9).
- [5] Alshamari, Murdhy & Naimah, Al-Ghamdi. (2021). Multi-Functionality of the Discourse Marker *haweh* in Ghamdi Dialect of Hijazi Arabic: Interaction of CP-Features?—A Minimalist-Cartographic Account. *Cogent Arts & Humanities*, 2021, 8.1: 1979307.
- [6] Alshammari, Naif. (2019). *Multiple and conjoined wh-questions in Najdi Arabic* UK: Newcastle University (Doctoral dissertation).
- [7] Bayer, J. (1996). *Directionality and Logical Form: On the scope of focusing particles and wh-in-situ* (Vol. 34). Springer Science & Business Media.
- [8] Bayer, J. & Trotzke, A. (2015). The derivation and interpretation of left peripheral discourse particles. In Josef. B & Roland. H & Andreas. T (eds). *Discourse-oriented syntax*. Amsterdam: John Benjamins Publishing Company. 226: 13-40.
- [9] Bayer, J. & Struckmeier, V (ed.). (2017). *Discourse particles: Formal approaches to their syntax and semantics*. Walter de Gruyter GmbH & Co KG, 2016.
- [10] Bayer, J. & Obenaus, H. (2011). 'Discourse particles, clause structure, and question types'. *The linguistic review* 28: 449-491.
- [11] Bianchi, V. & Frascarelli, M. (2010). Is topic a root phenomenon? *Iberia: An International Journal of Theoretical Linguistics* 2: 43-88.
- [12] Biberauer, T. & Sheehan, M. (2011). Introduction: particles through a modern syntactic lens. *The Linguistic Review* 28: 387-410.
- [13] Biberauer, T., Liliane. H. & A. Kemenade. (2014). Putting our heads together: towards a syntax of particles. *Studia Linguistica* 68: 1-15.
- [14] Bošković, Ž. (2007). 'On the locality and motivation of Move and Agree: An even more minimal theory'. *Linguistic inquiry* 38: 589-644.
- [15] Boukhris, F. (1998). *Les clitiques en berbère tamazighte: approche minimaliste*. Unpublished Ph. D. dissertation, Université Mohamed V: Rabat.
- [16] Chomsky, N. (1995). *The minimalist program*. Cambridge: MIT Press.
- [17] Chomsky, N. (2000). 'Minimalist Inquiries: The Framework'. In H. Lasnik, R. Martin, D. Michaels and J. Uriagereka (eds) *Step by step. essays on minimalist syntax in honor of Howard, L.* Cambridge: MIT Press.
- [18] Chomsky, N. (2001). 'Derivation by phase'. In M. Kenstowicz (ed) *Ken Hale. A Life in Language*. Cambridge: MIT Press. 1-52.

- [19] Sigurðsson, H.Á. (2009). Remarks on features. *Explorations of phase theory: Features and arguments*, pp.21-52.
- [20] Chomsky, N. (2008). On phases. *Current Studies in Linguistics Series*, 45, p.133-166.
- [21] Coniglio, Marco. (2008). Modal particles in Italian. *Working Papers in Linguistics*. 18: 91-129.
- [22] Coniglio, M. and Zegrean, Iulia. (2010). Splitting up Force, evidence from discourse particles. *Linguistics* 20: 7-34
- [23] Frascarelli, M. & Hinterhdzl, R. (2007). 'Types of Topics in German and Italian'. In Susanne, W and Kerstin, S (eds.) *On Information Structure, Meaning and Form*. Amsterdam: John Benjamins. 87-116.
- [24] Frascarelli, Mara. (2008). 'The fine structure of the topic field'. In C. De Cat and K. Demuth (eds) *The Bantu-Romance Connection. A Comparative Investigation of Verbal Agreement, DPs, and Information Structure*. Amsterdam/Philadelphia: John Benjamins Publishing. 261-292.
- [25] Holmberg, A., Michelle, S, & van der Wal, J. (2017). Movement from the double object construction is not fully symmetrical. *Linguistic Inquiry*. 50(4). 677-722. DOI:10.1162/ling\_a\_00322
- [26] Jarrah, M & Alshamari, M. (2017). The syntax of the evidential particle *ʃikil* in Jordanian Arabic. *Italian Journal of Linguistics*, 29, 29-56.
- [27] Jarrah, M. (2019). Record your agree: A case study of the Arabic complementizer *ʔinn*. *Journal of Linguistics*, 55(1), 83-122.
- [28] Kayne, R. (1994). *The antisymmetry of syntax* (No. 25). Cambridge: MIT Press.
- [29] Kramer, R. (2014). Clitic doubling or object agreement: The view from Amharic. *Natural Language & Linguistic Theory*, 32(2), 593-634.
- [30] Lasnik, H. 1995. 'Case and expletives revisited: On Greed and other human failings.' *Linguistic inquiry* 26: 615-633.
- [31] Miyagawa, S. (2010). *Why agree? Why move? Unifying Agreement-Based and Discourse-Configurational Languages*. Cambridge: MIT Press.
- [32] Ouhalla, J. (1988). *The syntax of head movement: A study of Berber*. PhD Thesis: University of London.
- [33] Ouhalla, J. (1994). Focus in standard Arabic. *Linguistics in Potsdam 1*: 65-92.
- [34] Ouhalla, J. (1996). 'Remarks on binding properties of wh-pronouns'. *Linguistic Inquiry* 27: 676-708.
- [35] Ouhalla, J. (1997). Remarks on focus in Standard Arabic. In M. Eid and R. R. Ratcliffe (eds). *Perspectives on Arabic linguistics X: papers from the Tenth Annual Symposium on Arabic Linguistics*. Amsterdam: John Benjamins. 9-45.
- [36] Ouhalla, J. and Shlonsky, U. (2002). *Themes in Arabic and Hebrew syntax*. Netherlands: Kluwer Academic Publishers.
- [37] Pesetsky, D & Esther, T. (2007). The syntax of valuation and the interpretability of features. In *Phrasal and clausal architecture*, ed by S. Karimi, V. Samiiian, and W. Wilkins, 262-294. Amsterdam: John Benjamins.
- [38] Rizzi, L. (2004). Locality and left periphery. *Structures and beyond: The cartography of syntactic structures*, 3, pp.223-251.
- [39] Struckmeier, V. (2014). Ja doch wohl C? *Modal Particles in German as C-related elements*. *Studia Linguistica* 68: 16-48.
- [40] Zeijlstra, H. (2012). There is only one way to agree. *The linguistic review*, 29(3), pp.491-539.

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# On the Translation Topology of Confucian Words in C-E dictionary: Structural Comparison and Feature Analysis

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**Abstract**—Confucian words in C-E dictionaries are significant for language learning and cross-cultural communication, and comparative lexicographical study is beneficial for the analysis of different bilingual dictionaries and especially helpful for the improvement of C-E dictionary compilation. The Feature of Topology in Bilingual dictionary (including topological equivalence, point-set topological hierarchical structure) provides theoretical framework for the present study. After stratified sampling and statistical analysis, the paper conducts comparative research on the translation structure and transformation pattern between Confucian words and Biblical words from translation topology. The research includes descriptive analysis, independent t-test and feature analysis. The findings indicate that the translation topology of Confucian words in C-E dictionaries is featured with simplification and discreteness, compared with Biblical words. Confucian words and Biblical words are heterogenic in distribution, assemblage, relevance and transformation strategy, concerning topological point, set and field, which in turn affects the appearance and reordering of initial event. The reasons are as follows: the difference of compilation principle and the over-dependence on the monolingual dictionary differentiate the language variables, leading to the structural difference in Confucian words of topological transformation. The paucity of parallel corpus changes the structure density of cultural topology set, and forms different transformation pattern and representation validity of culture-bound words.

**Index Terms**—Confucian words, translation topology, topology point/set/field, transformation strategy

## I. INTRODUCTION

The definition of culture-bound words (including Confucian words) has gone through a great change before it is finally accepted by lexicography and translation field. Lexicographers (Zgusta, 1971, p.295; Hartmann & James, 2000, p.33) provided the definition from both physical and psychological world. The geographical factor of different region has been taken into account except other connotations involved (Zgusta, 1971). Furthermore, culture-specific words were those words or phrases related to the lifestyle of one community using the same language (Hartmann & James, 2000, p.33). Different from Aixela's point to find equivalents in the target language or Zgusta's geographical point of view, some other lexicographer gave some definition on culture-specific words from conceptualism (Baker, 2000, p.21). This statement is like the point of Newmark (2001, p.94) who defined and specified on the main area of issues but ignored the other aspects.

Confucian words, as specific culture-bound words, referring to the core concepts, proper nouns and idioms in Confucian works (Zhao & Guo, 1988), are the main body to develop Chinese culture and inherit its magnificent Confucianism. They have aroused wide concern in academic field, as their conceptual representations are essentially important to the widespread and correct comprehension of Confucianism. As for the origin of Confucian words, we can date back to the Confucian terms in philosophy (Chan, 1986). Later, they have been extended to the related proper names and concepts appeared in the six classical Confucian works and subsequently collected in Chinese Confucian Terms Dictionary.

As a bridge between two different cultures, Confucian words exactly play a crucial role in the spread of Chinese traditional culture, and there is a growing interest in representation of Confucian words in Chinese-English dictionary (C-E dictionary in short) in both translation (Legge, 1872; Collie, 1970; Barry, 2011) and lexicographical fields (Béjoint, 2002; Svensén, 2009; Xu, 2002a, 2002b). Likewise, Biblical words are entitled to these key concepts, terms and proper names in Bible (Liang, 2015), and have grown into the research focus of western cultural studies in the past decades. So it's meaningful and significant to compare the representation of two culture-bound words and help improve the Confucian word compilation in C-E dictionary.

The comparative study of dictionary is the key point of comparative linguistics and asserts the increasing importance of the research in bilingual dictionaries. Actually, during the past decades, plenty of researches (Lemmens & Wekker, 1991; Bogaards, 2001; Dziemianko, 2011; Ptasznik, 2014) have been conducted, aiming to research the microstructure of learner's dictionary. For one thing, the early study of microstructure laid emphasis on the comparative paradigm, mainly with regarding to the grammatical information (Lemmens & Wekker, 1991), representation validity (Bogaards, 1996) and labelling status (Dziemianko, 2011). For another, the comparative research and quantitative

analysis of *Big Five* have optimized the dictionary compilation and representation, like quantitative study about deictic words (Xu, 2005) and other research on high-frequency grammatical marker (Coffey, 2006). Besides, collocation is also the emphasis of comparative research in learner's dictionary (Walker, 2009; Dziemianko, 2014).

Therefore, the present study will adopt the theories of Confucian words and bilingual lexicography, trying to conduct a comparative analysis of representational structure of Confucian words and Biblical words, so as to improve and perfect the representation structure of Confucian words in C-E dictionary.

## II. THE TOPOLOGICAL STRUCTURE OF BILINGUAL DICTIONARY

### A. *The Topology of Culture and Translation*

The topology of culture enhances the complexity of the structural mapping of Confucian words (especially the culture-bound words). The multiple expressions of culture have constants in the deep structure, so it is very meaningful to consider the internal structure of culture as "topology" (Steiner, 2001, p.448-449). Culture has a relatively stable core or root. Therefore, the constants that constitute a particular culture keep their internal quality unchanged even in cross-cultural mapping and meaning extension, and enhance the complexity of the translation in Confucian words as there are invariants and constants underlying the manifold shapes of expressions in our culture (Steiner, 2001, p.444).

The application of topology in translation lays a solid foundation for the improvement of Confucian words in C-E dictionary. For one thing, the topological nature of culture provides a theoretical basis for the translation of Confucian words, because culture is a sequence of transformation based on language variables (Steiner, 2001, p.448-450). The various kinds of relationship in dictionary translation embody the "constants in transformation" in the structural extension, prove to be dynamic and innovative in nature. For another, the topological translation centers on the reordering of constant structure and reappearance of event component, concerning both culture and language. The manifold transformations and reordering of relation between an initial verbal event and subsequent reappearance of this event might best be seen as topological (Steiner, 2001, p.444). That is to say, the topological transformation of translation structure is based on the cultural constants and regards the linguistic variable as the carrier.

### B. *The Application of Topology to Bilingual Dictionary*

#### (a). *The Feasibility of Topology to Bilingual Dictionary*

We apply the topology theory into the analysis of bilingual dictionary according to the following reasons.

Firstly, the structure of bilingual dictionary can be treated as topology as center on the topological equivalence and mapping transformation between two topological spaces. Bilingual dictionary in nature emphasizes translation (Zgusta, 1971), and seeking for equivalents is the fundamental aim of bilingual dictionary definition. Two topological spaces are topologically equivalent if there is a bijective function between them that yields a bijective correspondence between the open sets in the respective topologies (Egenhofer & Franzosa, 1991). Therefore, the theories and principles of "topological equivalence" can be adapted to bilingual dictionary representation.

Secondly, both point-set topology and tradition bilingual dictionary are featured with hierarchical structure and concerned with spatial relationship. Point-set topological theory illuminates the hierarchical feature of topology including their interior and boundary and other necessary components which in turn helps intertwine into a topological space. The translation in bilingual dictionary focuses on the mapping of culture constants in two topological spaces based on language transformation. Therefore, it's quite meaningful to apply topological paradigm to the new bilingual dictionary representation structure. Besides, the reordering of culture core in topological structure, especial the unchanged cultural constants, caters for the translation of culture-bound words and provides a manual principal for their translation.

#### (b). *The Feature of Topology in Bilingual Dictionary*

Both the theories of topology in culture and translation have been extended to dictionary study and provide a theoretical framework for the present study. According to the point-set topological relation (Egenhofer & Franzosa, 1991) which defines the topological point as the fundamental entity which composes the fundamental components of topological set. Actually, the point-set approach is the most general model for the representation of topological spatial regions (Egenhofer & Franzosa, 1991). The topological point and set are mainly about the distribution and portion of the language variables, while the field focused on the assemblage and relevance of representation structure.

Besides, the topological set integrates the topological points and accumulates them in order under the specific domain. The definitions of relations in terms of set operations use set theory to describe topological relations (Egenhofer & Franzosa, 1991). In this case, the domain which integrates the topological point and sets to form an event domain or topological field. Therefore, we can treat the microstructure of bilingual dictionary as topological structure since it is mainly concerned with the relations between equivalent, sense, example which indicate the semantic, logical and spatial relations among the micro-components, hierarchically organized and collected through separate topological point (from part of speech, equivalent, appended meaning), topological set (mainly concerning example) and topological field (based on sense division) individually.

Therefore, based on the topology of translation the present study will conduct an empirical study on Confucian words

and apply the point-set topological relation and mapping transformation framework into the analysis of Confucian words.

### III. THE PRESENT STUDY

#### A. Research Objects

##### (a). *The Selection of Dictionary*

In this study, we will select five C-E dictionaries to investigate the compilation of Confucian words, including *Chinese-English Dictionary* 3<sup>rd</sup> edition, (henceforth CED3 in short, 2010), *New Century Chinese-English Dictionary* 2<sup>nd</sup> edition (NCCED2, 2013), *New Age Chinese-English Dictionary* 2<sup>nd</sup> edition (NACED2, 2014), *Modern Chinese-English Dictionary* (MCED, 2001) and *Chinese-English Dictionary* (CED, 2006). All of them are middle-sized and categorized into active dictionaries (with more than 100,000 lemmas), published in 21<sup>st</sup> century and can be regarded as the representatives of the best and most influential C-E dictionaries in China now.

To compare is to find the drawbacks and fill in the gap of dictionary compilation between Confucian words and Biblical words in Five E-C dictionaries (bilingualized *version of Big Five*). They are *Longman Dictionary of Contemporary English* (henceforth Longman in short), *Macmillan English Dictionary for Advanced Learners* (Macmillan), *Cambridge Advanced Learner's Dictionary* (Cambridge), *Oxford Advanced Learner's Dictionary* (Oxford) and *Collins Cobuild Advanced Learner's Dictionary* (Collins). *Big Five* enjoys a long history of dictionary-compiling practice, with good reputation among EFL learners around the world and dominating a large proportion of dictionary market share. Although C-E dictionary compilation has gone through a history over 200 years and achieved great progress, we need to scrutinize the representation approaches of Confucian words in C-E dictionary. Therefore, it is essential for us to make a comparison between the Confucian words and Biblical words so as to improve and optimize the treatment of the formers.

##### (b). *The Selection of Confucian and Biblical Words*

In order to select the Confucian words systematically and comprehensively, we conduct the present sampling based on the *Chinese Confucian Words Dictionary* (1988), the only thesaurus dictionary of Confucian words around the world. The dictionary contains 620 Confucian words in total, so we conduct a random sampling to select 110 Confucian words for the present study. In order to enforce the reliability and validity of research object, we check the Confucian words in *Contemporary Chinese Dictionary* (henceforth CCD) to make sure that all those sampled words have been collected in both dictionaries. Therefore, we adopt the method of isometric sampling and finally 55 Confucian words (including 52 conceptual words and 3 Proper nouns) have been selected to form the final object of the study.

Similar to the selection process of Confucian words, we sample the Biblical words from *Encyclopedic Dictionary of the Bible* (2015). Similarly, we follow the principle of isometric sampling and select 162 Biblical words firstly and again we check them in *Big Five* for its collection status. After the similar isometric samples, 54 biblical words (including 51 conceptual words and 3 Proper nouns) have been finally extracted according to the principle of stratified sampling.

#### B. Research Process

Once the research objects of the present study (55 Confucian words and 54 Biblical words) have been selected, we record the data of culture-bound words in every topological structure from five C-E dictionaries and five E-C dictionaries alternatively. Based on the theoretical framework of translation topology (Chen & Chen, 2016) and microstructure of bilingual dictionary (Svensén, 2009), we will classify the representation model into 3 topological hierarchical structure, including topological point, topological set and topological field.

As for the statistical approach of topological structure, we integrate the demarcation and definition for topology in translation, culture and mathematics and illuminate them in the following practical way. To be more specific, the main topological structure of the Confucian words falls into 3 parts: topological point, topological set and topological field, and each of the components will be accounted (see section 2.2). For each of the components mentioned above, 1 point will be accounted in the process of data recording. As for the statistical method, we adopt the method of descriptive statistics and inferential statistics (t-test) to survey the difference between groups.

#### C. Research Question

Inspired by Steiner (2001), Dziemianko (2011) and Hu (2014), the present study aims to investigate the translation feature of Confucian words based on topological translation and comparative lexicography. *Big Five* will be adopted for the comparison of topological structure. To be more specific, the study tends to address the following research questions:

- 1) What is the distribution of topological points and topological sets in Confucian words compared with Biblical words?
- 2) What are the features of topological fields in Confucian words?
- 3) What's the transformation strategy of topological fields in Confucian words?

## IV. DATA AND RESULTS

In this section, we will investigate the topological structure (including topological point, topological set and topological field) of Confucian Words by comparing them with those of Biblical words in five E-C dictionaries. Descriptive statistics and independent-sample t-test will be conducted to display their difference. Furthermore, a general discussion about the results and the possible causes will also be held based on the statistical analysis.

A. *Topological Point Analysis*

Table 1 indicates a general distribution of topological points between Confucian words and Biblical words. Furthermore, we also make a null hypothesis that there is no significant difference in topological points between Confucian and Biblical words.

TABLE 1  
DESCRIPTIVE STATISTICS AND INDEPENDENT-SAMPLE T-TEST OF TOPOLOGICAL POINTS

Items	Objects	Average	Standard Error	Independent-Sample t-test (Sig)
Topological points				
Part of Speech	Confucian words	0.73	0.06	P<.05
	Biblical words	1.41	0.03	
Equivalent	Confucian words	4.44	0.33	P<.05
	Biblical words	6.09	0.35	
Appended Meaning	Confucian words	0.48	0.05	P<.05
	Biblical words	8.23	0.53	

Table 1 shows the following results. For one thing, the statistical data indicates that Biblical words contain more topological points (including part of speech (POS), equivalent and appended meaning) than that of Confucian words. Actually, Table 1 shows that the figure of POS in Confucian words is less than 1 on an average, which means that not all Confucian words contain part of speech labeling.

For another, table 1 implies that the difference between Confucian words and Biblical words is significantly striking in part of speech and appended meaning. Furthermore, we hold an Independent-Sample t-test to check the degree of difference. The figure shows that all topological points' significant level is 0.00 (namely  $P < 0.05$ ). Therefore, the null hypothesis is invalid, and we can infer that there is a significant difference between Confucian words and Biblical words in topological points.

B. *Topological Set Analysis*

As for topological set, we will mainly survey the examples based on the theoretical framework of topology translation as examples extend the meaning of culture-bound words by realizing the potential relations between initial-verbal event and subsequent reappearance of this event (Stein, 2001). Table 2 gives a general description of topological sets in Confucian words and Biblical words respectively.

TABLE 2  
DESCRIPTIVE STATISTICS OF TOPOLOGICAL SET

Items	Average	Standard Error	Independent-Sample t-test (Sig)
Topological set			
Confucian words	4.06	0.46	P<0.05
Biblical words	5.45	0.35	

The results indicate that the significant level of the difference in topological sets between Confucian and Biblical words is 0.02 ( $P < 0.05$ ). Therefore, the null hypothesis is invalid, which means there is a significant difference between the two groups.

Example coverage ratio is a criterion for the example allocation analysis (Svensén, 2009). From Chart 1, we can easily conclude that there is a wide discrepancy in the example allocation between the two groups which in turn indicates the difference of topological sets between them. It also informs that the divergence of the example coverage in Confucian words (ranged from 45.45% to 94.55%) is more prominent than that of Biblical words (from 70.37% to 88.89%), which demonstrates again the fact that there is a striking difference about topological set between 2 groups.

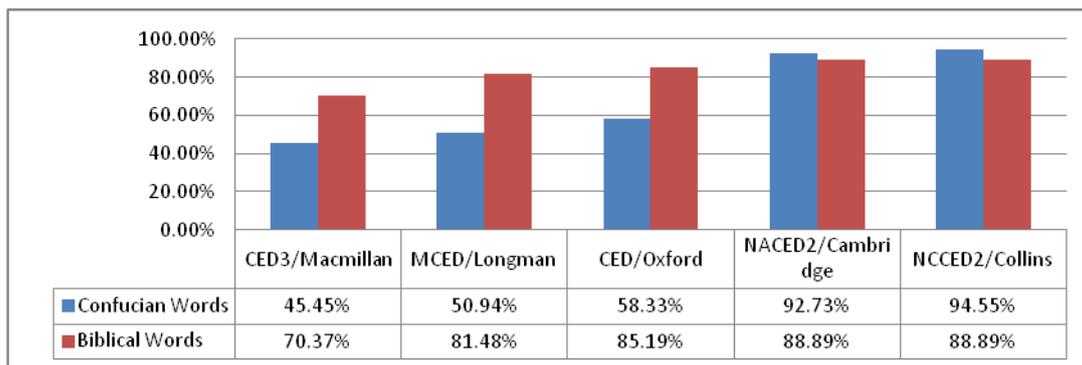


Chart 1 The Topological Set Based on Examples

C. Topological Field Analysis

The topological field is mainly an integration of topological points and sets, mainly concerning the underlying assemblages and relevance of functions and configuration (Stein, 2001, p.444). In this section, we will analyze the field from topological density and componential relevance.

(a). Statistical Feature of Topological Field

From table 3, we can find out that the average of topological fields based on the sense division in Biblical words is much higher than that of Confucian words (3.36>2.49). Furthermore, the independent-sample t-test (Table 3) shows the significant level of sense division is 0.00 (namely  $P < 0.05$ ). So, there is a significant difference between Confucian words and Biblical words about topological field.

TABLE 3  
DESCRIPTIVE STATISTICS OF TOPOLOGICAL FIELD

Items	Average	Standard Error	Independent-Sample t-test (Sig)
Topological field			
Confucian words	2.49	0.18	P<0.05
Biblical words	3.36	0.19	

(b). Assemblage Analysis Based on Topological Field

As for the assemblage of topological field, we will mainly analyze the Confucian words and Biblical word comparatively. Considering the present study, we analyze the assemblage status of topological field from the two perspectives: Point/ Set Ratio and Field Density. The former mainly refers to the portion of topological points in a certain set which indicate the density of topological set while the latter is about the total number of topological point and set in a specific topological field on an average.

TABLE 4  
ASSEMBLAGE ANALYSIS OF CONFUCIAN WORDS AND BIBLICAL WORDS

	Confucian Words	Biblical Words	Independent-Sample t-test (Sig)
Point / Set Ratio	1.39	2.89	p<.05
Field Density	4.89	7.30	p<.05

From table 4, we can conclude that both the Point/Set ratio and Field Density imply that the assemblage of Biblical words enjoys higher proportion than that of Confucian words. This can be confirmed from the Independent-sample t-test ( $p<.05$ ) which indicates that Biblical words and Confucian words are significantly different in both ratio and density.

(c). Relevance Analysis Based on Topological Field

Relevance is mainly concerned about the relationship among the mediostructure components in and cross the topological field, especially the relevant items and relevance/field ratio (the proportion of relevant senses or lemmas in a specific topological field).

TABLE 5  
RELEVANCE ANALYSIS OF CONFUCIAN WORDS AND BIBLICAL WORDS

	Confucian Words	Biblical Words	Independent-Sample t-test (Sig)
Relevant items	0.54	1.39	P<.05
Relevance/Field Ratio	0.16	0.56	P<.05

As table 5 indicates, the Biblical words contain more relevant items than that of Confucian words (1.39>0.54), and

the difference is statistically significant ( $P < .05$ ). The same feature and tendency can be verified in both relevant items and Relevance/Field ratio.

(d). *Transformation Strategy Based on Topological Field*

Based on the transformation strategy of topological shift (Steiner, 2001; Chen & Chen, 2016) and bilingual translation structure (Zgusta, 1971; Bejoint, 2002; Svensén, 2009), the present study will conduct a comparative survey about the transformation strategy of Confucian words in C-E dictionary and Biblical words in *Big Five*. As for the strategy classification, we will adopt the criteria of Stein (2001) and Chen & Chen (2016), mainly analyze the 4 strategies including intertextuality strategy, analogy strategy, direct translation and Modification strategy. The former two strategies emphasize the cultural constants (or roots) in topological transformation, focusing on the inference competence of core cultural constants in source language, while the latter two strategies focus on the linguistic variables of target language in topological mapping. As for the statistical method, we marked all the cultural words (including the Confucian words and Biblical words) according to classification criteria (1 point for 1 strategy based on one sense). Later, we will figure out the percentage of transformation strategy so as to make a comparative study syntagmatically.

TABLE 6  
TRANSFORMATION STRATEGY BASED ON TOPOLOGICAL FIELD

	Cultural Constants (%)			Linguistic Variables(%)		
	Intextuality	Analogy	Total	Direct Translation	Modification Translation	Total
Confucian words	42.68	38.14	80.82	11.86	7.32	19.18
Biblical words	40.13	36.41	76.54	13.47	10.99	24.46
Between-groups	P>.05			P<.05		

1) Totally speaking, table 6 shows that both Biblical words and Confucian words share the similar distribution model in topological transformation strategy. From table 6 we conclude that intertextuality is the dominant strategy in two groups, while the modification translation is less likely to be applied.

2) As for the difference between the two groups (Confucian words and Biblical words), Table 6 indicates that Confucian words are featured with more cultural constants ( $80.82 > 76.54$ ) while Biblical words pay more attention to linguistic variables ( $24.46 > 19.18$ ). Furthermore, the two groups' differences in linguistic variables are statistically significant ( $P < .05$ ) but their differences in cultural constants remain insignificant ( $P > .05$ ).

D. *General Discussions*

The data above indicates that, compared with Biblical words, Confucian words have heterogenic topological components, featured with simplification and discreteness. Actually, the simplification inevitably decreases the assemblage of topological components while discreteness of topological structure magnifies the irrelevance of topological mapping and influences the reappearance and reordering of an initial event concerning the culture-bound words. As for the reasons, the paucity of corpus and the overdependence on monolingual dictionary serve as the dominant and primary ones.

(a) The Topological components of Confucian Words in C-E dictionary and Bible words in E-C dictionary are heterogenic, and the former contains more simplified topological points and sets. To be more specific, Confucian words have simpler topological structure than that of Biblical words, and the two groups of culture-bound words have statistically significant differences in that aspect.

First, the labeling system in Confucian words only involves POS labeling and pragmatic labeling, while labels of Biblical words are more diversified and abundant, including word class, pragmatic labeling, collocation and syntactic structure as well. As for POS, dictionaries like MCD only tags the POS of monosyllabic lemmas such as “注”(zhù), “理”(lǐ), “道”(dào) and “德”(dé). Moreover, we find many inconsistencies about POS tagging among 55 Confucian words. For example, “胎教”(Tāijiào) was simply labeled as verb in NACED2, CED3 and NCCED2. Based on language intuition, we can easily enumerate its noun usage. Therefore, we make a survey about “胎教”(tāijiào) in CCL<sup>1</sup> and CN<sup>2</sup> corpus. The results (see table 7) indicate that among the valid concordance of 76 items, only 7 of them are used as verb while the rest of 67 items are used as noun, which is quite different from the POS labeling in the current C-E dictionaries.

TABLE 7  
SITUATIONS OF THE PART OF SPEECH OF “胎教”(TĀIJIÀO) BASED ON CCL AND CN CORPUS

	Verb	Noun
胎教(tāijiào)	9	67

As for reasons, the paucity of corpus in dictionary compilation seems to be fundamental for this inaccurate labeling. From this table we can find that most of Confucian Words have been falsely labeled due to the lack of survey or

<sup>1</sup> ([http://ccl.pku.edu.cn:8080/ccl\\_corpus/](http://ccl.pku.edu.cn:8080/ccl_corpus/))

<sup>2</sup> (<http://www.ncorpus.org/>)

investigation on usage. Furthermore, the overdependence on the monolingual dictionary proves to be another reason for the homogeneity of topological structure between C-E dictionaries, and a case in point is the equivalent. It has been found out that except for NACED2 and NCCED2, there is a prominent homogeneity among MCED, CED and CED3. For example, in MCED and CED alone there are 40 lemmas demonstrating the exact same equivalent in the sampled 55 words, and the high proportion of same equivalent for Confucian word between different C-E dictionaries shows that there is a high overdependence among the two dictionaries.

Second, it has been clearly found from Table 1 that there is a huge gap about appended meaning (8.23>0.48) between the two groups. This simplification in topological point (especially the appended meaning) will influence the compositionality of topological field. Aside from the average, if we compare the proportion of entries with appended meaning (see chart 2), we can easily find the divergence between the two groups.

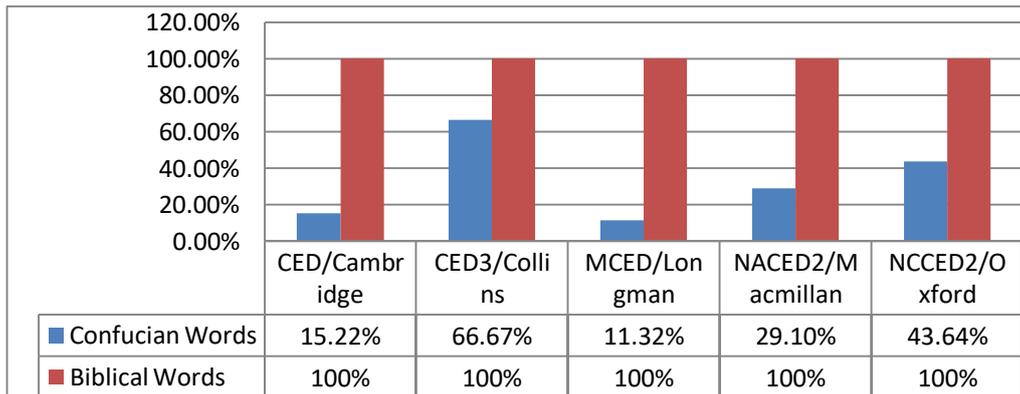


Chart 2 Proportion of Entries with Appended Mean

This chart clearly manifests that most Confucian words are suffering from the ignorance of the appended meaning in dictionaries. The shortage of the appended meaning will decrease the topological points and simplify the topological field eventually.

(b) Confucian words are inferior to biblical words in terms of structural integrity. Firstly, the topological sets based on coverage of examples will help users grasp their procedural and declarative knowledge by reordering the cultural constants from rich linguistic variables. Most of the Confucian words in Chinese-English dictionary aim at facilitating comprehension of Confucian words and have been suffering from the deficiencies of illustrated examples (see Chart 1). Furthermore, a large number of Confucian words borrow examples directly from the Chinese dictionaries (especially CCD) although they differ in proportion (see the table below), and “动静” (dòngjìng) is a case in point. “发现可疑动静” serves as a typical example in NCCED2, MCED and CED3 respectively while “一有动静就来报告” exists both in NACED2 and CED3. This has grown into a fundamental reason for the similarity and homogeneity of topological sets among the Confucian words.

TABLE 8  
THE DEPENDENCY OF TOPOLOGICAL SETS IN CONFUCIAN WORDS BASED ON EXAMPLES

	MCED	NCCED 2	CED	CED3	NACED2
Examples Borrowed from CCD	34	69	40	26	61
Total Examples	146	215	123	137	216
Percentage (%)	23.29	32.09	32.52	18.98	28.24

By contrast, examples of Biblical words in *Big Five* originate from their own corpora, which in turn helps improve the diversity and density of examples and reduce the repetitions and homogeneity.

Secondly, topological fields based on sense division show that their shortage and limitation will weaken the representation validity. In the five C-E dictionaries, “先进” displays different topological fields based on disposition of sense in different dictionaries (see Example 1, hereinafter shortened as Ex.1).

Ex.1

- 【先进】 xiānjìn advanced (MCED)
- 先进 advanced (CED)
- 先进 xiānjìn①形 advanced ②名 an advanced individual/collective (NACED2)
- 先进 xiānjìn 形 advanced; exceptional; foremost; excellent; exemplary; ahead of the times (opp. 落后) (CED3)
- 【先进】 xiānjìn ①<形> advanced; progressive ②<名> advanced individual or group (NCCED2)

From the above examples, it can be seen that MCED, CED and CED3 provide “先进”(xiānjìn) with one topological field, namely “advanced”, while NACED2 and NCCED2 give two respectively, “advanced” and “advanced individual or group”. The great difference among dictionaries expands the topological field discrepancy. So, we resort to CCL for

more details and it turns out that there are 52710 concordances of “先进” (xiānjìn) in the corpus. Due to the limited time and energy, we sample 1000 concordances, among which 908 concordances are valid.

TABLE 9  
SENSE STRUCTURE OF “先进”(XIĀNJÌN) BASED ON CCL

Sense	advanced	advanced individual or group	advanced entity
Concordance(item)	877	29	2
Percentage(%)	96.58	3.2	0.22

Table 9 shows that “先进”(xiānjìn) is divided into three senses, among which “advanced” accounts for the largest proportion(96.58%) and the sense “advanced individual or group” ranks the 2<sup>nd</sup> (3.2%). This usage pattern supports the objective evidence for NACED2 and NCCED2 to entail the sense “advanced individual or group” in the entry of “先进”(xiānjìn). As for the reasons for the divergence of sense collection, the ignorance of corpus grows into the basic one. Corpus-based principle of sense collection will help us get a comprehensible output about the usage of Confucian words. Furthermore, it will ensure and solidify the presentation structure and topological field categorization.

(c) Confucian words and Biblical words are heterogenic in topology transformation, the former being more descriptive and attentive to analogy but limited on reappearance and reordering of initial event domain. Confucian words in C-E dictionaries are not only simplified on the translation topology, but also show differences in transformation strategy, compared with Biblical words in Big Five.

First, the transformation strategy survey shows that the translation model of Confucian words is primarily descriptive and comprehension-oriented, which in the long run affects the reappearance or related event of the translation structure. Descriptive definition neglects insertability of equivalent words, emphasizing the comprehension instead of structural compatibility (syntagmatic and paradigmatic) of the equivalent words. That’s the reason why Confucian words pay more attention to cultural constants based on intertextuality and analogy (see table 6 for more details). Sampling displays that descriptive translation of Confucian words has an extremely high proportion (accounts for 40% or so). In contrast, translation model of Biblical words is mainly to provide the equivalent words with high insertability and productivity. Therefore, Biblical words in *Big Five* value structural compatibility on the topology transformation and emphasize more on linguistic variables based on direct and modification translation strategy (as table 6 indicates). Besides, some Confucian words overuse descriptive definition in representation model. A case in point is “太岁”(tāisui) in the 5 C-E dictionaries (see example below). Only 2 of them provide insertable equivalents while other 3 dictionaries only offer descriptive explanation. On the contrary, Biblical words tend to provide more equivalents in the process of bilingualization and help improve the insertability and productivity.

Ex.2

太岁 tāisui 名①<旧> Master of the Year; Jupiter ② God of the Year( a deity who was believed to change his dwelling on earth every year, and to allow no building wherever he happened to dwell, his every locations being set by the almanac) ③<贬>nickname for the most powerful man in a locality: 花花~ King of Lechers/ 镇山~Lord of the Mountain( a brigand chief) (CED3)

Second, transformation validity based on topology set indicates that the Confucian words in C-E dictionaries are mainly limited to phrase examples for related event domain, stressing analogy and intertextuality of topology but weakening the reordering of event component in macro context. The topological sets of Biblical words in E-C dictionaries consist predominantly of complete sentences, emphasizing direct and modification event or domain based on assemblage and relevance of topological sets. Confucian topological sets in C-E dictionaries focus on language information, such as collocation information and composite patterns, and attach importance to the expansion of the topology point. But the lack of context and irrelevance of topological components will affect the presentation of Confucian Words’ meaning potential (including the reordering of related event). A representative example is Ex.3 in NACED2. “人道”(réndào) has been supplied with “humanity; human sympathy”, which is rich in lexical structure but lack of procedural knowledge and usage patterns. Furthermore, the etymological and historical connotation fade away and this will affect the reader’s comprehension. Actually, we investigate the etymological meaning and find that “人道”(réndào) originally refers to the “general rule of Confucian about human affairs and social norm and regulations”, correspond with “天道”, adopted from “天道远, 人道迩” in 《易传·系辞下》. The topological set based on phrasal example “in the name of humanity” reflects part of analogical and cultural meaning while deletes the reordering and reappearance of related event in source language.

Ex.3

【人道】réndào ①<名> humanity; human sympathy: 以~的名义 in the name of humanity ②<形> human; humane inhumane ③<动> [usu used in the negative] have sex: 不能~ (of man) be impotent (NACED2)

On the contrary, Biblical words are concerned about assemblage based on topological points and relevance of topological set. Taking topology set as carrier, those words are attentive to frame mapping, context reoccurrence as well as topological continuity. “Service” (in Ex.4) has rich sense structure because of its complete linguistic topological sets based on high frequency usage. Grounded on semantic field and framework, the compiler presents the topological field

“a religious ceremony” with the reappearance of related event based on topological sets, including “morning/evening service” and “funeral/marriage/memorial, etc. service”. The prominence and homography of topological set will keep cultural constants and enrich the linguistic variables which in turn will improve the topological structure.

Ex.4

Service ...10[C] a religious ceremony 宗教礼仪; 宗教仪式: morning /evening service 晨祷、晚祷 to hold/attend a service 举行/参加礼拜 a funeral/marriage/memorial, etc. service 丧葬、结婚、追思等宗教仪式 (Oxford)

## V. CONCLUSION

Based on the results displayed in above sections, we can sum up the translation topology of Confucian words in C-E dictionaries. Firstly, among all the components, the topological points and sets of Confucian words are simpler and discrete. The topological components of Confucian words are featured as simplified topological points (including POS labeling, equivalent and appended meaning) and topological sets (based on example) while discrete in topological transformation. Secondly, both the topological set and topological fields show that Confucian words are inferior to Biblical words in terms of structural integrity. Thirdly, Confucian words and Biblical words are heterogenic in topology transformation, the former being more descriptive and limited on reappearance and reordering of initial event domain.

All in all, the study indicates that Confucian words and Biblical words are heterogenic in simplification and discreteness. The reasons are as follows: the difference of compilation principle and the overdependence on the monolingual dictionary differentiate the language variables, which finally leads to the structural difference in Confucian words of topological transformation. The paucity of corpus changes the structure density of cultural topology sets, and forms different transformation pattern and representation validity of culture-bound word.

## REFERENCES

- [1] Aixela, J. F. (1996). Culture-specific items in translation. In *Translation, Power, Subversion*, R. Alvarez and M. Carmen-Africa Vidal(eds), 52-78. Clevedon/Philadelphia: Multilingual Matters.
- [2] Baker, M. (2000). *In Other Words: A Course Book on Translation*. Beijing: Foreign Language Teaching and Research Press.
- [3] Boggards, P. (1996). Special feature dictionaries for learners of English. *International Journal of Lexicography*, 9 (4), 273-320.
- [4] Barry, C. K. (2011). *Neo-Confucian self-cultivation*. Honolulu: University of Hawaii Press.
- [5] Chen, F. & Chen, H. D. (2016). *Topotranslatology*. Beijing: Renming Press.
- [6] Coffey, S. (2006). High-frequency grammatical lexis in advanced-level English learners' dictionaries: From language description to pedagogical usefulness. *International Journal of Lexicography*, 19 (2), 157-173.
- [7] Collie, D. (1970). *The Chinese Classical works Commonly Called The Four Books*. Scholars' Facsimiles & Reprints.
- [8] Dziemianko, A. (2011). User-friendliness of noun and verb coding systems in pedagogical dictionaries of English: a case of Polish learners. *International Journal of Lexicography*, 24 (1), 50-78.
- [9] Dziemianko, A. (2014). On the presentation and placement of collocations in monolingual English learners' dictionaries: Insights into Encoding and retention. *International Journal of Lexicography*, 27 (3), 259-279.
- [10] Egenhofer, M. J. & Franzosa, R. D. (1991). Point-Set topological spatial relations. *International Journal of Geographical Information System*, 5(2):161-174.
- [11] Hartmann, R. & James, G. (1998). *Dictionary of Lexicography*. London: Routledge.
- [12] Hu, W. F. (2013). *The Construction of Multidimensional Definition Model in Chinese-English Dictionaries: A Lexicographical Study on Psychological Verbs*. Beijing: Science Press.
- [13] Legge, J. (1872). *The Chinese Classics: with a translation, Critical and Exegetical Notes, Prolegomena and Copious Indexes*. London: Trubner & Co.
- [14] Lemmens, M. & Wekker, H. (1991). On the relationship between lexis and grammar in English learners' dictionaries. *International Journal of Lexicography*, 17 (1), 227-242.
- [15] Liang, G. (2015). *Encyclopedic Dictionary of the Bible*. Shenyang: Liaoning Renming Publishing House.
- [16] Newmark, P. (1981). *Approaches to Translation*. Oxford: Pergamon Press.
- [17] Ptasznik, B. & Lew, R. (2014). Do menus provide added value to signposts in print monolingual dictionary entries? An application of linear mixed-effects modeling in dictionary user research. *International Journal of Lexicography*, 27 (3), 241-258.
- [18] Steiner, G. (2001). *After Babel: Aspects of Language and Translation*. Shanghai: Shanghai Foreign Language Education Press.
- [19] Svensón, B. (2009). *A Handbook of Lexicography: The Theory and Practice of Dictionary Making*. New York: Cambridge University Press.
- [20] Walker, C. (2009). The treatment of collocation by learners' dictionaries, collocational dictionaries and dictionaries of business English. *International Journal of Lexicography*, 22 (3), 280-298.
- [21] Xu, H. (2005). Treatment of deictic expression in example sentences in English learners' dictionaries. *International Journal of Lexicography*, 18 (3), 289-311.
- [22] Xu, S. G. (2002a). A revisit to Chinese-English dictionary. *Chinese Lexicographical Research*, (01), 126-138.
- [23] Xu, S. G. (2002b). A revisit to Chinese-English dictionary. *Chinese Lexicographical Research*, (02), 115-124.
- [24] Zhao, J. H. & Guo, H. A. (1988). *Confucian Dictionary in China*. Shenyang: Liaoning Renming Publishing House.
- [25] Zgusta, L. (1971). *Manual of Lexicography*. Mouton.

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# Humanistic Values in Metaphoric Expressions of Traditional Marriage in Tolaki Mekongga Kolaka

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**Abstract**—This paper discusses the humanistic values based on the local wisdom of *Mekongga* dialect of Tolaki. It focuses on the form of metaphorical expressions. The problem relates to the types of humanistic values contained in the text "*mowindahako*" (expression relates to customary marriages accomplishment). The metaphorical expression in the marriage custom is not only an unusual form of speech in society, but it is also an indication of various local policies of the people who use it. Tolaki *Mekongga* community in Kolaka Regency, Southeast Sulawesi, has a very strong cultural background. The data source of this research is the text expression of "*mowindahako*". The data were obtained by conducting interviews and observations at the time a wedding ceremony was performed and also the published texts as a comparison. The results of data analysis indicate that the humanistic values in the text of "*mowindahako*" are packaged in an understandable metaphorical form based on the cultural context of the community, family values, respect for fellow human beings, and praying for mutual safety. The expressions of these values are in form of human metaphors of human, substance, living of flora and plants, the energy of water, and being (truth). In addition, in the expression of traditional marriage, the wisdom of the community in solving various problems, the wisdom of the supporting community in obeying the provisions or rules that have been mutually agreed upon, and the wisdom of the community in maintaining the harmony of life and association, especially the internal life of the supporting community.

**Index Terms**—humanistic values, metaphoric expression, traditional marriage

## I. INTRODUCTION

The use of language in social life, as in other socio-cultural contexts, does not only express the thoughts and feelings of the speakers but also has a specific purpose according to the context of the underlying situation. It is important to know that in using language, the speakers need to pay attention to the condition of where they belong because the environment also takes part of the language produced while doing an interaction (Anggrawan et al., 2019). The interaction of language and culture is observed, language is the embodiment of thoughts and feelings as a form of the human mind (Alisjahbana, 1997; Sunardi et al., 2018). Since language is the embodiment of the human mind, language is not merely a grammatical structure that only contains sound, word, and sentence aspects but language also reflects the completeness of a culture (Arafah & Kaharuddin, 2019; Fadillah et al., 2022). The language used in a conversation or a textbook is all creation of people's minds that focused on reality (Asriyanti et al., 2022). The use of language as a cultural event involves several components, among which the most important are the participants, certain cultural settings or backgrounds, locations, channels, language norms, gender, speech objectives, and of course institutions as the vehicles or places for speech to work (Bauman & Briggs, 1990; Arafah, B. et al., 2020).

The value system, including the cultural values, is a guideline adopted by every member of society especially to perform good attitude and behavior and also becomes a benchmark for assessing and observing how individuals and groups act and behave. So, the value system can be said as a standard norm in social life (Hasjim et al., 2020; Arafah, B.

et al., 2021). Oktavianus (2006, p. 117) explains that Indonesian philosophy, including cultural values, is stored in proverbs, traditional houses, traditional ceremonies, old myths, decorative clothing, dance forms, music, weaponry, the system of social rules. Through language, a proverb is a medium for displaying cultural meanings which contain values. Language categorizes cultural reality (Duranti, 1997; Foley, 1997; Arafah & Hasyim, 2022). Language has a classification system useable to trace cultural practices in a society. Cultural models can be raised explicitly through expressions (Oktavianus, 2006). The cultural models in question include perceptions, attitudes, behavior, ethics, and morals (Kaharuddin et al., 2020; Purwaningsih et al., 2020).

Cultural values contain meanings as depicted by the cultural elements of society. The meanings relate to ethnicity or ethnic groups (Yulianti et al., 2022). Likewise in the Tolaki Mekongga community, Kolaka Regency, Southeast Sulawesi Province, the marriage ceremony contains messages based on local wisdom in Tolaki's local language. In the ritual of "mowindahako" (completion of marriage customs) in the Tolaki Mekongga ethnic group, language does not only function as a means of verbal communication but also as an element of culture. The use of ritual language in the marriage ceremony describes the cultural aspect. As part of the culture, especially rituals, language contains the cultural values of the people. Value of the people refers to something worth which can be used as a standard of behavior in people's lives in daily life (Afiyah et al., 2022).

Language is a medium for conveying cultural meaning which contains values. Language categorizes cultural reality (Duranti, 1997; Foley, 1997; Hasyim et al., 2020). The cultural value leads to the formation of behavioral patterns which can develop into habitual actions and become the character of a person (Mokoginta & Arafah, 2022). Therefore, within a language, everything is presented and summarized concerning the phenomena of human life and reflects society, both for its good values and its ills (Mutmainnah et al., 2022). Many rituals bequeathed by the ancestors contain messages, values, and advice very useful for the next generation. These rituals are passed down orally by their heirs. The oral traditions have been developing for thousands of years ago (Mbete et al., 2004; Arafah et al., 2020). All these relics can only be interpreted by understanding the language. So language is the key to unlocking the veils and secrets of the past.

Kolaka Regency is inhabited by several ethnic groups such as Buginese, Makassarese, Torajanese, Moronene, Javanese, Balinese, Lombok, Buton, Muna, and several other ethnic groups. The Tolaki Mekongga ethnic group is one of the ethnic groups inhabiting the Kolaka Regency. This ethnic group has a socio-cultural background different from the other ethnic groups. These differences can be seen in the customs, habits, and language used. In Tolaki Mekongga ethnic community, there are still some traditional ceremonies or rituals related to the cycle of human life from birth to death. These rituals include birth, death, land clearing, harvest parties, building houses, and marriages.

The Tolaki Mekongga ethnic group views marriage as a somber (a family bond from one ancestor) to become a family tree. This is interpreted that a person who has gone through marriage is considered to have united in bonds as a member of a family clump who is joined in close ties with all family members from the families of both the wife the husband. The married couple is expected to give birth to many offspring who will further enlarge the family group as a thick grove of trees. Therefore, among the Tolaki ethnic community, there are three terms regarding marriage. The three terms are medulu which means to gather, unite, and mesanggina which means to eat together on one plate. The third is the most commonly applied term that is merapu which means to clump together, a state of the husband-wife bond, children, son/daughter-in-law, parents-in-law, uncles-aunts, brother/sisters-in-law, nephews, cousins, grandparents, and grandchildren. They are all in lush and shady trees (Tarimana, 1993; Arafah & Hasyim, 2019).

One of the traditional rituals still survives and is performed in the Kolaka community is the mowindahako ritual (traditional settlement). This ritual is performed in the context of carrying out the wedding ceremony. It is a ceremony of handing over the dowry and traditional equipment that must be fulfilled by the bridegrooms' side before the wedding ceremony is carried out. This ritual is the culmination or completion of the custom which is usually called momboko tudu o'sara (customary handover) which is carried out by each customary spokesperson (tolea). The customary settlement ritual is then followed by a marriage contract (marriage) usually related to the religion of the two prospective brides.

The marriage of expression of 'mowindahako' contains some useful messages for the bridegroom in which there are humanistic values intended to unite the bride and the groom to become a member of a new family in one extended family. In addition, the words conveying several expectations and prayers for happiness and continuity or permanence in the new household contain positive cultural values of the Mekongga people which serve as guidelines to behave in social life.

Based on the explication above, the problem to be discussed in this research is about the forms of humanistic values contained in the mowindahako text, and the representation of the local language in the ritual which is focused on the form of metaphorical expression. The benefits of this research are expected to have a contribution to the development of the study of cultural semiotics (linguistic anthropology).

## II. RESEARCH METHOD

This research used primary and secondary data. The primary data were the oral speech expressed in the ritual of mowindahako in Mekongga Kolaka ethnic group by a traditional spokesperson (tolea) or an informant located in the Sabilambo Exit, Kolaka District, Kolaka Regency. The primary data were taken from interviews and observations when

the marriage ceremony was performed. Furthermore, the secondary data was taken from published documentation and used as comparison data in data analysis.

### III. THEORETICAL REVIEW

The term metaphor has been used in a narrow and broad sense since ancient times (cf. Lieb, 1964). Although metaphor in the narrow sense describes a special figure of speech among other figures of speech, such as metonymy, synecdoche, hyperbole, and so on, metaphor in a broad sense includes the meaning of all figurative words. In the contemporary theory of language and literature, the narrow sense is more commonly used, although the separation from the broader sense of the term is often overlooked. Therefore, the term metaphor is only used in a narrow sense.

Some philosophers of language tend to define metaphor as a speech act that occurs only in parole. Thus metaphor is irrelevant to langue semantics. For this reason, they assume metaphor as a static word or semantic of sentences whose metaphor can never occur in the language system concerned (Ortony, 1993), and words and sentences are separated from the specific context of their occurrence (Davidson, 1978, p. 33). Davidson takes the extreme monist position, a metaphor containing nothing other than its literal meaning (Davidson, 1978, p. 32). Such a strict division of text and language systems is not particularly useful for metaphorical analysis. Static semantics does not allow for language changes or lexicalized metaphors. Metaphor analysis requires a dynamic semantic text that includes text and metaphorical communicative situations outside and above the word level. However, in language system norms, metaphors are contained in the lexicon. Just like all structures of language systems, metaphor is a structure that may or may not be realized in the text.

Metaphor serves as a tool to organize a series of ideas. With metaphor, we can understand what is meant (expressed) in the metalanguage. In the Big Indonesian Dictionary, metaphor is defined as the use of words with not their true meaning, but as a depiction based on similarities or comparisons (Poerwadarminta, 1985; Ismail et al., 2020). Hornby (1974) in the Oxford Advanced Learners' Dictionary of Current English suggests that metaphor is an example of using words to show something different from the actual meaning. While Longman, in the Longman Dictionary of American English states that metaphor is the use of a phrase (in a sentence) describing something expressed by using other words and it can be compared without having to use the word 'as' or 'like' what is meant. The three statements above convey the same thing, namely a metaphor as a figure of speech.

Lakoff and Johnson (2003, p. 14) argue that metaphor is a kind of poetic imagination strategy, an expression full of allegories. Metaphors unite or integrate into our daily lives, not only in language but also in our thoughts and actions.

### IV. DISCUSSION

In this study, the form of speech was found in each part of the mowindahako ritual. The form of speech has a peculiarity such as a metaphor. Metaphor is a form of figurative language style. Figurative speech always shows a form of application of expression and media models that can be understood because of the value of their use. When a person speaks figuratively, he will not focus on the problem directly addressed Haley (1980, p. 139). Meanwhile, Kridalaksana (2008, p. 152) argues that metaphor is the use of other words or expressions for other objects or concepts based on figures of speech or similarities, for example, the foot of a mountain, the leg of a table are analogous to a human leg.

Analysis of metaphorical forms in the ritual speech of mowindahako refers to the model proposed by Haley (1980, p.139-154). The model includes human, animate (fauna/animals), living (flora/fauna), object (all minerals), terrestrial (mountains, rivers, seas), substance (a kind of gas), energy (light, fire, wind, water), cosmos (sun, earth, moon), and being (abstract concepts, truth, sadness, etc.). The analyzed metaphor model is adjusted to the metaphorical form having been identified in the mowindahako ritual speech. Based on the model above, the analysis of the metaphor in mowindahako ritual is presented below.

#### A. Human

The expression of human metaphor is perceived as the existence of humans themselves with all forms of behavior to meet their needs including the ability to do good deeds. The use of human metaphors can be seen in the following text quote:

1. *Tusa tongano lipu peutumbuno wonua*  
the center pillar of the country supporting the village  
'Tiang tengah utama negeri'  
'The main pillar of the country'

The word *tusa tongano* 'middle pillar' contains a metaphor. A pole is depicted as something boosting the strength, livelihood, or long pillar made of bamboo, iron, or wood to boost (roof, bridge, house, and so on). That is the literal meaning of the form of the word. But the meaning of pole is as a figurative expression that the speaker conveys about a customary matter that must be known by the authorities in the place. In every customary affair, parties or people having an interest in solving them are certainly related. In the culture of Tolaki Mekongga people, reflected in marriage customs that the position of regional rulers such as the government (sub-district head, village head) plays an important role even becomes the pedestal, expectation, or grip that participates in making a decision. Therefore, concerning

customary talks, the presence of these government officials is important, apart from having the power as rulers or kings to regulate the population and become a buffer in people's lives. It is also interpreted as the main pillar in society to solve any social problems in society, and as the person who will straighten or complete the implementation of culture if there is an error or discrepancy. If there is no agreement, then the invited government official can take over the problem.

2. *Ie inggomiu tonomotuo okambo puutabuno wonua*

We are the leaders in the village, we are elders in the village 'O  
exalted one, elder leader in this land'

The purpose to be conveyed in the speech above is that the customary spokesperson expressed his request to 'tonomotuo' (traditional elders, traditional leaders) in the village. Before the traditional interpreter performs the ritual, he must go through a process to obtain permission or approval for an intention been planned and decided. The expectation is that the ritual is under customary rules or laws, and nothing is neglected so that the principle of kinship is maintained properly.

B. *Substance*

The expression of the substance metaphor relates to things in progress in the community. The use of this metaphor can be seen in the following quotation from the text:

1. *Aso nggasu okasa, aso ndumbu reno, aso lawa tawa-tawa*

*1 piece of white cloth, 1 piece of gold jewelry, 1 piece of gong*

'Consists of a piece of white cloth, one piece of jewelry, and one gong'

The use of the object in the semantic field of human perception refers to something in relationship with an object. The familiar objects with philosophical meaning in the text are such as white cloth, gold jewelry, and gongs. One piece of white cloth expresses a sense of chastity, jewelry a treasure, and a gong is a symbol of conveying or sounding information to the public that the prospective bride has already belonged to a certain groom. Many other objects are found in the text, such as sarongs, long cloths, basins, buckets, lamps, tablespoons, and others, as can be seen in the following example text.

2. *Oaso osawu rane-rene mbaano inano, oaso soma pebahoa,*

One sarong for the mother, one for the bath,

*Oaso thighuno, oaso pehulua/likomma, oaso duli-dulino,*

One bucket, one lamp, one spoon,

*Oaso kapepanda patebabano/theme-temano*

One long cloth for the baby

One sarong for the mother, one bath, one bucket, one lamp, one spoon, one long cloth

'The custom for the mother is 1 piece of sarong, the custom for her child to be married in 1 basin, 1 bucket, 1 lamp, 1 tablespoon, and 1 long piece of cloth for the baby.'

C. *Living (Flora/Fauna)*

The use of living metaphor relates to human perception of flora life. The use of this metaphor can be seen in the following expressions where the word orchid is used.

*Peowaino toono is okay with iwonua sorume*

The work of many people in the Orchid Moon region 'As ruler of the people in the land of Mekongga'

The expression *iwonua sorume* means 'region of the moon orchid'. Orchid is a type of plant that used to grow a lot in Kolaka. The plant is now in extinction except in certain forest areas in Kolaka, such as in Mekongga mountain. The moon orchid is the archaic name for the land of Mekongga. The term *wonua sorume* (moon orchid) is still preserved as a historical icon of the area. In addition to *wonua sorume*, there are also other names, such as *Bumi Wonua Mekongga*, *Cocoa City*, and *Nickel City* in Southeast Sulawesi, even, the name *Afdelling Luwu* (the former kingdom of Luwu). This is part of the figurative form used in traditional language speech by indexing the area where the *mowindahako* ritual activity is carried out.

D. *Energy (Water)*

The expression of energy metaphor found in the text of the *mowindahako* ritual is water. The use of 'water' energy can be seen in the following quotation from the text:

1. *Atoki hende laa merehu ine matabubuh mepahalu ini motawai kita*

*seperti ada duduk di memasang bubuh pakai bantal di mata air* 'We sit

in the cool of the flowing water'

it's like we're sitting on a pillow using a pillow in the spring

In the example above, the metaphors are the words *bubuh* and *bantal*. *Bubuh* means to put or write. While *bantal* (pillow) is a coffer filled with cotton or other soft objects, functioning as head mats, seat mats, or backrests. *Bubuh* is associated with the installation of baskets or boxes made of bamboo slats to keep fish in rivers (lakes or dams), and seawater, better known as the so-called cages. Why the word *bantal* is chosen as a language metaphor here since it is different in use where *bantal* (pillow) is used in certain places and spanned with water. The meaning we can grasp is that customary holders and all audiences attending the traditional procession to complete the affairs of the wedding party

have carried out their responsibilities towards the children (both bride and groom). This matter has soothed the heart or relieved like the fresh cold and comfortable cool flowing water. In addition, there is peace with the release of fatigue from the affairs in life.

2. *Rini-rinino iwai moriniki iwai mano moriniki penaomami*  
the cold water is cold but our hearts are cold 'I  
take the wisdom contained in water'

Figurative language is used by the traditional spokespersons to create a communicative atmosphere during the customary process. An example of the use of figurative language is the use of the word water which means that the customs must be adhered to or guided, not violated so that our souls or hearts remain cold as water. Thus all the customary affairs discussed will be successful and a blessing in life.

#### E. *Being (Abstract Concepts, Truth, Sadness, etc.)*

The metaphor of being found in the text is the expression of a belief in doing something good and right. The use of the metaphor of being can be seen in the quoted text below.

1. *Molali mabadoa kuongoto umaleika*  
begging for protection want to take  
'To seek protection from Allah SWT'
2. *Takionggo teisiako rongga motipu ako takionggo*  
won't be a little hard I won't  
'May we both spokespersons of custom be sinful and disobedient'

The expression of the metaphor of implying that in carrying out his duties, the spokesperson must act fairly and honestly and in good health throughout his life, praying for the two families of the bride and groom to live in harmony, peace, happiness, health, knowledge, and faith until the end of their lives.

The state (being) is said to be the highest because it has a concept from human experience as depicted by the following metaphorical expression.

3. *Tudu ipohae if nesting ikomonggoruo iramiu iwaimiu*  
down the greatness attribute beside you the gentlemen  
'We have come to present the traditional attributes of the greatness of Tolaki Mekongga'
4. *Ieto anolaa tudu sara mbeparalungga*  
so that the custom is expected  
'Then comes the awaited custom'

In the expression above there is a word, *Kalosara*, which conveys the meaning of greatness custom which refers to the highest cultural symbol/rule, the highest customary law that binds all Mekongga ethnic groups in all respects. *Kalosara*, a sacred traditional object which is a circle in form, in the culture of Mekongga people is a cultural symbol functioning in practice as the highest order. These rules are born from the experience of community, where the regulations or customs are automatically binding on the community members from generation to generation and have been going on for a long time. If the great custom has been presented in the marriage ritual, then it is binding as its function applies to the Mekongga ethnic group.

#### V. CONCLUSION

- The humanistic values in the text "*mowindahako*" are packaged in a metaphorical form and understandable based on the cultural context of community. These humanistic values refer to family values, respect for fellow human beings, and praying for mutual safety.
- Expressions of humanistic values are presented in the form of human metaphors, substance, living (flora/plants), energy (water), and being (truth). The results of this research indicate that the metaphor does not only concerned with the choice of words used by the customary spokesperson of *tolea* (male spokesperson) and *pabitara* (female spokesperson), but it is also a fact of the local culture of whom the custom belong to relating to the community in solving various problems, including the wisdom of the community to obey the provisions or rules mutually agreed upon as well as the wisdom of the community in maintaining the harmony of life and association, especially the internal life of the supporting community.
- Reposition the local language as community appreciation so that the socialization of cultural values can be implemented in people's lives. Preservation of cultural values rooted in local linguistic repertoire needs to be continuously explored as a source of value that has its character and identity.

#### REFERENCES

- [1] Afiah, Nur et al. (2022). Burmese Women Portrait under the British Imperialism in Orwell's Burmese Days. *Journal of Language Teaching and Research*, 13 (1), 213-219.
- [2] Alisjhabana, Sutan Takdir. (1997). *Dari Perjuangan dan Pertumbuhan Bahasa Indonesia (From the Struggle and Growth of the Indonesian Language)*. Jakarta: Dian Rakyat.
- [3] Anggrawan, Anthony et al. (2019). *Comparison of Online Learning versus Face to Face Learning in English Grammar*

*Learning*. 5th International Conference on Computing Engineering and Design (ICCED), pp. 1-4.

- [4] Arafah, B., & Kaharuddin, A. (2019). The Representation of Complaints in English and Indonesian Discourses. *Opcion*, 35 (24), 501-517.
- [5] Arafah, B. & Hasyim, M. (2019). Linguistic Functions of Emoji in Social Media Communication. *Opcion*, 35 (24), 558-574.
- [6] Arafah, Burhanuddin et al. (2020). An anthropological linguistic study on Maccera' Bulung ritual, *Opcion*, 36 (27), 1592-1606.
- [7] Arafah, Kaharuddin et al. (2020). Self-Concept and Self-Efficacy's Role in Achievement Motivation and Physics Learning Outcomes. *Opcion*, 36 (27), 1607-1623
- [8] Arafah, Burhanuddin et al. (2021). Saving the Environment: Environmental Lessons in Colin Thiele's February Dragon. *Journal of Language Teaching and Research*, 12 (6), 935-941.
- [9] Arafah, B., & Hasyim, M. (2022). Social Media as a Gateway to Information: Digital Literacy on Current Issues in Social Media. *Webology*, 19 (1), 2491-2503.
- [10] Asriyanti, Satri et al. (2022). The Representation of Women's Dependence on Men in Little Women. *Theory and Practice in Language Studies*, 12 (4), 790-796.
- [11] Bauman, R., & Briggs, Charles L. (1990). Poetics and Performance as Critical Perspectives on Language and Social Life. *Annual Review of Anthropology*, 19, 59-88.
- [12] Davidson, Donald. (1978). What Metaphors Mean. *Critical Inquiry* 5 (1), 31-47.
- [13] Duranti, A. (1997). *Linguistics Anthropology*. New York: Cambridge University Press.
- [14] Fadillah, Nur et al. (2022). The Act of Slavery in 20th Century as Reflected in Samuel Beckett's *Waiting for Godot*. *Journal of Language Teaching and Research*, 13 (1), 66-72.
- [15] Foley, William A. (1997). *Anthropological Linguistics: An Introduction*. New York: Blackwell.
- [16] Haley, Michael (1980). *Linguistic Perspective on Literature*. London: Routledge & Kegan Paul.
- [17] Hasjim, Munirah et al. (2020). Principles behind Semantic Relation between Common Abbreviations and their Expansions on Instagram. *International Journal of Criminology and Sociology*, 9, 2270-2276.
- [18] Hasyim, Muhammad et al. (2020). The New Toraja Destination: Adding Value 'Toraja Coffee' of the Sustainable Tourism Development. *IOP Conference Series: Earth and Environmental Science*, 575 (1), 1-10.
- [19] Hornby, A.S. (1974). *Oxford Advanced Learner's Dictionary of Current English*. 3rd Edition Oxford: Oxford University Press.
- [20] Ismail et al. (2020). Paraphrasing Technique to Develop Skill for English Writing among Indonesian College Students of English. *Systematic Reviews in Pharmacy*, 11 (11), 291-297.
- [21] Kaharuddin et al. (2020). Contributions of Technology, Culture, and Attitude to English Learning Motivation during Covid-19 Outbreaks. *Systematic Reviews in Pharmacy*, 11 (11), 76- 84.
- [22] Kreinath, J. (2005). Ritual: Theoretical Issues in the Study of Religion. *Revista de Estudos da Religião*, 4, 100-107
- [23] Kridalaksana, Harimurti. (2008). *Kamus Linguistik (Linguistics Dictionary)*. Jakarta: Gramedia.
- [24] Lakoff, G., & Johnson, Mark. (2003). *Metaphors We Live By*. London: The University of Chicago Press.
- [25] Mbete, Aron Meko et al. (2004). *Khasanah Bahasa Lio-Ende (Lio-Ende Language Repertoire)*. Ende: Education and Culture Office of Ende District.
- [26] Mokoginta, K., & Arafah, B. (2022). Negotiation in Indonesian Culture: A Cultural Linguistic Analysis of Bahasa Indonesia Textbooks. *Theory and Practice in Language Studies*, 12 (4), 691-701.
- [27] Mutmainnah et al. (2022). Racial Discrimination Experienced by Black People as Reflected in Langston Hughes's Poems. *Journal of Language Teaching and Research*, 13 (2), 350-356.
- [28] Oktavianus. (2006). Nilai Budaya dalam Ungkapan Minangkabau: Suatu Kajian dari Perspektif Antropologi Linguistik (Cultural Values in Minangkabau Expressions: A Study from the Perspective of Linguistic Anthropology). *Linguistik Indonesia (Indonesian Linguistics)*, 24 (1), 115-129.
- [29] Ortony, Andrew (ed.) (1993). *Metaphor and Thought*. Cambridge: Cambridge University Press.
- [30] Poerwadarminta, WJS. (1985). *Kamus Umum Bahasa Indonesia (General Indonesian Dictionary)*. Jakarta: Balai Pustaka
- [31] Purwaningsih, Y. Ratna et al. (2020). An ambition of infidelity "Emma Bovary" as wife: Sexuality problems. *Medicina Clínica Práctica*, 3 (S1), 100108, 1-3.
- [32] Sunardi et al. (2018). Looking at the Shared Conception of Teaching Literature in an Indonesian ELT Setting. *Journal of Language Teaching and Research*, 9 (2), 316-327.
- [33] Tarimana, Abdurauf. (1993). *Seri Emografi: Kebudayaan Tolaki (Ethnographic Series: Tolaki Culture)*. Jakarta: Balai Pustaka.
- [34] Yulianti, Sri et al. (2022). Conversational Implicatures on Saturday Night Live Talk Show. *Journal of Language Teaching and Research*, 13 (1), 189-197.



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# Parental Influence in *Sharp Objects* and *The Silent Patient*

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**Abstract**—This article employs Erikson's theory of psychosocial development to explore parental involvement through personality development in select novels. Parent-child relationships pose the most important need for a child's development. Children learn to understand the world around them only through parenting / care. Gillian Flynn's *The Sharp Objects* and Alex Michaelides' *The Silent Patient* are one of the modern thrillers of the current period. Here, both the authors paid the utmost attention in creating the characters with the postmodern details that makes the readers grasp the trauma faced by the characters. The female protagonists in the novels are found to face trauma created by their own parents. Here it brings out the importance of the parents guiding their children in order to appear as a better version in the eyes of the society and to self. Parents/caretakers become the anchor of every child out here. It also emphasises the value of a developmental systems perspective, in which parents and caregivers are structurally and functionally fused in a multidimensional system that includes biological, social, and historical areas of organisation. As the protagonist's horrific experiences demonstrate, diversity is a major substantive element of parenting behaviour.

**Index Terms**—parenting, traumas, psychosocial, social influences

## I. INTRODUCTION

The novel *Sharp Objects* in short is a stylishly compulsive and disturbing debut novel of Gillian Flynn. "Flynn delivers a great whodunit, replete with hinting details, telling dialogue, dissembling clues. Better yet, she offers appalling, heart-breaking insight into the darkness of her women's lives: the Stepford polish of desperate housewives, the backstabbing viciousness of drug-gobbling, sex-for-favours Mean Girls, the simmering rage bound to boil over. Piercingly effective and genuinely terrifying" (Kirkus reviews). Gillian Flynn is known for psychological writings and her novels have claimed quite a lot of awards as well as criticisms. It deals with the protagonist Camille Preaker who's returning to her hometown in order to investigate the murders that took place for the newspaper she's working for. The downfall takes place when Camille's mother failed to show her the motherly love because her mother as Adora grew up by not receiving her mother's love.

*The Silent Patient* is a mind-bending journey into the minds of a woman accused of murdering her husband and the therapist determined to save her. Rather than researching a crime, *The Silent Patient* looks inside a criminal's psyche, and it's a fascinating examination. Alicia Berenson's life seems so perfect. A famous painter married to an in-demand fashion photographer, she lives in a large house with large windows overlooking a park in one of London's most desirable areas. One night, her husband Gabriel came home late from a fashion shoot, and Alicia shot him five times in the face, then didn't say a word. Alicia's refusal to speak, or offer any explanation, turns a domestic tragedy into something larger, a mystery that captured the public's imagination and brought Alicia to notoriety. Her art prices are skyrocketing and she, a quiet patient, is hidden from the tabloids and attention at Grove, a secure forensics unit in north London. Theo Faber is a criminal psychotherapist who has been waiting for the opportunity to work with Alicia for a long time. His determination to get her to talk and unravel the mystery of why she shot her husband has set her on a winding road with her own motives - a quest for the truth threatened to kill him.

## II. PARENTAL INFLUENCE

An infant relies entirely on their parents for survival. An individual's parents play the most crucial role in his or her future accomplishments. Parenting straddles the classic continuum's nature side, on the other hand. This brings up the various questions within us to ask like: Ultimately, whose responsibility is it to raise children? Do we need to learn the skills of parenting or does it come naturally? Our understanding of parenting is aided by psychology, personality theory, and behavioural genetics. What impact do these theories have on how we parent? Parenting was a rather straightforward procedure. The mother became the mother and the father became the father. There are many motives, meanings and expressions in parenting today. Today, parenting is considered a time-consuming and exhausting endeavour. The ideal mother, father or family is a fantasy of the past. In today's culture, "subdivisions" of the phrase include the genetic

mother, the expectant mother, the biological mother, the birth mother, and the social mother. Parenting is more than just a mother or father feeding, sheltering, and caring for a new-born or child. Growth, according to newer ideas, is viewed as being immersed in an ordered web of variables that starts at various levels of an organization. Children and parents are structurally linked in a multilevel system encompassing biological, social and historical stages of organization in this view of developmental systems (Lerner, 2002a). The formulation of Bronfenbrenner (1979) had a widespread impact on the field of human development, and in the 1980s aroused great interest in the functioning of ecosystems in the structure of human life. Therefore, Bronfenbrenner's model converges with the developmental context by emphasizing the importance of a multidimensional approach to understanding, studying and applying the essence of children's developmental education.

### III. PSYCHOANALYSIS AND TRAUMAS

This manuscript focuses on the child's development, the traumas s/he encounters in childhood, and the outcomes s/he himself or herself brings into adulthood. Child development is considered to be a very important stage. Childhood helps people reshape their mental evolution in relation to self and society. Theorists such as Sigmund Freud have emphasized the importance of a child's subconscious experiences and behaviours in influencing adulthood. He proposed the theory by classifying the body's pleasure centres into oral, anal, corporeal, latent, and genital stages. He did not evaluate or analyse any child from birth to adulthood, but he extended the concept through his clinical cases. However, there isn't much concerning female psychosexual stages due to the fact he frequently targeted on male psychosexual degrees through his medical sufferers with the help of his loved pal Joseph Breuer. To realise the human intellectual condition, Freud concentrated on 3 degrees: Id, Ego, and SuperEgo. He believed that the aware thoughts are aware about the present, in addition to reminiscences and feelings from the past. He compared the thoughts to an iceberg. The thoughts are like an iceberg, it floats with one-7th of its bulk above water - Sigmund Freud. Long before Freud and other post-Freudians, Darwin's theory of evolution gave birth to the theory of psychoanalysis. The motive of psychoanalysis is to find 'subconscious foundations of human behaviour in man's... ineradicable animal nature,' and the fundamental middle of psychoanalysis is to freely partner so that you can open the internal self. To describe the improvement of human intellectual health, Sigmund Freud focused completely on inner forces.

Erikson, on the other hand, focused not only on internal causes but also on external influences such as the culture in which a person grows up and the emotional trauma that they personally suffer. Erikson contrasts his argument with Sigmund Freud's theory of personality development. Personality, according to Freud, is formed in childhood. Erikson points out that people's personalities change as they age. It is not fixed and cannot be determined. Erikson feels that by focusing on controlling one's attitude towards a positive regimen, one can live a more positive and healthier life. The influence of social factors on an individual's mental health and behaviour is known as psychosocial analysis. Psychosocial trait is a term that refers to a person's psychological development in relation to their social and cultural environment. The term "psychosocial" refers to "the influence of social elements on an individual's mind or behaviour, as well as the interrelationship between behavioural and social aspects" (Oxford Dictionary, 2012). Some have even claimed that there has never been a more influential theory on psychosocial development (Dunkel & Harble, 2017, p.58). Psychoanalysis is a specific field of psychosocial research that continues to play an important role in all aspects of modern research. Due to post-structuralism, influences and many theorists going down, there are few who oppose psychosocial analysis. Psychoanalysis, applied sociology, sociology, and critical social psychology, as well as post-structuralism, social constructivism, and gay and feminist social studies have contributed to part in the development of psychosocial theory (Frosh, 2003).

The mother-child relationship is more important in psychiatry. All felt that it was the source of human sanity and maturity. What they don't realize is that the process is a two-way:

- The social environment has an impact on individuals.
- Individuals have an impact on how people behave in public.

To be clear, growing up is influenced by both society and the individual. One could even argue that clinging to one person socially could be a political effort against the dictatorship. Furthermore, libertarians have exploited emotions to mask the functioning of an individual and a society (Frosh, 2003). Identity formation, according to E. E (1968), requires the ego and the self. On the other hand, Bukowski et al. (1993) argue that age and skill are key elements of personal identity. A person's social, physical, and cognitive development can affect their perception of their social worth. Montemayor and Eisen (1977) unequivocally asserted that age plays an important role in the development of perception and self-concept. In his book *Childhood and Society*, Erikson described eight stages of development (1950). He also coined the terms "epigenetics" and "epidemiological principles", which refer to concepts of the past and present as well as genetics. The term 'core' here means 'above' in space as well as 'ahead' in time and most likely describes the space-time nature of all genetic development (implying importance in old age, 1989). According to the stages Erikson mentions, he believes that people will experience a conflict that will be the turning point in an individual's behaviour. He points out that conflict is often positive and negative at the same time. It is different for each person. The following are the eight stages mentioned by Erikson for the psychosocial development of an individual:

1. Trust vs Mistrust
2. Autonomy vs Shame

3. Initiative vs Guilt
4. Industry vs Inferiority
5. Identity vs Role Confusion
6. Intimacy vs Isolation
7. Generativity vs Stagnation
8. Ego Integrity vs Despair (Cherry, Understanding Erikson's Stages of Psychosocial Development 2021)

Childhood is one of life's most lovely and vital stages. During childhood, a lot can happen that can shape a person's future. During the course of a child's growth, he or she may be exposed to trauma. Child abuse or seeing any form of domestic violence is considered harmful and can be distressing. Any person who has been through a traumatic event has a long-term impact on their lives. There will be no coping mechanisms available. When a caregiver fails to protect a child from emotional harm, they are accused of betraying the child, adding to the intensity of the trauma and its possible repercussions. Suffering from trauma makes it harder to control one's conduct and emotions. Children who have been traumatised prefer to avoid conversations, crowds, items, and other things that remind them of the terrible event. They will have a restless night's sleep, and they have a proclivity to forget themselves in the process of dealing with continual challenges to their survival instincts. The mind is disintegrated by arousing strong emotions. They hinder the ability to synthesise and integrate new information, as well as causing dissociation in those who are susceptible to them. In research from Nijenhuis et al. (2010) states that traumatic reports get ingrained with inside the unconscious mind, turning into everlasting notions. Detachment from trauma and re-revel in trauma are intellectual states that one could be tempted to assume of. Traumatic events, specifically people who arise early in lifestyles and constitute a severe hazard to the body's integrity, can also additionally cause psychobiological motion structures which have advanced due to evolution. These structures' evaluative conditioning to annoying reminiscences can also additionally live bored to death to variable tiers due to intense pressure levels.

#### IV. SHARP OBJECTS

People are created by their parents. The common road to children's development and stature is the parent's entrusted and enduring responsibility of preparing their kids for the physical psychosocial economic conditions which they will face later in their life. The consequences, disappointments, worries, and failures that come with parenting are unavoidable. Parenthood promotes psychological growth, self-confidence, and a sense of well-being. But in the case of *Sharp Objects* written by Gillian Flynn, it brings to notice that the mother of the protagonist failed as a parent in bringing up her daughter. She was supposed to bring a positive development. *Sharp Objects* – protagonist Camille Preaker is known for doing crazy little things when she was young in her hometown. She never received any parental love whilst growing up. After her sisters' death she was totally lost and she started carving her skin out with words of comfort and to help her to be grounded. Camille Preaker, her mother, has never exhibited any affection for any of her children, even those from her first marriage and those from her second. She deals with Munchausen by proxy, a disease where she pays attention only when her kids are ill. Camille Preaker returns to her hometown for an investigation report requested by her paper company.

Camille Preaker needed to cope with traumas and the outcome; Erikson's psychosocial improvement principle is used. Culture and sophistication affect what mother and father do and who they are, however the surroundings that mother and father create for his or her kids isn't always best inspired with the aid of using those contextual factors. Parenting also demonstrates the resources available in the neighbourhood. Parenting is a complex characteristic of many aspects, consisting of the figure's very own history and personality, in addition to the capabilities of the kid being parented, as Belsky's (1984) version of parenting demonstrates. Both the figure and the kid are energetic creators in their settings in addition to respondents to the possibilities that the surroundings provide (Ford & Lerner, 1992; Wachs, 1992, 2000). Parenting involves a plethora of in-the-second interactions with the kid and his or her surroundings.

##### A. Trust vs Mistrust

This is the very first stage framed by Erik Erikson in order to understand the human psyche development influenced by the surroundings an individual grew up in. This stage begins from birth till age 3, where they develop the trust of the mother or the caregiver. When the child has been fulfilled with love, care and the nutrition they need, they tend to develop trust around the society. As they grow they will be a better human with clear and happy thoughts. For the past two decades, academics have concentrated on theory of mind, which has altered our knowledge of early childhood cognitive development and has significant consequences for social cognitive development (Gelman & Banaji, 2013). If children experience a favourable influence of trust, they are more likely to acquire a secure feeling about themselves and others. If they fail at this level, they will develop self-doubt. Camille felt unloved even as a kid because she didn't receive any motherly love from her mother. That becomes the foundation for all of her life's issues. Adora shared Adora's feelings about her mother, who didn't receive any love from her and didn't pay any attention to any of her children.

##### B. Identity Vs Role Confusion

The developmental stage is the fifth and most significant stage. In this situation, the individual will fight for his or her identity in society. When they successfully complete this stage, they will have a better understanding of who they are and will most likely discover their life's purpose and passion. They will go through a depressive phase if they fail. Camille scratched the first word 'wicked' into her flesh when she was thirteen years old "*Cutting like a child along red imaginary lines. Cleaning myself. Digging in deeper. Cleaning myself. Pouring bleach over the knife and sneaking through the kitchen to return it. Wicked. Relief*" (Sharp Objects, P.76).

She adores carving the phrase out loud and cutting her skin. Her scars became her identity, and she believed that "*my scars have a consciousness of their own*" (Sharp Objects, P.75). She describes herself as a '*cutter...snipper, slicer, carver, chatter*' (Sharp Objects, P.76). Her words are self-explanatory. It all started when she lost her dear sister Marian when she was thirteen years old. She had been gang raped and had no idea what her future held.

### C. Intimacy vs Isolation

*The young adult, emerging from the search for and the insistence on identity, is eager and willing to fuse his identity with that of others. He is ready for intimacy, that is the capacity to commit himself to concrete affiliations and partnerships and to develop the ethical strength to abide by such commitments, even though they may call for significant sacrifices and compromises - (Childhood and Society, p.263)*

This stage is about developing close relationships with others and settling down in life. Success offers a sense of security and devotion to life, whereas failure brings isolation, loneliness, and depression. She's never been in a relationship since she's always cut herself. She doesn't think it's necessary for anybody to keep an eye on her for any reason. *Cook, cupcake, curls... baby doll, harmful (Sharp Objects, p.76) 'queasy', 'perky', 'panty', 'cherry' are some of the terms she uses to describe herself (Sharp Objects, p.78). Sew, baby, go away, bad, weep (Sharp Objects, p.79).* She came to Wind Gap to investigate the murder, and as the case progresses, she allows John Natalie's brother to get close to her. She lets him read her wounds because she is "*so damned tired of hiding. More than a decade devoted to concealment, never an interaction- a friend, a source ... Let John look. Please let him look*" (Sharp Objects, p.268). This demonstrates how alone she has felt as a result of her sad thoughts. She is also in a mental health facility. She attempts to visit doctors to feel better or safer, but it doesn't seem to work for her. She understood every phrase that sets the tone. She felt safe because of the clippings. The only part of her back she didn't carve was the centre,

*"...which was too impossible to reach, is a circle of perfect skin the size of a fist" (Sharp Objects, p.79). "They often call depression the blues," she says, "They always call depression the blues, but I would have been happy to awaken a periwinkle outlook. Depression to me is urine yellow. Washed out, exhausted miles of weak piss" (Sharp Objects, p.80).*

Camille's mind kept wandering back to recollections of her mother's treatment of her in public and private, making her feel disoriented and trembling. Adora portrayed Camille as a "*loving child in public, yet when she returned home, she would "drift off to her chamber like an incomplete sentence"* (Sharp Objects, p.123). She'd ponder what she'd done to deserve such treatment. Richard attempted to get to know her while assisting each other in the investigation of the killings. He referred to her as a "*difficult one*" (Sharp Objects, P.185). She wanted to get to know him and take the next step with him in the following days. I meant it when I said, "*You and I might have gotten along just fine.*" *I was suddenly upset that I'd never known a boy like Richard as a kid, someone who could at least push me*" (Sharp Objects, p.186). When Adora was challenged with her childhood mishaps, she told Camille that she understands how she feels. "*Camille, I wanted to adore you. You, on the other hand, were quite difficult. Marian was a breeze to work with.*" (Sharp Objects, p.305).

### D. Generativity vs Stagnation

This stage is about settling down in life, starting a family, and giving back to the community. Guilt and sadness are brought on by the unfavourable impact. Adora was a self-obsessed woman who never looked after her children. She expressed her dissatisfaction with Camille, blaming her for being so nasty to her. "*... even as a kid, you were the one who never liked me.*" *Don't you dare to turn this on me, since I've never felt anything but frigid from you*" (Sharp Objects, p.190). She questioned Camille, though, about how she sought to get to know her through the memories of those murdered girls. "*They reminded me of you, running around town wild. Like little pretty animals. I thought if I could be close with them, I would understand you better. If I could like them, maybe I could like you. But I couldn't*" (Sharp Objects, p.191).

Unless one of her daughters is sick or she makes them sick, she has never been close to them. Camille suffered bruises after falling down the stairs. "*I feel sick, Momma,*" *Camille stated as she was approached by her mother (Sharp Objects, p.190). "I know baby," she said (Sharp Objects, p.190).* She looked after her by giving her medicine and lavishing her with motherly affection. Camille later talks with Amma, her half-sister, to try to understand more about her mother. She eventually learned that Amma had been given the same medication that had made her unwell, and she attempted to control her mother. Camille was shocked when Amma revealed herself to her. "*I don't mind. Sometimes I don't take it – just pretend. Then we're both happy. I play with my dolls or I read, and when I hear her coming I pretend to be asleep*" (Sharp Objects, p.249).

Camille learns about her mother through one of her friends, and when questioned, she says it like this: "*was my mother ... a nice person?*" (Sharp Objects, p.260). She then "*Adora devours you, and if you don't let her, it'll be even*

worse for you. Look what's happening to Amma. Look at what happened to Marian." (*Sharp Objects*, P.261) "I think she's sick, and I think it's time for you to go, Sweeper... "I mean leave Wind Gap. It is not safe for you here." (*Sharp Objects*, p.261). Camille brings up the talk by questioning her momma about why Amma is sick and what happened to Marian. But she focused on her skin and she looked as if she got ruined whilst taking care of Camille. Camille is clogged by her own thoughts "Either the drink makes me sick and I know I'm not insane, or it doesn't, and I know I'm a hateful creature" (*Sharp Objects*, p.287). But Adora loves taking care of Camille "You were never such a good girl when you were little, ... You were always so wilful. Maybe your spirit has gotten a bit more broken. In a good way. A necessary way" (*Sharp Objects*, p.287). Camille arrived at Marian's hospital and went over the file. It all made sense, and she was heartbroken after learning the truth and realising how late she had discovered the genuine cause of her sister Marian's death. "Mother shows no interest in Marian when she is well, in fact, seems to punish her. Mother holds child only when she is sick or crying" (*Sharp Objects*, p.292). Camille understands about her momma who's suffering from "Munchausen by Proxy...you make yourself sick to get attention. You got MBP; you make your child sick to show what a kind, doting mommy you are" (*Sharp Objects*, p.293). Camille realised the purpose of her existence and the awful truth about her mother as a young adult. She tried everything she could to win her mother's love. She was never going to be able to grasp it. Humans tend to understand the importance of life at this time of life, and they obtain a kind of wisdom. Some they will never obtain, even if they are dying. Camille gained insight, whereas Adora lost her life due to MBP, and she couldn't match the profile imposed by society without tormenting herself and others. Camille discovered the truth and also took care of her half-sister.

#### V. THE SILENT PATIENT

Alex Michaelides' compelling novel *The Silent Patient*, released in 2019, explores Alicia's anguish following the death of her husband, Gabriel. Theo is enraged by Gabriel's infidelity with Kathy, his wife. Theo, blinded by wrath, injures and threatens to kill both Gabriel and his wife, but does not carry out his threat. There is a remarkable turn of events, which is depressing. Alicia assassinates Gabriel in cold blood after discovering her husband's adultery. From her trial through her incarceration in a psychiatric facility, Alicia has remained silent out of guilt. In the manner of a criminal returning to the scene of a crime, Theo takes a job at the psychiatric institution where Alicia has been admitted with the deceitful goal of helping Alicia. The novel's premise centres around Alicia, a silent patient who attempts to show that her seemingly innocent therapist, Theo, was also complicit in Gabriel's murder.

Trust Vs Mistrust - plays an important role in every childhood as previously mentioned above. Here, Alicia didn't receive any parental love when she needed it the most. Her mother died in an accident and her father did not show any sympathetic affection towards her. Alicia compares the summer and her mother's death in her diary. "It reminded me of another summer, hot like this one - the summer Mum died . . . In my memory that summer lasts forever" (*The Silent Patient*, p.63). After her mother's death, she no longer trusts anyone. Parents are seen as positive actors in their children's lives. She is broken without parental love and she is looking for someone she can trust again and deal with her childhood traumas. Parents use the environment to help their children's behaviour and development. They use it to offer youngsters with nutrition, stimulation, and emotional support. Through Bronfenbrenner's theory it is clear that a child's development is based entirely on the surroundings they grew up in. According to Bronfenbrenner, the most detrimental influence to a child's growth is the volatility and unpredictability of family life that our economy has created. Children seeking affirmation seek attention in unexpected places, and a lack of self-discipline leads to anti-social behaviour and an inability to provide self-direction. If the relationships in the immediate microsystem fail, the child will be unable to explore other aspects of his environment (Addison, 1992). The author mentions Winnicott and Bion, who focused their theories upon "holding" and "containment" theories. The classification of symbiotic, symbiotic, and parasitic partnerships by Bion (1970) can assist us comprehend the nature of Alicia and Gabriel's connection, or at least how Alicia views it. The term "contain" was coined by Bion to characterise the crucial interaction between thought and speech. Congenial, symbiotic, and parasitic communication are three types of communication that occur at distinct phases of growth, according to him. Since the novel focuses on the trauma suffered by the characters, it is up to the author himself to provide the thinking of the theorists in question. The sources for further analysis of Erikson's stages of development are not entirely available. The author developed a plot that focuses on the mental health of Alicia and Theo Faber, a psychotherapist who joins a mental institution to treat Alicia's illness. The novel begins with "Alicia Brenson was thirty-three when she killed her husband" (*The Silent Patient*, p.7). She killed her own husband with multiple shots and cut his wrists. She was arrested and she never spoke again. She never defended her murder plot and all she's done since the murders happened is to paint "ALCESTIS" (*Silent Patient*, p.10). The painting is inspired by the Greek tragedy *Alcestitis*, which corresponds to her own tragedy of being *The Silent Patient*.

Alicia's past is conveyed through her handwritten diary where she pen downs utmost everything with mere filters of thoughts here and there. One such instance was her painting of her husband Gabriel on cross. Because "He saved me - like Jesus" (*The Silent Patient*, p.70). She was all alone and she had friends whom she met during the night and they disappeared like nothing. When she met Gabriel her whole world changed and she never bothered about her disappearing friends. She compares her husband to the lord Jesus. While painting, she finds his eyes "dead, lifeless" (*The Silent Patient*, p.71). In simple terms, a commensal connection is one in which one benefits while the other is unaffected, a symbiotic relationship is one in which both parties benefit, and a parasitic relationship is one in which one

party benefits while the host suffers. Bion has placed a strong emphasis on the container and contained developing a symbiotic interaction. However, while Alicia and Gabriel's relationship appears to be very symbiotic at first, we soon learn that, while the host Gabriel remained unharmed until he was shot, Alicia developed a parasitic bond with Gabriel from which she draws her energy and meaning in life because she feels contained with Gabriel. However, Theo Faber, a psychotherapist who comes to save Alicia from becoming a silent patient, seems to understand that her childhood was just as traumatic as his. When he tried the talking cure he understood that "*Her silence was like a mirror – reflecting yourself back at you. And it was often an ugly sight*" (*The Silent Patient*, p.101). There were many diary incidents that bring forth the dilemma Alicia is facing all alone and her struggle within herself and the people around her. One among them was where she loved her husband dearly at the same time she wanted to hurt him badly. She never wanted to have kids and she is scared since her mother's blood is running within her. "*I'm in danger of ceasing to exist. Like I might disappear. . . I wish I could disappear*" (*The Silent Patient*, p.129).

On the other hand, Theo is trying hard to piece together Alicia's background through her acquaintances, co-workers, relatives, and works. Theo discovers her father's hatred from her cousin. He could understand the hatred she received because he was the victim of a childhood trauma too. Alicia's therapist describes her as someone who is "*highly paranoid, delusional – psychotic, even. . . always up and down – typical borderline*" (*The Silent Patient*, p.249). Alicia finally mentions about the plotline about the day murder took place. Only in the end the readers get to know the suspense about Theo Faber was the one who persuaded Alicia about Her Husband Gabriel cheating with Theo's wife Kathy. When Alicia discovered the adultery and how her husband chose him over her: "*I remained silent. How could I talk? Gabriel had sentenced me to death*" (*The Silent Patient*, p. 325). Alicia's suppressed thoughts took over her faith she had over Gabriel ". . . all my dreams shattered – leaving nothing. . . All I did was pull the trigger" (*The Silent Patient*, p.326). The contain-and-contain relationship between Alicia and Gabriel is parasitic, non-symbiotic, and very similar.

At least unconsciously, Alicia's childhood experiences hindered her from building a healthy symbiotic relationship with the container or with her husband Gabriel. Theo Faber came to the asylum only to reframe her thoughts that this murder has nothing to do with him and he wanted to make sure that he was not involved in any aspect of murder. So Theo injected Alicia with morphine and he made Dr West take the blame for his actions. However in the end Alicia did not die and she went into a coma. It is sarcastic in a dark sense where he complains "*Perhaps some of us are simply born evil; and despite our best efforts we remain that way*" (*The Silent Patient*, p. 336).

## VI. CONCLUSION

"Traumas produce their disintegrating effects in proportion to their intensity, duration and repetition"(J. Pierre, 1909). To sum up, parents from *The Sharp Objects* and *The Silent Patient* have failed to raise their children into a better person when they were young. Parents do create people around the world. They sometimes tend to forget the fact that they are the common pathway of the child's development. They are the source for the cognitive, mental and the physical growth of an individual. Parenting is "a lifetime of relationships," according to cross-cultural perspectives on parenting," as Townsend (2000) expressed it.

## REFERENCES

- [1] Addison, J. T. (1992). Urie Bronfenbrenner. *Human Ecology*, 20(2), 16-20.
- [2] Arnett, J. J. (2017) Life stage concepts across history and cultures: Proposal for a new field on indigenous life stage. *Human Development*. 59(5):290-316.
- [3] Banaji, M. R., & Gelman, S. A. (Eds.). (2013). *Navigating the social world: What infants, children, and other species can teach us*. Oxford University Press.
- [4] Batra, S. (2013). The Psychosocial Development of Children: Implications for Education and Society — Erik Erikson in Context. *Contemporary Education Dialogue*, 10(2), 249–278. <https://doi.org/10.1177/0973184913485014>
- [5] Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, 55, 83–96.
- [6] Bornstein, M. H. (2013). *Handbook of parenting: Volume 2 Biology and ecology of parenting*. Psychology Press.
- [7] Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- [8] Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. In S. L. Friedman and T. D. Wachs (Eds.), *Measuring Environment Across The Life Span* (pp. 3–30). Washington, DC: American Psychological Association.
- [9] Cherry, K. (2021, July 18). Understanding Erikson's Stages of Psychosocial Development. *Verywell Mind*. Retrieved August 18, 2019 from, <https://www.verywellmind.com/erik-eriksons-stages-of-psychosocial-development-2795740>
- [10] *Dictionary, O. E.* (2004). Retrieved October 14, 2020 from, <http://dictionary.oed.com>.
- [11] Dunkel, C. S. & Harble, C. (2017). A review of measures of Erikson's stages of psychosocial development: Evidence for a general factor. *Journal of Adult Development* 24(1): 58–76.
- [12] Erikson, E.H. (1963). *Childhood and Society*. New York: W.W. Norton and Company.
- [13] Erikson, E. H. (1968). *Identity youth and crisis*, New York (WW Norton) 1968.
- [14] Flynn, G. (2007). *Sharp Objects* (Reprint ed.). Crown
- [15] Ford, D. H., and Lerner, R. M. (1992). *Developmental systems theory, an integrative approach*. Newbury Park, CA: Sage.
- [16] Frosh, Stephen. (2003). Psychosocial Studies and Psychology: Is a Critical Approach Emerging?. *Human Relations*. 56. 10.1177/00187267035612005.

- [17] Hoare, C. H. (2002). *Erikson on development in adulthood: New insights from the unpublished papers*. Oxford University Press on Demand.
- [18] Hossain, M. A. (2021). Exploring the Concept of Containment, Childhood Development and Silence in Alex Michaelides's Novel *The Silent Patient*: A Psychoanalytic Critique. *International Journal of Research and Innovation in Social Science*, 05(05), 319–324. <https://doi.org/10.47772/IJRISS.2021.5517>
- [19] Janet, P. (1904). *L'amnésie et la dissociation des souvenirs par l'émotion*. F. Alcan.
- [20] Kakar, S. (1968). The human life cycle: The traditional Hindu view and the psychology of Erik Erikson. *Philosophy east and west*, 18(3), 127-136.
- [21] Lerner, R. M. (2002-a). *Concepts and theories of human development* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum Associates
- [22] Michaelides, A. (2019). *The silent patient*. New York: Celadon.
- [23] McLeod, S. A. (2013). *Erik Erikson's Psychosocial stages—Simply psychology*. Simply Psychology.
- [24] Montemayor, R., & Eisen, M. (1977). The development of self-conceptions from childhood to adolescence. *Developmental Psychology*, 13(4), 314.
- [25] Newcomb, A. F., Bukowski, W. M., & Pattee, L. (1993). Children's peer relations: A meta-analytic review of popular, rejected, neglected, controversial, and average sociometric status. *Psychological Bulletin*, 113(1), 99–128. <https://doi.org/10.1037/0033-2909.113.1.99>
- [26] Nijenhuis, E., van der Hart, O., & Steele, K. (2010). Trauma-related Structural Dissociation of the Personality. *Activitas Nervosa Superior*, 52(1), 1–23. <https://doi.org/10.1007/bf03379560>
- [27] Pulman, A., & Taylor, J. (2012). Munchausen by internet: current research and future directions. *Journal of medical Internet research*, 14(4), e115.
- [28] Richard, D. E. (2019). Episodes of Depression: Existential Feelings and Embodiment in 'Sharp Objects'. NECSUS.
- [29] Rolls, E. T. (2018). *The brain, emotion, and depression*. Oxford University Press.
- [30] Rudnytsky, P. L. (2013). *The psychoanalytic vocation: Rank, Winnicott, and the legacy of Freud*. Routledge.
- [31] Sharp Objects | Kirkus Reviews. (2006, October 10). *Kirkus Reviews*; [www.kirkusreviews.com](http://www.kirkusreviews.com). Retrieved October 18, 2021 from, <https://www.kirkusreviews.com/book-reviews/gillian-flynn/sharp-objects/>
- [32] Shoukat, L., Arshad, K., & Azam, S. (2021). A Psychoanalytic Analysis of the Character of Theo Faber in Alex Michaelides Novel *Silent Patient*. *Journal of Social Sciences Review*, 1(3). <https://doi.org/10.54183/jssr.v1i3.18>
- [33] Townsend, N. W. (2000). Male fertility as a lifetime of relationships: Contextualizing men's biological reproduction in Botswana. In C. Bledsoe, S. Lerner, and J. I. Guyer (Eds.), *Fertility and the male life-cycle in the era of fertility decline* (pp. 343–364). New York: Oxford University Press.
- [34] Wachs, T. D. (1992). *The nature of nurture*. Newbury Park, CA: Sage.
- [35] Wachs, T. D. (2000). *Necessary but not sufficient: The respective roles of single and multiple influences on individual development*. American Psychological Association. <https://doi.org/10.1037/10344-000>
- [36] Winnicott, D. W. (1947). *Hate in the countertransference*. London: Tavistock.
- [37] Winnicott, D. W. (2013). *The child and the family: First relationships (Vol. 6)*. Routledge.
- [38] Widick, C., Parker, C. A., & Knefelkamp, L. (1978). Erik Erikson and psychosocial development. *New Directions for Student Services*, 1978(4), 1–17. <https://doi.org/10.1002/ss.37119780403>.

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# Use of Mind-Mapping in Language Learning: A Cognitive Approach

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**Abstract**—This article aims to describe the use of mind-mapping techniques in language learning as a way to assist students in developing their analytical, organizational, collaborative, and creative skills in addition to their language capabilities. During the 2020 academic year, mind-mapping was utilised as a teaching and learning tool in an English class composed of 93 12<sup>th</sup>-grade students. The research tools used for the purpose of a quasi-experiment included lesson plans, integrated mind-mapping techniques and unit tests. Through a one-group posttest-only design, cognitive-related data was collected by way of unit tests while a questionnaire was used for gathering opinions related to the use of mind maps in English classes. The results showed that the use of mind maps in English language classrooms provide an opportunity for students to be an active learner by acquiring data, processing information, organizing details and constructing knowledge by themselves. In addition, mind-mapping techniques also improve students' skills such as creative and critical thinking, collaborative and organizational skills, alongside their English-language skills. They also develop positive attitudes towards mind-mapping techniques in which they can apply to other subjects.

**Index Terms**—mind-mapping, language learning, active learner

## I. INTRODUCTION

English classes place a strong emphasis on developing the communication skills of students so that they possess the ability to articulate, communicate and interpret the meanings and values from their experiences. The students are not only required to have knowledge of grammatical rules, but also be able to communicate clearly. With continued strides towards a borderless world, there is a need for students to be fluent in languages other than their mother-tongue in order for students to have greater opportunities in the future. The Ministry of Education (2008) clearly states that the Basic Education Core Curriculum of Thailand B.E.2551 (A.D. 2008) aims to equip learners with a “favourable attitude towards foreign languages, the ability to use foreign languages for communicating in various situations, seeking knowledge, engaging in a livelihood and pursuing further education at higher levels” (p.252). The main content of English classes encompasses language for communication and culture, as well as language and its relationship with the community, the wider world and even other learning areas. Nevertheless, language-learning has been often associated with rote-learning. Students believe that they can better acquire a language through memorization of vocabulary, sentence structures and grammatical rules. Consequently, students are often found to recite content before examinations, yet fail to understand or apply them in real-life situations. In reality, language is a skill-based subject covering four main skills - listening, reading, writing and speaking - all of which can be developed and improved through practice. Once students associate learning a language with the need to recite, they feel overwhelmed with the effort that is required. Therefore, English is perceived as one of the most difficult subjects for Thai learners.

Despite the fact that there have been many policies issued to reform language teaching, Thailand is categorized as having ‘very low proficiency’ in the EF English Proficiency Index (Education First, 2021). This situation demands finding an effective tool to assist learners in learning languages. A language teaching method is a single set of procedures of which teachers are to follow in the classroom. Methods are usually based on a set of beliefs about the nature of language and learning (Nunan, 2003). Consequently, it is the responsibility of the teacher to select and apply a variety of different methods, as proposed by Kumaravadevelu (1994), in order to ‘maximise learning opportunities’ (p.33) and ‘promote learner autonomy’ (p.39-40). Therefore, any teaching and learning activity must empower learners to learn independently. A mind map can help learners become an active, constructive thinker by processing the language words and structures and constructing knowledge of a language by themselves. There is an abundance of studies on the use of mind maps in teaching foreign languages (Casco, 2009; Buran, 2015) so as to enhance different skills including writing (Wangmo, 2018), English grammatical structure (Wibowo, 2020; Normawati, 2020; Wang, 2019), English vocabulary (Jiang, 2020, Shdaifat, 2019; Wang, 2018; Sahrawi, 2013), and speaking skills (Nasution, 2020). This paper aims to study the impact of mind maps on the cognitive domain with respect to language learning.

## II. LITERATURE REVIEW AND RESEARCH STUDIES

### A. Cognitive Approach in Language Learning

Cognition refers to mental activities occurring in the brain to absorb and retain information through experience, senses and thought. This includes thinking, remembering, learning and using language. A cognitive approach in learning helps to understand the connections between new information and concepts with that of existing knowledge, breaking down information and reconstructing it logically. Consequently, such a process maximizes memory and retention capacity. Cognitive learning relates to all forms of knowing including memory, psycholinguistics, thinking, comprehension, perception and application.

Language is a form of communication based on a system of symbols. Communication can be conducted through spoken, written or signed forms. What makes a language comprehensible is its use of words by a community in conjunction with the application of a set of rules delineating the way the language works. Since English is a foreign language in Thailand, learners lack experience in the linguistic, cultural and historical background of the language. In addition, their exposure to the language is limited to weekly classes at school. Most of the time, there is a missing link between existing knowledge of the language to the new lesson learned. The cognitive process sheds light on how learners construct their knowledge of language. As the term suggests, a cognitive approach focuses on the mental process of learners when learning a language, rather than their behavior or the teachers' role in the learning process. Cognition in language study concerns the acquisition, storage, transformation and use of knowledge. It consists of a wide range of mental processes including perception, memory, imagery, language, problem-solving, reasoning and decision-making (Belkhir, 2020). Therefore, in a language lesson the learners, acting as active constructors of knowledge, perceive the language they have learned through mental processes which help them make sense of, memorize and apply what is being taught.

There are many cognitive strategies that teachers can use to teach language. However, the focus should be on developing learners' mental processes with respect to their thinking and problem-solving ability. For example, learners can repeat new vocabularies, organize linguistic structure, guess meaning from context and associate visualization. These student-led activities allow active learners to acquire and process a language in a way that make sense to the individual student.

### *B. Mind Mapping*

The mind map was a concept originated in 1970 by Tony Buzan. It is a graphic technique encompassing the full range of cortical skills including word, image, number, logic, rhythm, colour and spatial awareness in a single, uniquely powerful manner. For educational purposes, mind maps can be used for revision and exams, overviewing the whole picture of the topic, concentrating, memorizing information, organizing details, presenting, communicating, planning, analyzing thoughts and brainstorming ideas (Buzan, 2017). A mind map contains the main idea or key word in the center, with secondary ideas radiating into the surrounds and additional details presented as branches. It shows relationships between ideas through connecting lines.

### *C. Use of Mind Maps in Language Teachings*

Mind maps have been used in foreign language teachings as a tool to activate students' prior knowledge of a topic and assist them in organizing and recalling vocabulary. The activities can be done individually or as a collective class task. The teacher can ask students to create mind maps instead of writing bullet points or paragraphs of what they know about the topic or vocabulary related to it (Casco, 2009). There have been many studies on the use of mind maps in teaching foreign languages to enhance different skills, such as the writing (Wangmo, 2018) of 4<sup>th</sup>-grade Bhutanese students. The mind mapping technique was considered an appropriate instrument in providing the students with the basic skills necessary for writing, revealing a positive impact on students' writing competency. Additionally, it also enhanced Bhutanese students' higher order thinking skills.

In addition to this, mind mapping was implemented in the teaching of English grammatical structure to students (Wibowo, 2020). The technique allowed for students to be active in giving feedback and also became a measure in assessing the extent to which students understood the material during teaching and learning activities. There were advantages in integrating mind-mapping in grammar lessons because the technique provided students with an overview of the grammatical concept, in-turn allowing for the grammar point to be more easily understood and memorized. In addition, Normawati (2013) conducted studies on digital mind-mapping to improve learners' grammar competence using different platforms, including Instagram and WhatsApp, in the learning process. The students were allowed to create mind maps using digital tools and share it on social media platforms. The mind-mapping technique helped students categorize information and ideas while recognizing the connection between ideas. It also helped them focus on lectures and discussions about grammatical materials while thinking systematically. Wang (2019) conducted research on the application of the mind map in English grammar teaching to study its effectiveness in improving students' interest and efficiency in grammar learning. The results found that mind-mapping can enhance students' initiative, promote interest in learning, and improve the efficiency of learning and the ability of students to grasp grammar knowledge.

The use of mind maps also yielded positive results in English vocabulary lessons. Jiang (2020) applied mind-mapping techniques for vocabulary learning during online courses in China which transformed plain text into colorful, highly organized and easy-to-memorize diagrams in ways that encouraged students to not only actively participate in activities, but also gain a deeper understanding of the content. Moreover, Shdaifat (2019) revealed a positive impact of

an E-mind mapping strategy on improving early-stage students' English vocabulary in Jordan. In addition to achieving an enhanced vocabulary, E-mind mapping strategy transformed the classroom into a more cheerful and colorful environment, with the added benefit of increasing students' self-confidence. Wang (2018) analyzed the feasibility of using mind maps in teaching and learning English vocabulary. The findings revealed that mind maps should play an important role in teaching practices because it could help create interconnectedness among isolated units or items. It could help learners organize and manage knowledge learned in such a way that learners gain a deeper understanding of the lesson. At the same time, teachers could apply mind-mapping techniques to help create knowledge and facilitate communication and learning. Sahrawi (2013) studied the effectiveness and significance of mind-mapping for teaching English vocabulary with 8<sup>th</sup>-grade students. The study proved the effectiveness of mind-mapping for language learning, with the findings revealing students had an improved knowledge of vocabulary terms as a result of its use. As such, it was suggested that teachers implement mind-mapping strategies for teaching English in the classroom.

Nasution (2020) also observed the positive results of implementing mind-mapping to improve students' speaking skills. In addition, the research identified six factors influencing students' speaking skills including: interesting teaching media, interesting materials, engaging classroom activities, enjoyable classroom management, as well as an engaging teachers' approach and teaching strategy.

### III. METHODOLOGY

With the aim of this study being to describe the use of mind-mapping technique in language learning, mind maps were used in an attempt to answer the fundamental question: what happens to students' understanding of English when mind-mapping techniques are incorporated into lessons?

The mind-mapping technique was used in an English class with of 12<sup>th</sup>-grade students during semester 2 of the 2020 academic year (October-December). There were 93 student participants. The one-group posttest-only design employed the following research tools: lesson plans, integrated mind-mapping techniques and unit tests. The cognitive-related data was collected through the use of unit tests while a questionnaire was used for gathering opinions related to the use of mind maps in English classes. The data was presented as descriptive statistics.

The lesson focused on English grammar and vocabulary. Each unit included at least 15 new vocabulary terms presented through a reading passage and 2 grammatical topics presented through 2 reading passages or dialogues. The unit requires 6 periods of 40 minutes length each.

The lesson was delivered by allocating individual students self-study time on the unit and tasking them with creating a mind map prior to the class. As an individual task, the mind map aimed to allow students to analyze, organize and process all of the information included in the chapter by themselves. This allows students the opportunity to absorb the information, process all the details and present their understanding in the mind map. Please note that, at this stage, there may be some information missing. The students were able to include symbols or drawings in place of the concept they lack understanding of. At the end of each chapter, the students were assigned to work in pairs to discuss, integrate, revise and refine their mind maps. The pair assignment allowed students to work collaboratively and creatively with their classmates. They were required to criticize, negotiate, make decisions and solve problems that arose during their pair-work activity. Prior to COVID-19, the students were asked to write a mind map on a piece of paper. During the COVID-19 pandemic situation however, the use of online platforms was compulsory. Students were allowed to write a mind map on paper, take a photograph and submit it through the online assignment system. Otherwise, they could use applications to creatively produce their work, including programs such as Procreate, Canva, GoodNotes, Microsoft PowerPoint and Google Docs.

### IV. RESULTS AND ANALYSIS

At the end of the unit, the 93 students were required to complete the unit test. The results are as shown in Figure 1.

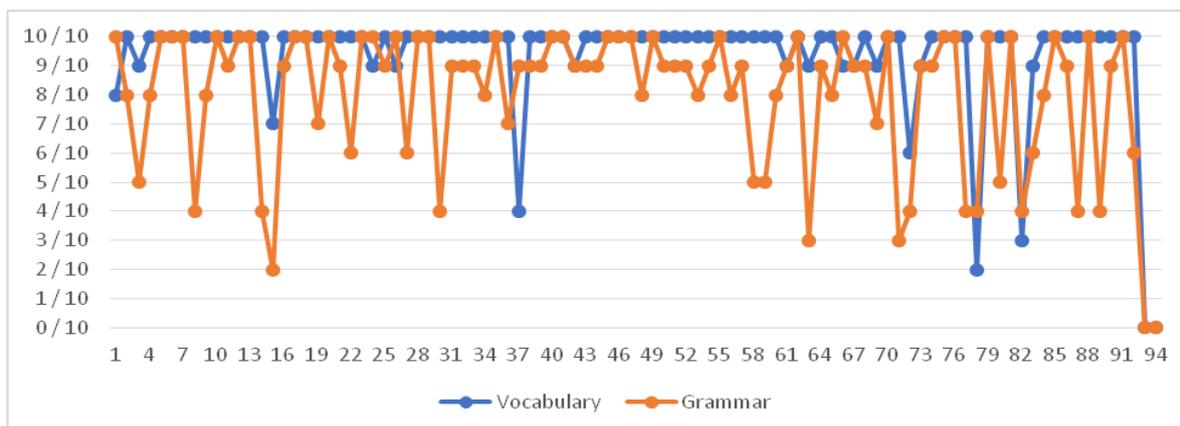


Figure 1 Passing Rates and Mean Scores of the Unit Test Following Intervention Using Mind Mapping Strategies

There were 20 questions: 10 vocabulary-based and 10 grammar-based questions, for a potential total score of 20. The passing criteria were set at 80%. The average score was 9.46 for vocabulary and 8.14 for the grammar component. There were 87 students, equivalent to 93.5%, who achieved the passing criteria for the vocabulary component and 69 students, equivalent to 74%, who achieved the passing criteria for the grammar component

After implementation, the questionnaire was distributed to elicit students' attitude towards the use of mind maps and to answer the question: what happens to students' understanding of English when mind-mapping techniques are incorporated into lessons? 89 questionnaires were returned which was equivalent to 95.70%. There were fifteen, 5-rated scale questions asking students' opinion on the use of mind maps in English classes plus one open-ended question asking for students' additional comments or suggestions. The results are reported in Table 1.

TABLE 1  
STUDENTS' OPINIONS TOWARDS APPLICATION OF MIND MAPPING TECHNIQUE IN ENGLISH CLASS

Experience on Mind Mapping Technique	<i>M</i>	<i>SD</i>	Interpretation
Mind map is considered useful for learning English.	4.40	.75	Agree
Mind map is useful for summarizing the lesson learned.	4.58	.65	Strongly Agree
Mind map is useful for organizing the contents of the lesson.	4.49	.71	Agree
Mind map helps students recognize relationship between topics included in the chapter.	4.39	.76	Agree
Mind map helps students understand the contents of the lesson easier.	4.33	.84	Agree
Mind map can be applied in other subjects.	4.43	.74	Agree
Students will apply mind map in studies in the future.	4.30	.82	Agree
Mind map helps students improve English language skills.	4.28	.90	Agree
Students prefer to review studies through mind map to textbook.	4.29	.93	Agree
Students prefer to be assigned mind map as individual task.	3.96	1.29	Agree
Students prefer to be assigned mind map as pair work.	4.34	1.10	Agree
Students prefer to be assigned mind map as group work.	3.56	1.48	Agree
Students enjoy the use of mind map in English class.	4.35	.81	Agree

The study found that 88.7% of students perceived mind map as a useful tool for learning English ( $M = 4.40$ ,  $SD = .75$ ). 93.3% of them found that mind maps were useful for summarizing the lesson learned ( $M = 4.58$ ,  $SD = .65$ ). 92.2% of them agreed that mind-mapping was useful for organizing the contents of the lesson ( $M = 4.49$ ,  $SD = .71$ ). 89.9% of students held the view that mind maps helped them recognize relationships between topics included in the chapter ( $M = 4.39$ ,  $SD = .76$ ). 84.3% of students agreed that mind maps helped their understanding of the contents of the lesson ( $M = 4.33$ ,  $SD = .84$ ). When asking whether the use of mind maps can be applied in other subjects, 87.7% of students agreed as such ( $M = 4.43$ ,  $SD = .74$ ) while 84.2% said they would apply mind-mapping strategies to their studies in the future ( $M = 4.30$ ,  $SD = .82$ ). As students were asked to write mind maps in English, 84.3% of students thought that mind maps helped improve their English language skills ( $M = 4.28$ ,  $SD = .90$ ). 82% of students were found to prefer reviewing their studies through mind maps compared to textbooks ( $M = 4.29$ ,  $SD = .93$ ). Students preferred to be assigned mind maps as an individual task (29.2%,  $M = 3.96$ ,  $SD = 1.29$ ), pair work (48.3%,  $M = 4.34$ ,  $SD = 1.10$ ) and group work (22.5%,  $M = 3.56$ ,  $SD = 1.48$ ) respectively. In overall, 84.3% of students enjoyed the use of mind maps in English class ( $M = 4.35$ ,  $SD = .81$ ).

In terms of other skills, 74 students (83.2%) viewed mind maps as helpful in improving their collaborative skills. Moreover, 78 students (87.6%) expressed that mind maps improved their creativity. 74 students (83.1%) perceived mind maps as an effective tool in improving their critical thinking skills, with 73 students (82%) holding the view that mind mapping techniques improved their organizational skill. s

In the open-ended question, students expressed that mind maps were useful for learning as a tool, using only key words for providing an overall idea of the lesson. Some students thought that mind maps were an innovative way for writing short notes summarizing all the details, and that it was useful for reviewing the lesson before examination. Many students enjoyed creating the mind map.

## V. DISCUSSIONS

Mind mapping is an effective tool for language learning. Besides cognitive skills, it enhances students' psychomotor and affective domains as well. This study revealed an increase in knowledge and understanding of vocabulary, which is in accordance with the studies of Jiang (2020), Shdaifat (2019), Wang (2018) and Sahrawi (2013), as well as grammatical comprehension of the language as proposed by Wibowo (2020), Normawati (2020) and Wang (2019). In addition, mind mapping techniques also improved students' collaborative, creative, critical thinking and organizational skills, as is suggested within the research findings of Wangmo (2018). Moreover, the use of mind-mapping also resulted in a positive affective domain among students. Many students enjoyed the inclusion of mind-mapping activities in the English class, and the creative process behind it, which is in accordance with the studies of Jiang (2020), Shdaifat (2019) Wang (2018) and Nasution (2020).

In summary, mind maps should be integrated in English language lessons so as to improve students' comprehension of the language concepts being taught in the class, whilst also allowing for students to be active learners, take ownership of their learning and improve other necessary skills.

## VI. CONCLUSION

This study reveals that the use of mind maps in English language classrooms provides an opportunity for students to be an active learner by acquiring data, processing information, organizing details and constructing knowledge independently. According to the results from the unit tests, mind maps are a learning tool that helps students understand vocabulary and grammar effectively (Casco, 2009 & Belkhir, 2020). In addition, mind mapping techniques also improve students' skills such as creative and critical thinking, collaborative and organizational skills as well as their English language ability. Students also hold positive attitudes towards mind-mapping techniques, of which they can apply to other subjects.

Mind maps prove to be an effective tool for cognitive learning in English classes as it helps students concentrate on the key words and concepts of the lesson by requiring them to organize, plan, brainstorm and communicate with their friends (Buzan, 2017). Such a cognitive activity can be implemented individually, in pairs or as a group (Casco, 2009) which can maximize both cognitive and social skills of the learners.

As observed and supported by the feedback from the students, mind maps provide students with an opportunity to express their creativity and work collaboratively with their friends. They tend to have positive attitudes towards English and less associate the subject with the need to recite or memorize. The mind map can be used again when they need to review the lesson for their examinations or other assignments. With this new adopted attitude, they tend to put extra effort in completing this and other assignments.

## VII. RECOMMENDATIONS

This study presents the following recommendations for future researchers who are interested in this issue.

Firstly, future studies can explore the impacts of mind-mapping techniques on participants from different populations, so that diverse data can imply how effective the technique is on different ages and educational levels of students.

In addition, researchers can investigate the impacts of mind-mapping techniques on the different aspects of language teaching and learning such as vocabulary, grammar, reading and writing.

This study highlights several recommendations for teachers. The mind-mapping technique can be applied in various settings, both in traditional and online classrooms.

To being with, integrating mind-mapping activities in learning environments cultivates a sense of ownership of knowledge among students. This transforms students into active learners while teachers enact as the facilitator and coordinator in the class (Buran & Filyukov, 2015).

Additionally, mind-mapping techniques provide different opportunities for students to learn a language. It also accounts for the differing learning styles of learners in the class (Buran & Filyukov, 2015). Students can transform textual descriptions into visual depictions, allowing for visual learners to capture and understand the details of the lesson more easily. Logical learners prefer the patterns of information that a mind map allows for. In addition, social learners can benefit from the collaboration required with their classmates in discussions as a part of mind-mapping activities.

In conclusion, mind maps have positive impacts on students' understanding of English. It also improves students' skills that are essential for being an active learner. Such techniques can be easily integrated into English classes, with which both students and teachers alike can greatly benefit from.

## REFERENCES

- [1] Belkhir, Sadia. (2020). *Cognition and Language Learning*. Cambridge Scholars Publishing.
- [2] Buran, Anna and Filyukov, Andrey. (2015). Mind Mapping Technique in Language Learning. *Proceedings of XV International Conference "Linguistic and Cultural Studies: Traditional and Innovations"*, LKTI 2015, 215-218. Retrieved January 18, 2022 from <https://core.ac.uk/download/pdf/53079167.pdf>
- [3] Buzan, Tony. (2017). *Mind Maps*. Retrieved January 18, 2022 from <https://www.tonybuzan.edu.sg/about/mind-maps/>
- [4] Casco, Mandy. (2009). *The Use of "Mind Maps" in the Teaching of Foreign Languages*. Retrieved January 18, 2022 from <https://wlteacher.files.wordpress.com/2013/02/mindmaps.pdf>
- [5] Education First. (2021). *EF English Proficiency Index*. Retrieved January 18, 2022 from <https://www.ef.com/wwen/epi/>
- [6] Jiang, Y. (2020) Application of the Mind Map in Learning English Vocabulary. *Open Access Library Journal*, 7, 1-4. <https://doi.org/10.4236/oalib.1106484>.
- [7] Kumaravadivelu, Bala. (1994). The Postmethod Condition: (E)merging Strategies for Second/Foreign Language Teaching. *TESOL Quarterly*. <https://doi.org/28.10.2307/3587197>.
- [8] Ministry of Education. (2008). *Basic Education Core Curriculum 2008*. Bangkok: The Agricultural Cooperative Federation of Thailand. Limited.
- [9] Nasution, Dina Syarifah. (2020). Mind Mapping to Improve Students' Speaking Skill. *English Journal for Teaching and Learning*, 8(1), 1-12.
- [10] Normawati, Afi. (2020). Digital Mind-Mapping to Improve Learners' Grammar Competence. *EDULINK (Education and Linguistics Knowledge) Journal*, 2(2), 52-62.
- [11] Nunan, D. (2003). *Practical English Language Teaching*. New York: McGraw Hill.
- [12] Sahrawi. (2013). The Effectiveness of Mind Mapping for Teaching Vocabulary to the Eighth Grade Students of SMP Negeri 3 Sungai Kakap in Academic Year 2012/2013. *Jurnal Pendidikan Bahasa*, 2(2). 236-247.

- [13] Shdaifat, Samar & Al-Al-Abed Al-Haq, Fawwaz & Al-Haq, & al-jamal, Dina. (2019). The Impact of an E-mind Mapping Strategy on Improving Basic Stage Students' English Vocabulary. *Jordan Journal of Modern Languages and Literature*, 11(3), 385-402.
- [14] Wang, Ling. (2019). Research on the Application of the Mind Map in English Grammar Teaching. *Theory and Practice in Language Studies*, 9(8), 990-995.
- [15] Wang, Xiaojun & Dostál, Jiří. (2018). *Using a Mind Map to Learn English Vocabulary*. <https://doi.org/10.1145/3291078.3291121>.
- [16] Wangmo, Kinley. (2018). The Use of Mind Mapping Technique to Enhance Writing Skills of Grade Four Bhutanese Students. *St. Theresa Journal of Humanities and Social Sciences*, 4(2), 30-57.
- [17] Wibowo, F. E. (2020). A Mind Mapping: A Strategy to Enhance Students' English Grammatical Structure. *Al-Lisan: Jurnal Bahasa (e-Journal)*, 5(2), 213-229. <https://doi.org/10.30603/al.v6i2.1321>

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# The Effect of Role-Playing Techniques on the Speaking Skills of Students at University

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**Abstract**—Students must master the skill of speaking in order to be able to communicate effectively in a foreign language. The fear of making errors and a lack of motivation are just a few reasons for students' difficulty in speaking. Role-Playing is used to help students overcome speaking difficulties. This study aims to determine the efficacy of role-playing in teaching speaking to second-grade students at the University of Sumer's College of Basic Education and determine whether there is a significant difference in speaking achievement between students taught with and without role play. The data were collected in 2021 by applying the quasi-experimental method in which two groups were involved in pre-test and post-test. The research consisted of forty-six students from two classes. The study indicates that the student's speaking score is improving. As a result, role-playing benefits students by offering an opportunity to struggle with oral communication. The results showed a significant improvement in the speaking skill of the experimental group. The students taught through the role-play method performed better than those taught through the grammar-translation method. It can be concluded that role-play significantly affects students' speaking skills. These findings have positive implications for implementing role-playing techniques at the University of Sumer.

**Index Terms**—foreign language, speaking, role-playing, grammar-translation, University of Sumer

## I. INTRODUCTION

In addition to their native language, obtained at birth, some people elect to study a second language. This is especially likely for those who belong to a linguistic minority or whose native tongue is not utilized in national or international communication. While Mandarin has many native speakers globally (China's vast population), English is the most common second language. There is now overwhelming evidence that English has become a global lingua franca, a common international language of trade and communications globally. Mandarin (China), Hindi (India), Russian (Eastern Europe and Central Asia), and Spanish (Latin America) all have a significant presence in various regions of the world, but with a limited influence and fewer second-language speakers than native speakers. If English has a rival, it is French, which is used more as a second language than a first language and is spoken in many countries. A hundred years ago or so, French was a dominating worldwide language, but its reach has dropped dramatically (Grenier & Zhang, 2021).

According to Rashid and Jafar (2015), the colonisers' language was utilised for extended periods in most Arab countries, and English was taught to Arab children. The British Mandate for Iraq highlighted the significance of English education in the country in 1921. Due to the fact that the language and culture of the coloniser are typically forced on the colonised, teaching English in Iraq became a high priority. Most of the obstacles to English instruction in Iraq relate to environmental concerns and the educational system.

In today's globalized world, communication is critical to success in practically every field. Language is a means of communication. It is conceivable that communication might be impossible without using a language. That is, communication with others involves language. Nowadays, English is often regarded as the world's language Franca. It is used to communicate with people from all around the globe. In this context, the necessity of speaking ability in English education becomes apparent. Speaking ability is the most critical to acquire while learning a second language (Jezhny & Bapir, 2021).

Iraq has the exact English language needs as the rest of the world. Each year, many foreign visitors come to Iraq for various reasons, including business, education, and tourism. Universities attempt to equip their graduates with the

necessary skills to obtain jobs in a society where youth unemployment is higher for educated young. English language skills are crucial for young people in the MENA region to improve their work opportunities (Grajek, 2017). With the introduction of the Internet, English has become a more integral part of communication between individuals speaking various languages and from various nations (Doochin, 2019). As a result, the need for Iraqis to communicate in English is skyrocketing (Al-Mofti & Hussein, 2019).

As a result, the Iraqi government has long encouraged Iraqi students to acquire English from primary school through university. It has made significant efforts to alleviate the issue, but progress has been gradual, putting a damper on overall advances (Al Hamdany, 2018). Despite years of compulsory English classes, Iraqi undergraduates struggle with a lack of speaking skills, translating into low language proficiency (Krebt, 2017).

The problems associated with speaking English as a foreign language are not limited to secondary and high school students; they also exist among university students studying English. Mahdi (2020) stated that Iraqi university students face many difficulties mastering and learning English, lacking several ingredients for language learning. The language teaching methods in Iraq are effortless and insufficient to master the language well. Al Hamdany (2018) stated that the traditional teaching method, i.e., grammar-translation, prevails in Iraq. Although the teaching of English has enhanced, the students remain weak. Speaking skill mainly receives less emphasis as it is the only skill not included in the exams. The focus is primarily on teaching reading and writing besides grammar and vocabulary, questioned in the exam (Elttayef & Hussein, 2017). It is confirmed by (Mhamad & Shareef, 2014) that the grammar-translation method is widely used and impedes Iraqi language learners from attaining skills to take responsibility for their learning and monitor or evaluate themselves. Consequently, most Iraqi learners still find it challenging to speak English (Keong et al., 2015).

In Iraq, the Ministry of Higher Education and Scientific Research settled on some textbooks named the 'New Headway' series, published by Oxford and divided into two parts. For university students, there is a student book and a workbook. In light of this decision, students in all Iraq Institutes must experience a 'New Headway' approach (Basheer, 2019). According to letter No. 5/8053 from the Ministry of Higher Education and Scientific Research in 2018, teaching English for four study semesters and each part of the approved curriculum books is for one study stage, given that it is equivalent to two study units in each stage. As a result, the first stage is assigned to New Headway for Beginners, the second stage to New Headway for Pre-Intermediate, the third stage to New Headway for Intermediate, and the fourth stage to New Headway for Upper-Intermediate.

According to Sencar (2021), the New Headway remains one of the most frequently used course materials in a wide variety of language schools worldwide. One reason for this is that it is often recognized as one of the most adaptable course books to various sociocultural contexts. Even in these days of online and technologically driven learning, the most widely used aid in the classroom, after the board, is still the course book (Egitim & Price, 2020). Sencar noted that the New Headway series, which promotes communicative language instruction and a learner-centred approach, appears to be the most popular choice among English language schools worldwide. Communicative language instruction places a premium on the requirements of learners and is primarily concerned with offering flexibility and response to individual needs. While most coursebooks have a delicate design of learning activities and an appealing appearance, they are more likely to predetermine the learning objectives and provide little room for teachers to customize their lesson activities to match the unique needs of their students. The fact that most coursebooks have a shallow degree of flexibility to meet the varying demands of potential users in various circumstances is in direct opposition to communicative language instruction principles.

As a lecturer in one of the universities, the researcher has noticed that, in Iraqi university classrooms, students are not efficient in their speaking skills. This issue is evidenced through several studies that have been conducted in Iraq, such as (Khalil, 2018). Hence, the situation is problematic and requires some remedy for development and improvement since speaking ability is crucial for learning and teaching English as a Foreign Language (Asa'adi & Asuea'adi, 2018). As a result, new approaches and techniques for teaching speaking must be adopted and implemented.

The study was conducted at the University of Sumer in Iraq with undergraduates eager to enhance their English skills. Using role-playing techniques, experimentation was used in the classroom to help students overcome their difficulty speaking the target language. BENABADJI (2006) stated that students study English because there is a need behind their will. In addition, they want to fulfil specific educational requirements, find employment, continue their education, travel, earn more money, gain access to the culture of an English-speaking country, or acquire another foreign language for enjoyment.

The researcher selected to examine the influence of role-playing techniques on the speaking skills of EFL undergraduates since English language graduates in Iraq have difficulty communicating in English, not only in literary expressions but also in situational conversions of street signs (Hussein & Albakri, 2019). Recently, emphasis has been placed on student-centred education to ensure that every EFL student masters the four language skills (receptive skills such as listening and reading, and productive skills such as speaking and writing) (Abdul-Majeed, 2018). Additionally, the learner must be armed with the skills necessary to push himself beyond the boundaries he establishes for himself.

## II. LITERATURE REVIEW

According to Leong and Ahmadi (2017), speaking is one of the essential skills to develop and enhance effective communication. In addition, speaking seems to be one of the most challenging skills that students can acquire since it requires, first of all, much practice and also exposure. The authors stated that many language learners find it difficult to express themselves in spoken language. Speaking skills are the most challenging skills language learners face in language learning. Speaking is believed to be the most important of the four language skills. Many learners state that they have spent many years studying the English language but cannot speak it appropriately and understandably. Furthermore, using an appropriate technique is possible to improve learners' speaking skills.

According to Rao (2019), the speaking skill is more complex than the other skills, for learners should express their ideas on the spur of the moment. The difficulties of English language learners should be understood, and various techniques can be implemented to improve learners' speaking skills. This is possible if appropriate teaching methods are used. One of the methods that emphasized improving speaking skills is role-playing. It has a significant effect on speaking. Unlike the grammar-translation method, role-play helps the students use many phrases instead of focusing on grammar rules. Role-play develops speaking skills and increases the interaction among second language learners. It makes learners use the language successfully in many aspects of their lives (Jezhny & Bapir, 2021).

Role-playing is a teaching strategy that enables students to engage with the topic in a way that is not possible in a traditional method (Piscitelli, 2020). It requires the students to participate in a play to represent a specific role or character. It is an important way for the students to practice speaking. In addition, this way gives the students chance to communicate with other people provisionally. Role-play is a favourite activity in speaking class. In role-play, students need extra time to prepare what they have to say. The role gives some opportunities for the students to use the script with its difficulties. The teachers can guide the role-play. The responsiveness to the complexity is the technique to decide the score. This technique makes the test-takers more simple, intensive, and responsive (Wulandari et al., 2019).

To establish role-playing as a strategy for language development inside the EFL curriculum, a study of theories of language and ideas of second language acquisition is an absolute necessity. According to Purba (2018), three critical theoretical perspectives are considered when constructing a language teaching technique: structural, functional, and interactional. According to structural theory, language is composed of grammatical units such as phrases, clauses, sentences, and affixes. According to functional theory, language is a mode of communication that can be informative, emotive, persuasive, or social. According to interactional theory, a language is a tool for establishing interpersonal interactions and carrying out social transactions between individuals and society. Each perspective has a distinct role to play in the development of language education approaches. The final two theories lay the theoretical groundwork for Communicative Language Instruction.



Figure 1. Theories of Language

On the other hand, Scarcella and Crookall (1990) review research to reveal how simulation enables second language acquisition. Three learning hypotheses that they discuss are that learners acquire language when they are exposed to enormous amounts of comprehensible input, are actively involved, and have a positive effect (desires, feelings, and attitudes). According to Krashen's (1982) 'comprehensible input theory,' learners gain grammar and vocabulary via exposure to and comprehension of language that is somewhat above their present level of proficiency. Swain (1985) defines comprehensible output as the output that broadens the learner's language vocabulary as he or she works to produce the required meaning precisely and effectively. Scarcella and Crookall (1990) identified another critical aspect for successful language acquisition, which they refer to as the "positive effect." They reviewed the study literature on similar topics offered by numerous scholars, including Krashen (1982), Dulay and Burt (1978), and Schumann (1978).

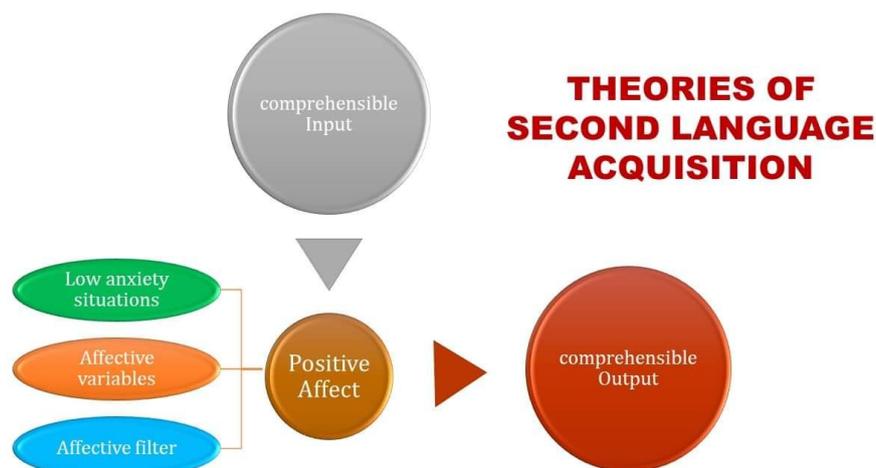


Figure 2. Theories of Second Language Acquisition

Role-playing may be divided into three categories: fully scripted, semi-scripted, and unscripted. All the words are written down in a fully scripted role-play. Each student should know or be able to memorize his or her part (Harper & Morris, 2005). Such a type of role-playing explains the model conversation in the textbook. The main goal of the conversation, after all, is to make each piece of a language meaningful and easy to remember. Low-level students who do not know what is going on in the semi-scripted role play might be able to use this kind of role play, says (Byrne, 1986).

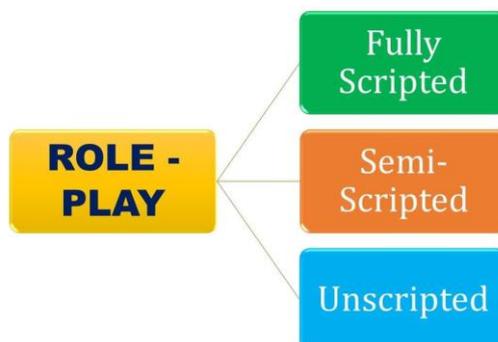


Figure 3. Types of Role-play

There are some missing words in the second role-play, and students should know how to fill in the gaps with words that fit the situation (Livingstone, 1983). So, students can change the main conversation in some way and start their conversation. Such role-playing might be semi-controlled because the teacher or a prescribed textbook gives students language input. However, students also need to choose the materials based on a frame that gives them a real-life context. This type of role-playing can be used with students at the upper-beginner to intermediate level of English proficiency. They should already know the main steps and move to more complex tasks because semi-scripted role-play is less structured and less controlled than fully scripted role-play.

In the third type of role play, in which students are given dialogue keywords (Dickson, 1989), keywords and information, or contexts and objectives in less controlled and structured tasks, students establish a mini-conversation based on the dialogue keywords mentioned previously, materials or contexts are used to fill in gaps (Pi-Chong, 1990). They suggest that non-scripted role play gives an excellent opportunity to use technical knowledge in specific scenarios. Non-scripted role-playing may be beneficial for students in the intermediate to advanced levels because it allows students to engage in unstructured role-playing that sometimes requires unique abilities such as problem-solving.

According to Bawa (2020), it is critical to identify the issue you want learners to solve, the topic for the scenario that best suits the situation, and the entire time allotted for the session to construct a successful role-play session. Establishing these characteristics will provide the groundwork for developing the session. The time constraint will help measure the issue's difficulty while connecting the theme and problem will make it simpler to construct roles/characters that fit. The next phase will be executed, which will need the session to be held in a space large enough for participants to converse easily with one another and with the teacher.

Role-playing entails assuming another person's identity, which is why it is often referred to as pretend-play. It is a valuable and adaptable instrument that aids in the comprehension of theory through practical experience. It might be a deliberate choice to accept a role or an unconscious one to fulfil a societal obligation. It is critical to recognize that role-

playing has its own set of rules and principles that must be followed if you wish to benefit from them. Concentrate on the beginning, be particular in expectations, comprehend the objectives, and look for attainable and concrete outcomes while considering how to make it effective. Role-playing teaches students what will work in a specific situation and what will work against them (Bhasin, 2020), as demonstrated in his article "Role-Playing: Definition, Objectives, and Importance."

Krebt (2017) discovered that role-playing enhanced students' performance on speaking assessments in Iraqi English as a Foreign Language. As a result, the experimental group seemed to succeed due to their involvement and practice of role-playing tactics such as group work and peer collaboration. It follows that if the class is presented as a community that supports one another, it will have the chance to strive toward common goals. This strengthens their capacity to communicate with and comprehend one another, the most acceptable foundation for all learning. Additionally, the present study's findings demonstrate that role-play techniques provide an appealing atmosphere for students to thrive in, resulting in increased attention to learning and motivation to participate in role-play techniques. Through role-playing tactics, students assume a new persona and practice communicating in a foreign language in ordinary situations.

In their research, Sari et al. (2021), the effect of role play on improving students' speaking ability: A library research, investigated how existing literature discusses the effect of role play as one of the teaching techniques on students' speaking ability. In this research, the researcher used library research. Library research can be defined as research that is supposed to collect data and information through journals. In addition, the data that has been found with library research could be the base and primary tool for the researcher. The data was in the form of journals and previous research studies as a primary data source. Through several proven data, role play showed significant improvement for students in learning speaking. The study also revealed that the students were delighted with this technique. It enabled the students to formulate their turns and gave them a better opportunity to improve their English speaking. Those studies revealed that the role play technique is an effective technique to increase students' speaking skills and is one of the teaching speaking methods.

In his research, The Impact of using Role Play Techniques on Improving Pupils' Speaking Skill for Primary School, Rayhan (2014) evaluated the effectiveness of role-playing techniques on improving female students' speaking ability for primary school pupils. According to the findings of this study, the subjects in the experimental groups who were taught using the role-play technique showed considerable improvement in their ability to communicate verbal information. This is based on a statistical comparison of the subjects' scores on both groups of pre-and post-tests, which was conducted. Students appeared to be more involved with the subject in a role-playing class, negotiating with one another and helping one another than they were in a standard lecture setting. The role-playing class also provided an effective method for students to take greater responsibility for their learning and share their knowledge with their classmates.

Permatasari (2016) found that having a role play as one of the activities in the classroom, the students had better speaking skills because they had more opportunities to practice their English. Role-play successfully attracts the students' interest and motivation to participate in the English classroom actively. They did not get bored because role-play provides fun and enjoyable activities. Besides that, the activities in role-playing used some situations related to their future surrounding as a nurse; it made them like having a real conversation in an actual situation and felt like being another person who was they were learning English in the classroom as a student.

Altun (2015) stated that role-play techniques influence the development of speaking skills of language learners. Simply put, the study has proved that role-play techniques provide learners with the necessary components learners need to develop their communicative competence. Role-play techniques present language materials in a natural way to learners. Through repeated exposure to language elements in role-play techniques, learners learn the language incidentally. Furthermore, role-play techniques provide a good opportunity for learners to learn the everyday language. Constant exposure to language elements and everyday language in role-play techniques enables learners to develop vocabulary and language skills. It has been found that role-play techniques naturally present the language items. Hence, learners acquire the language quickly and role-play techniques contribute to language skills and vocabulary development.

### III. METHODOLOGY

A quasi-experimental technique was used, and the authors focused on the pre-and post-tests. Two experimental and control groups would have to implement this technique. The researchers gave the experimental group a pre-test, a treatment session, and a post-test. Fluency, grammar, vocabulary, and pronunciation were all considered in the assessment process. Nine weeks of treatment were required. Meanwhile, the author administered only a pre-and post-test to the control group. All second-grade students enrolling in the College of Basic Education at the University of Sumer from 2020-2021 in the Arabic language department were included in the study.

#### **Technique of Data Analysis**

The researcher collected data by administering a test to students on speaking subjects in a monologue. The tests provided the data for the analysis. The students' grades were classified into two categories. Group A: Scores on pre-and post-tests for students who learned through role-playing. Group B: Pre- and post-test scores of students who learnt without using the role-playing technique. The rubrics would be used to examine the students' speaking abilities, and the researchers would utilize the Paired Sample T-test, with the data being analyzed by the SPSS program. It was utilized to

determine the statistical significance of the difference between pre-and post-test scores for each group. Additionally, the independent T-test was used to determine whether there was a significant difference between the two groups.

#### **Validity of the Test**

The authors used tests to assess students' speaking abilities to achieve a high degree of content validity. To determine whether the topic for the speaking test was valid, the writers developed the topic for the speaking test using the college's curriculum and English book.

#### **Reliability of the Test**

The authors used a speaking rubric to grade the students' speaking ability scores to determine the speaking test's reliability. Additionally, to ascertain the results of the pre-and post-test speaking tests, the authors invited two raters to assess students' speaking abilities in experimental and control classrooms at the College of Basic Education. After acquiring the data, the authors enlisted the assistance of two raters' assistance to collect information about the students' speaking abilities. The writers chose the raters based on their qualifications, including a TOEFL score of 500 or higher and at least five years of experience teaching English. The authors employed inter-rater reliability to determine the test's dependability. The writer linked the students' speaking scores from both raters at this point and recognized the relevance of the inter-rater finding. Additionally, SPSS would be used to examine the calculation.

### IV. FINDINGS

Scores were used to collect data for this investigation. The data came from pre-and post-test ratings of speaking ability by two raters. The author selected 40 students as examples. They were separated into experimental and control groups. This article made two significant findings: (1) the outcome of tests (descriptive statistics) and (2) data analysis using the dependent sample t-test (paired sample t-test) and independent sample t-test. The dependent sample t-test (paired sample t-test) was used to determine the following: (1) the significant difference in students' speaking ability attainment before and after role-play instruction. An independent sample t-test was used to ascertain the following: (2) the statistically significant difference in students' performance of speaking skills between the experimental and control groups.

According to the descriptive statistics collected in the experimental group, there was a significant difference in the experimental and control groups' attainment of speaking skills. As can be seen, the lowest pre-test score was .00, the highest was 13.00, and the mean was 7.8696. The post-test score ranged from .00 to 18.00, with the mean being 11.2174. On the other hand, descriptive statistics revealed that the control group's lowest pre-test score was .00, the highest was 18.00, and the mean was 7.2609. The post-test score ranged from .00 to 18.00, with an average of 8.696.

In terms of the paired sample T-test results in the experimental group, the mean score of students' speaking skill achievement in the experimental group's pre-test was 7.8696, with a standard deviation of 3.89993. Meanwhile, in the experimental group's post-test, the mean of the students' speaking skill achievement was 11.2174, with a standard deviation of 5.07182. In the control group, the mean score of students' speaking skill achievement in the pre-test was 7.2609, with a standard deviation of 4.53489, according to the results of the paired sample T-test. Meanwhile, the mean of the control group's students' speaking skill achievement in the post-test was 8.8696, with a standard deviation of 4.62507.

To compare the mean scores of the two groups, the experimental group had a score of 11.2174 while the control group had a score of 8.696. This shows that the experimental group outperformed the control group in overall post-test results. This supports the hypothesis that the experimental group outperformed the control one.

### V. INTERPRETATION

According to the findings, the students in the experimental group improved their speaking ability before and after the intervention. It indicates a difference in speaking ability before and after exposure to role play. There was a substantial difference in speaking achievement in the experimental group before and after therapy. The mean difference between pre-test and post-test in experimental conditions demonstrated this. As a result, role play might have significantly increased students' speaking abilities and participation in the teaching and learning environment. When the students acted out the role, they had to understand the character and perceive information about their roles. Furthermore, when teaching role-playing, the teacher employed drills to engage the students in the classroom actively. As a result, it is possible to conclude that role-playing could improve students' oral communication skills in the classroom.

### VI. CONCLUSION

According to the research findings, role play is an excellent strategy for developing students' speaking abilities. The result indicates that the mean score for speaking abilities in the experiment and controlled groups is 11.2174 and 8.696, respectively. It may be concluded that the role-play approach aided in developing the learners' speaking abilities. The benefit of using role-play in the EFL classroom is that it helps students build their confidence and inventiveness by motivating them to participate in speaking activities. Students become proficient in English as a result of their regular role-playing exercises. Additionally, it builds vocabulary, which aids in selecting appropriate words for the scenario.

Finally, the study demonstrates that role-play has a significant pedagogical impact on improving students' communication abilities in Iraqi EFL courses.

## REFERENCES

- [1] Abdul-Majeed, M. R., & Kadhim, S. H. (2018). Investigating EFL Skills Used by Iraqi College Students. *Journal of College of Arts, Vol. 46*, 367-379.
- [2] Al Hamdany, H. (2018). A proposed design and rationale o task-based activity as a learning assessment. *Al-Adab Journal, No. 125 (June)*, 15-24. <https://doi.org/10.31973/aj.v1i125.37>
- [3] Al-Mofti, K. W., & Hussein, J. Q. (2019). The Impact of Outside Social Support on EFL Iraqis Learners' Motivation at University Level. *Journal of University of Human Development, Vol. 5, No. 3*, 103-107. <https://doi.org/10.21928/juhd.v5n3y2019.pp103-107>
- [4] Altun, M. (2015). *Using Role-Play Activities To Develop Speaking Skills: A Case Study In The Language Classroom*. 6th International Visible Conference on Education Studies and Applied Linguistics, 354-363.
- [5] Asa'adi ,S. K. , Asuea'adi ,A. K. (2018). The Effect of Using Three-Step Interview and Talking Chips Techniques on Iraqi EFL Learners' Speaking Ability. *Journal of college of basic education, Vol. 101*, 97-112.
- [6] Basheer, N. A. (2019). Attitudes of Iraqi Medical Schools Teachers and Students towards the Textbook "New Headway Beginner Plus". *Al-Adab Journal, No. 130*, 167-190. <https://doi.org/10.31973/aj.v1i130.649>
- [7] Bawa, A. (2022). *Role-Play*. Retrieved 10 June 2022, from <https://edtechbooks.org/studentguide/roleplay>
- [8] Bhasin, H. (2022). *Role-Playing: Definition, Objectives and Importance*. Retrieved 10 June 2022, from <https://www.marketing91.com/role-playing/>
- [9] Byrne, D. (1986). *Teaching oral English*. London: Longman.
- [10] Doochin, D. (2022). *English as an International Universal Language*. Retrieved 10 June 2022, from <https://www.babbel.com/en/magazine/international-languages>
- [11] Dulay, H., & Burt, M. (1978). Some remarks on the creative construction process in child language acquisition. In W. Ritchie. (Ed.), *Second Language Acquisition Research: Issues and Implications*. New York: Academic Press.
- [12] Dickson, P. S. (1989). Acting French: drama techniques in the second language classroom. *The French Review, Vol. 63/2*, PP 300-311.
- [13] Egitim, S., & Price, G. (2020). Japanese university EFL teachers' perspectives on EAP coursebooks and authentic EPOP supplement. *Journal of English for Academic and Specific Purposes, 54(4)*, 20-25. DOI: 10.13140/RG.2.2.21336.62724
- [14] Elttayef, A. I. & Hussein, N. O. (2017). Arab Learners' Problems in Learning English Language: A Teacher Perspective. *Research Journal of Finance and Accounting, Vol.8, No.23*, 1-6.
- [15] Grajek, M. (2017). Retrieved 10 June 2022, from <https://www.al-fanarmedia.org/2017/01/iraqi-universities-focus-teaching-english/>
- [16] Grenier, G., & Zhang, W. (2021). The value of language skills. *IZA World of Labor, 2021: 205v2*,1-11. <https://doi.org/10.15185/izawol>
- [17] Harper-Whalen, S. & Morris, S. (2005). Using a role-play activity in training. *Training Solutions 9*, PP 1-4.
- [18] Hussein, N. O. & Albakri, I. S. (2019). The Role of Strategies on Developing Iraqi Learners' Usage of Request in EFL Classroom. *International Journal of English, Literature and Social Science (IJELS), Vol-4, Issue-5*, 1337-1341. <https://dx.doi.org/10.22161/ijels.45.14>
- [19] Jezhny, K. A., & Bapir, N. S. (2021). University Learners' Perspective towards Factors Affecting the Speaking Skill. *Cihan University-Erbil Journal of Humanities and Social Sciences, Volume V No. 1 (2021)*, 25-31. DOI: 10.24086/cuejhss
- [20] Jezhny, K., & Bapir, N. (2021). University Learners' Perspective towards Factors Affecting the Speaking Skill. *Cihan University-Erbil Journal of Humanities and Social Sciences, 5(1)*, 25-31. <https://doi.org/10.24086/cuejhss.v5n1y2021.pp25-31>
- [21] Keong, Y. C., Ali A. I., & Hameed, F. W. (2015). Speaking Competence of Iraqi EFL Undergraduates of Garmiyani University. *International Journal of Education and Research, Vol. 3, No. 5*, 157-170.
- [22] Khalil, E. R. (2018). Activating Functional Formulas of EFL Learners` Fluency and Accuracy Skills at the College of Education for Human Sciences s (Ibn Rushd). *Journal of Language Studies, Vol.1, No. 3*, 1-16.
- [23] Krashen, S. D.(1982). *Second language learning and second language acquisition*. U.K.: Prentice Hall International.
- [24] Krebt, D. M. (2017). The Effectiveness of Role Play Techniques in Teaching Speaking for EFL College Students, *Journal of Language Teaching and Research, Vol. 8, No. 5*, PP 863-870. <http://dx.doi.org/10.17507/jltr>
- [25] Leong, L., & Ahmadi, S. M. (2017). An Analysis of Factors Influencing Learners' English Speaking Skill. *International Journal of Research in English Education, Volume 2, Issue 1*, PP 34-41. 10.18869/acadpub.ijree.2.1.34
- [26] Livingstone, Carol (1983). *Role play in language learning*. Singapore: London: Longman.
- [27] Mahdi, A. M. (2020). Motivation Toward English Language Learning - A Study of Undergraduates Iraqi Students. *Journal of Al-Frahedis Arts, Vol (12)*, Issue (40), Pages (719-729). DOI: <http://dx.doi.org/10.25130/arts.v12i40.726>
- [28] Mhamad, A., & Mohammed, S. (2014). *Education in Kurdistan: A Lost Cause? - Fair Observer*. Retrieved 10 June 2022, from [https://www.fairobserver.com/region/middle\\_east\\_north\\_africa/education-kurdistan-lost-cause-83612/](https://www.fairobserver.com/region/middle_east_north_africa/education-kurdistan-lost-cause-83612/)
- [29] Permatasari, I. (2016). *The Implementation of Role Play to Improve Speaking Skill for Grade X Nursing Class*. Unpublished sarjana thesis, Yogyakarta State University, Indonesia.
- [30] Piscitelli, A. (2020). Effective Classroom Techniques for Engaging Students in Role-Playing. *Teaching Innovation Projects, 9(1)*, 1–8. <https://doi.org/10.5206/tips.v9i1.10320>
- [31] Pi-Chong, S. (1990). *The effectiveness of role-play activities in learning English as a foreign language by Chinese college students*. Ph.D. thesis, University of San Francisco.
- [32] Purba, N. (2018). The role of psycholinguistics in language learning and teaching. *Tell Journal, Volume 6*, PP 47-54.
- [33] Rayhan, J. M. (2014). The Impact of Using Role Play Techniques on Improving Pupils' Speaking Skill for Primary School. *Journal of Basic Education, 15*, 516–530.

- [34] Rao, P. S. (2019). The importance of English speaking skills in English classrooms, *Alford Council of International English & Literature Journal(ACIELJ)*, Vol-2, Issue-2 ,2019, 6-18.
- [35] Saeed, N., & Jafar, F., (2016). Problems of Teaching English in Iraqi Public Schools in Mosul for the Intermediate Stage from the Teachers' Point of View. *International Journal of Humanities and Social Science*, 6(1), 53-60. Retrieved from <http://www.ijhssnet.com>
- [36] Saeed, N. R., & Jafar, F. A. A. (2016). Problems of Teaching English in Iraqi Public Schools in Mosul for the Intermediate Stage from the Teachers' Point of View, *International Journal of Humanities and Social Science*. Vol. 6, No. 1; January 2016.
- [37] Sencar, E. (2021). The New Headway Coursebook Review. *International Journal of All Research Education and Scientific Methods (IJARESM)*, Volume 9, Issue 7 July -2021, 2117-2121.
- [38] Sari, I. P., Prawati, A., & Afrianto (2021). The effect of role play on improving students' speaking ability: *A library research. JOM FKIP – UR*, Vol. 8, Issue 1, PP 1-12.
- [39] Scarcella, C.R. & Crookall, D. (1990). Simulation/gaming and language acquisition. In D.Crookall & R. L. Oxford (Eds.), *Simulation, gaming, and language learning* (pp. 223-230). New York: Newbury House.
- [40] Schumann, J. (1978). *The Pidginization Process: A Model for Second Language Development*. Rowley, MA: Newbury House.
- [41] Swain, M. (1985). Communicative competence: Some roles of comprehensive input and comprehensible output in its development. In S. M. Gass and C. Madden (Eds.), *Input in second language acquisition* (pp. 235-253). Cambridge, MA: Newbury House Publishers.
- [42] Wulandari, A. T., Pratolo, B. W., & Junianti R. (2021). Students' perception on the use of role-play to improve students' communicative competence. *The 5th UAD TEFL International Conference (5th UTIC)*, Vol 2, 137-145. Doi:10.12928/utic.v2.5748.2019
- [43] BENABADJI, S. (2006). *Improving Students' Fluency through Role-playing* (Master). University of Oran Es-Senia.



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# Definition of the Term "The Wound" in the Jordanian Penal Law

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**Abstract**—The aim of this article is to evaluate the definition of the term "The Wound- (Al-Jořh)" in the Jordanian Penal Law by finding out the linguistic meaning of the term and its idiomatic meaning in forensic medicine by taking into account the term definition within the Penal Law added for the term "The wound". Depending on the descriptive-analytical methodology, these definitions will be evaluated and presented and then compared with the definition contained in the Jordanian Penal Law. The analysis concluded: the omission of the definition "the wound" in the Jordanian Penal Law, to indicate the possibility that the wound is internal to the viscera and not external; and "the wound" may mean harm to honor and the feelings that may be exposed to by the tongue, for example, cursing.

**Index Terms**—legislative interpretation, Penal Law, Jordanian Law, Legal Parlance, linguistic connotation

## I. INTRODUCTION

Based on the two reasons listed below, it is crystal clear that providing definitions of terms is not the task of the legislator:

1-The definition of the term contained in any legal text is one of the interpretive tasks of the judiciary and jurisprudence.

2-The definition process in law has special caveats, so that if the definition does not contain all the possible meanings of the defined term, it will be deemed incomplete and not meet its correct meaning.

However, the legislator may intervene to define some terms, and this may be exercised in two cases:

**First Case:** If the legislator desires to give the term a meaning that differs from its common meaning, for example, when the legislator intervened to define what is meant by the residential house, he defined it as "the place of the dwelling or any part of the building that the owner or the occupant considers to be a dwelling for him, his family, his guests and servants, or any of them, even if it was not occupied at the time of the offence, it also may include its annexes and ancillary buildings that are surrounded by one wall."

**Second Case:** To resolve a legal dispute about a specific term. An example of that is when the legislator intervened to define the term "night," where the dispute raged between those who defined it by its astronomical meaning, which is the period between sunset and sunrise (which is also a linguistic connotation), and those who defined it by its ordinary meaning, which is the period of darkness only, that starts from dusk to dawn, as dusk is the period when the twilight period passes, it's when the sun rays scatter after sunset, while dawn is the period when the light begins to appear before sunrise, and to resolve this controversy, the legislator intervened by adopting the astronomical connotation.

"The wound" is one of the terms defined by the Jordanian Penal Law, where it was defined as "each incision or cut that cleaves or slits a membrane of the outer body membranes, and for purposes of interpretation, a membrane is considered external if it can be touched without cutting or slitting any other membrane." The term "the wound" is mentioned in fourteen (14) texts of the Jordanian Penal Law as follows:

1-Article (187), under an aggravating circumstance in the crime of assaulting a public employee, Paragraph (4) of this Article stated the following: "If the acts of violence, wound, or disease require a more severe penalty than the penalties stipulated in the previous paragraphs, an additional period from one third to one half shall be added to the penalty to which the provisions of this law grant the offender."

2-Article (208), under an aggravating circumstance related to the crime of torture to extract a confession, Paragraph (3) of this Article proclaim that; "If this torture leads to illness or serious wound, the penalty shall be temporary hard labor."

3-As stated in Paragraph (2) of Article (277), concerning the crime of disturbing funeral ceremonies, where it stipulated that "Whoever disturbs the assembled individuals to hold a funeral ceremonies that offend the feelings (Ĵarh Al-Mashāeç) of any person or insult his religion, or knowing that his act would offend the feelings of any person or

lead to any religious insult, shall be punished by imprisonment for a period not exceeding six months, or by a fine not exceeding 100 dinars, or by both penalties."

4-Paragraph (1) of Article (330), attributed to the crime of beating that leads to death, as it states: "Whoever hits or wounds a person with an instrument that does not lead to his death or that gives him harmful substances and does not intend to kill him at all, if the victim dies from what happened to him, the offender shall be punished with hard labor for no less than seven years."

5- Article (333), which involves the crime of premeditation harm, as it states, "Anyone who intentionally beats, wounds, or harms a person with any act of violence and significant assault, resulting in illness or inability to work for more than twenty days, the offender shall be sentenced from three months to three years in prison".

6- Article (338) related to the offence of quarrel, as the text states: "If several people are involved in a quarrel that results in killing or disabling of one of the quarreling parties, or wounding or harming of a person, and that the offender cannot be personally identified, whoever participated in the executive procedure that led to death, disabling an organ, wounding, or harming, shall be punished with the penalty stipulated in the law for the committed crime after reducing it to half the period."

7- In Paragraph (1) and (2) of Article (340) regarding the extenuating circumstances of the husband or wife they stipulate that: "1- Benefiting from the mitigating excuse, someone who was surprised by his wife, ascendants, descendants, or sisters committing an adultery crime or in an illegal bed, and he immediately killed her, or killed who committed adultery with her or killed both of them, or assaulted one or both of them, where the assault results in wounding, injury, permanent disability, or death."

"2- The same mitigating excuse, benefit the wife who surprises her husband committing adultery or was in an unlawful bed in the marital home, and she immediately killed him, or killed the one who committed adultery with her, or killed both of them, or assaulted on one or both of them, where the assault resulted in wounding, abuse, permanent disability, or death."

8- Articles (341) and (342) regarding legitimate defense, where Article (341) stipulates the following:

"The following acts are considered legitimate defense:

1-A person who kills others or wounds another person, or any effective act considered as self-defense or a defense for his honor, or defending others' life and their honor, provided that:

a-The defence is done when the assault occurs.

b- The assault was unjustified

c-The victim can get rid of this assault unless by killing, wounding, or influential action.

2-An act of someone who kills or wounds another or any other effective act in defending his money or others money that is in his custody, provided that:

a- Defense is done during looting and theft accompanying the violence. or

b-That the theft leads to serious harm that would prejudice the will of the stolen victim and spoil his choice, even if the theft was not accompanied by violence.

And that in the previously two mentioned cases, it is not possible to urge the thieves and looters and to recover the money without killing, wounding, or influential act.

While Article (342) stipulates the following: "It is considered a legitimate defense, each killing or wounding or committing any influential act in self-defense, or in defending the honor or the money from an assaulting person when entering or attempting to enter a dwelling, in day or night by climbing a fence or a paling or the walls of any of them, or being in its courtyard within the fence or the paling without justification, or breaking its entrances or doors by punching, breaking or take-off, or by using keys or special tools for this purpose."

9- Article (389/1/a) regarding the crime of beggary where it stipulates: (Either he begs or asks for alms from others under the pretext of his wounds or his disability, or by any other means, whether he is wandering or sitting in a public place, or if he is found exploiting a child under sixteen years of age for begging or asking for alms, or encourages him to do so).

10- Articles (401) and (402) of the articles an aggravating circumstance for the crime of theft, where Article (401), stated the following:

"1- Whoever commits theft, combining the following two cases, shall be punished with temporary imprisonment for at least five years:

a-Two or more people committed the offence.

b-All or one of the thieves threaten with weapons or the use any form of violence against persons, either to prepare for or facilitate the crime, or to secure the escape of the perpetrators, or seize the stolen property.

2- If the theft took place inside of a bank or if the violence caused cuts, bruises, or other physical harm, the punishment specified in the previous paragraph will be temporary hard labor for a minimum of ten years."

3- Will be punished with temporary labour work, if the theft is committed by one person as described in Clause (B) of paragraph (1) of this Article, and Temporary labor work shall be imposed for no less than five years if this theft occurs in a bank or the violence caused bruises or wounds as a result of violence, and."

While Article (402/3) stated the following: "Whoever commits the crime of robbery on a public road shall be punished as follows: "With permanent hard labor if the theft occurred as described in the second paragraph, and as a result of the violence bruises or wounds occurred."

11- Article (452/3) regarding the crime of assaulting animals as its text states: "Whoever intentionally unnecessarily strikes or wounds one of the animals mentioned in this article, in a manner that prevents him from working or causes serious harm to it, shall be punished by imprisonment for a period not exceeding one month or a fine not exceeding twenty dinars."

12- Article (472/3) which is the crime of employing an animal incapable of work, the text states: "A penalty up to one week in prison and a fine up to five dinars shall be imposed on whoever: 3- employ an animal incapable to work due to illness, old age, or due to being wounded or deformity. "

Proceeding from the idea that the difference in meaning leads to the change of legal provisions (Al-hendi, 2021), this research is devoted to assess the Jordanian legislator's definition of the term (the wound) from a linguistic and idiomatic point of view, as this definition raises several issues, the most important of which is: Is the mentioning of this definition necessary and a must? Was the legislator successful in this context?

## II. DISCUSSION

The Arabic language dictionaries agree that the word "the wound" implies two meanings that converge about inflicting material and moral harm of the injured, the first linguistic meaning of the word "the wound" generally refers to an incision in the body in general, or in the skin, for example, the author of the dictionary of (Mu'jam Maqāyīs Al-lughah) mentioned: (Jorhun) where as the "Al-Jim, Al-Ra'a, and Al-Ha " are originality : as the first meaning is "the earning", and the second meaning is "split the skin", so that the first meaning is as said "He will [Earn - Ējterāh] if he works and acquires", as The mighty God said {Or do those who commit evils think} - (Al-Jāthiyah -21), and it was called as (Ējterāha – Earning) because it function with the body limbs, which are the functional limbs, and (Al-jāwāreḥ) the predatory animals and ravenous birds, are the hunting animals, while the second meaning is as said " He wounded (Ĵārahoh) him by iron " and the noun is "the wound -Al-Joṛḥ" (Ibn Fares, 1999), and this interpretation confirms what is stated in (Al-Mu'jam Al-Waseet): "He (wounded) (Jarhahoh) him a wound that has split an open in his body" (Qadir et al., 2008). The author of (Mukhtār Al-Şiḥāḥ) indicates that (Al-Jim, Al-Ra'a, and Al-Ha) "he wounded -(Ĵārahoh) ) are under the section of splitting, and the noun (al-jorh - the wound) by using the vowel letter (O), and the plural (Juruh - Wounds )" (Al-Razi, 1999).

Accordingly, the term "wound" in its physical meaning as it appeared earlier denotes (incision and cut), while its linguistic meaning "al-jarh - abuse" using the vowel "a" denotes moral harm to a person or other, meaning that: "Curse the honour and what is similar in the tongue, which is what some linguists have mentioned: { The term (The Wound- (Al-Joṛḥ) by using the vowel (O) is a split in the bodies by iron and what is similar, and "The Wound - Al- Jarh" with the vowel (a): is an offend with the tongue in the meanings of honour and what is similar (Al-Zubaidi, 1971).

The meaning of "The wound" linguistically: The noun "The wound - Al-Ĵāḥ" and the verb "to wound him, wounding him a wound - Ĵārahōḥ, Ya Ĵrāhahō Ĵōrhāññ", Defected him with a weapon; and offending (Ĵrāhahō) him with his tongue: cursing him" (Ibn-Manzur, 1993).

Based on the linguistic definition of the term "the wound," medical scientists have formulated an overarching terminology which indicates that "the wound" is the separation in contact with any of the body tissue, as a result of the application of a mechanical force on it, and this applies to the outer surface of the skin, as well as to any inner tissue "(World Health Organization, 2010).

The idiomatic meaning of the word "wound" is not limited to the outer skin, however, it may refer to the inner parts such as bones and viscera: "The wound is the separation of histological contact, and the wound is externally, as in cases of the skin and the tissues under it, or internally, as in bone fractures or visceral injuries, and the is an external violence that occurred to the affected side, and the violence includes beating, punching, kicking, biting, stabbing, choking, falling, traffic accidents, explosives, and gunshots, while the definition excludes harms caused by heat and cold, and electric shocks" (Shahrour, 2010).

When considering the legal definition of the term "the wound" that is: (any cut or incision that cuts or incises one of the outer membranes of the body; and to fulfill the purpose of this interpretation, a membrane is considered external, if it can be touched without cutting or slitting any other membrane).

We can notice that, the legislator omitted an important aspect of the medical terminological definition of the wound, which is the possibility of the wound have occurred in the internal parts of the body, such as bone fractures or visceral wounds. While, the legal definition of a wound was satisfied with what affects the external parts such as a wound or incision. On the other hand, it is noted that the legal definition of the wound does not refer to the linguistic meaning, which believes that the term the wound may be psychological, represented by verbal abuse, insult, or offence, which is an important aspect, especially as some issued judgments refer to this meaning. However, the legal definition does not adopt this meaning. Therefore, the legislator had to carefully consider precisely into the medical terminological definition before formulating the definition, in addition to the necessity of taking into account the necessity of benefiting from the psycholinguistic meaning.

### III. CONCLUSION

The study concluded that the Jordanian legislator was not successful in identifying the term "the wound". This is because it does not indicate that (the wound) may be in the form of an insult to honour and feelings that may be expressed by the tongue (Ĵārĥ Al-Mashāeċr), or state some expressions or words that hurt the feelings and emotions. The legislator also neglected the possibility of (the wound) occurring in the internal parts of the victim's body. Consequently, the research recommends the amendment of the legal definition draft to rhyme with the linguistic and idiomatic definition of the wound to become as follows:

"(The Wound) is every incision or cut that affects one of the internal or external parts of the body, such as the skin, viscera, broken bones, etc., as a result of a personal or external influence. The wound also includes verbal abuse, insult, or any psychological harm to feelings and emotions that lead to a certain type of harm (Ĵārĥ Al-Mashāeċr)." This suggestion provides a clearer and more precise sense for those who stand up to the enactment of legislative provisions.

### REFERENCES

- [1] Al-hendi, N. (2021). *Distortion of Meaning in Forensic Medicine Reports. Journal of Forensic Medicine Science and Law*, 30(2), pp. 67–70
- [2] Al-Razi M. (1999). *Mukhtar Al-Sahah*. 1st Edition. Beirut: Modern Library.
- [3] Al-Zubaidi M. (1971). *Bride's crown of jewels dictionary*. 1st Edition. Kuwait: Kuwait Government Press.
- [4] Ibn Fares A. (1999). *Language Measures*. 2nd Edition. Beirut: Dar Al-Jeel.
- [5] Ibn-Manzur C. (1993). *Lisan Al-arab*. 1st Edition. Beirut: Dar Sader.
- [6] Qadir H, Mustafa I, Al-Najjar M, Al-Zayyat A. (2008). *Al-Mu'jam Al-Wasit*. 5th Edition. Beirut: Dar Ihya Turath al-Arabi.
- [7] Shahrour h. (2010). *Forensic Medicine - principles and facts*. 1st Edition. Beirut: Academia;
- [8] World Health Organization. (2010). *Forensic Medicine and Toxicology*. 2nd Edition. Beirut: Academia;

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# Distortion of ‘Self-Image’: Effects of Mental Delirium in *Fahrenheit 451* by Ray Bradbury

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**Abstract**—The Mountain State Centers for Independent Living states the Self- image is how one perceives oneself. The existence of Self- image is twisted and devoid of human feelings in Bradbury’s future-narrated Post literature universe. It is several numbers of self-impressions that develop over time that creates positive and concurrently unfavourable impacts. In the realm of psychology, Self-image is a pivotal factor in leading a fortunate life. An individual’s impression of himself forms the collective depiction of his strength and weakness. It is quintessential to talk about and compare the Self-image that Bradbury’s era had lived because self-image comprises not only one’s perception but also the intervention of the culture in which they lived. He lived in a timeline with World wars, Nazi book-burning, Stalin’s Great Purge, Nuclear warfare, and the technological development of radio and television. Bradbury found that these elements be disrupting the Self of an individual. This same connection can also be seen developing in the novel, where the government brainwashes the characters and makes them live a pre-programmed life. The interactions between the individuals are artificial and rare; they do not share any sense of feelings or the need to communicate. This diminishing effect of life is the disintegration of Self-image in the novel.

**Index Terms**—cognition, culture, government, identity, programmed, self-image

## I. INTRODUCTION

*Fahrenheit 451* is a science fiction masterpiece written back in the 1950s that narrates its readers of a dystopian era among the contemporary crisis in literature, i.e., Post Literature era. Walsh (2016) stated that according to a new report from the National Endowment for the Arts, it is recorded that every month had a drastic discharge in people buying books, newspapers, and almost every other reading material. This downfall of literature was spearheaded by the internet and other modern inventions, which served as another platform for reading. This decline led to a significant loss in the book publishing and printing firms since books are less bought and read, leading to increased production costs. Therefore, a Post Literature era is when literature is rendered less through its original mode, i.e., the book but more through other technologies. Aqil (2020) stresses the decline in the book reading culture that the contemporary era is facing. He stated that the culture of book reading is almost non-existent due to the evolution of society, which has drifted towards a digitally demanded spectrum and system of education and politics.

In his book *Fahrenheit 451*, Ray Bradbury takes the readers on a future trip through his Post literature universe, which is ruled by a totalitarian government where technological advancements have decayed the culture. Arendt (1957) states that the selflessness of the people is the disturbing factor that leads to the success in the formation of a totalitarian government. The decay of culture is historical. The government distorts history with mass media manipulation, controlled knowledge, and book burnings.

Bradbury, who wrote this novel back in 1953, was alarmed by the social mishaps and technological progress it was going through then. Bell (1960) explains the world in the 1950s by stating that their intellectuals had a rough agreement on the political issues: the acceptance of their welfare state; the allure of the decentralized power; a system that was an amalgamation of the economy and political pluralism. The U.S.A. was in the zenith of its cold war. This era had paranoia in mind of people because the government was hunting down artists and writers suspected on the grounds of communist sympathies. On the other end, mass media such as Television and Radio were developing rapidly. Bradbury conceived the idea for this book from the destruction of the Library of Alexandria and book burning, which was carried out by the fascist regimes. As a result, Bradbury drifted away from the conventional plot of dystopian fiction. If one looks at the general plot structure of a dystopian novel, we can see a government that lays unwilling agendas and rules to the masses. Still, in *Fahrenheit 451*, the apathy of the masses acts as the root cause for the rise of totalitarian government.

## II. REVIEW OF LITERATURE

Maltz (1964) explains how Self-Image forms the foundation for leading a life, stating how to lead a happy, sad or boring life depends on how we forge our Self-Image. He portrays Self-Image with the metaphor of a motion picture. An

individual's Self is the writer, director, and actor who stars in it, stating the notion of how one can turn his life around with the will of his Self-Image. He says how the modern era has become an age of conformity, where everyone's Self-Image is affected by technology and other forces that are uncontrollably leading to finding comfort and security following other people. Huitt (2009) states that the Self is the conscious image of one's cognition or mental identity, an element that evaluates external factors such as the environment or other's Self. He considers Self-Concept and Self-Esteem to be the most integral part of the Self. Self-Concept is the cognitive or thinking part associated with Self-Image, meaning that Self-Concept is the general idea or picture of oneself. Franken (1994) states that Self-Esteem is relevant to the concept of Self-Image because people who possess positive Self-Esteem have a substantial effect on their Self-Image. He further says that people who get to have more ideas about themselves tend to be more productive since they know their abilities and inabilities.

Critiques argue that the process of maintaining a Self-Image plays a critical factor in the stereotyping and prejudice found in society. They have examined it with three studies that suggested that if an individual is subjected to stereotyping and bias, it may lead to the trajectory of maintaining his self-image because of the positive and negative feedback given out by society. They explain how the process of maintaining a self-image works in the context of motivation and cognitive and sociocultural approaches (Fein & Spencer, 1997). Rosenberg (1965) tells how society's intervention of self-image in adolescent works describes how the nature of self-concepts is subjected to change. The context of how a culture, a human being is subjected to live plays an essential role in an individual's portrayal of Self, stating that the people belonging to collective cultures have a self-image of interdependent traits while individualist groups show a quality independent self (Singelis et al., 1999). The concept of how culture and self-image work on the functions of cognition, emotion, and motivation, a comparative study of the Asian and American cultures proved a significant difference in the construal of the individual's Self, others, and correlation of these two. The difference in the levels of cognition is all a factor in the relationship; one's Self shares with their culture (Markus & Kitayama, 1991). The Self qualities of an individual, such as self-evaluation and self-esteem, and how it works as a protective and non-specific risk factor. The downside of poor self-esteem leads to internal complications such as eating disorders, depression, and suicidal tendencies. Therefore, it established that self-esteem is one of the crucial factors in mental health stimulation (Mann et al., 2004).

Mokyr et al. (2015) explain that technological advancements have generated cultural anxiety throughout history. They focus on three prominent factors which prove their stand; the first factor is how technological development will replace the labor force by making the machines the prime source of muscle in the industry, resulting in technological unemployment; the second factor is the anxiety that is created on the grounds of the moral implication of technological structures replacing human resources and welfare. This problem dates back to the Industrial Revolution, where the concern was on the dehumanizing effects of the work, but in the contemporary universe, the termination of work for humans by technology is itself the dehumanizing effect; the third factor is more of an evaluation that epoch of prominent technological progress is behind us and understanding the history of the technological anxiety on the culture proves that there is more to come.

### III. DISCUSSION

#### A. *The Importance of Self-Image*

Guenther and Alicke (2008) explain how the study of 'Self' extends beyond the realm of psychology: Stating how philosophers, sociologists, anthropologists, and even science fiction writers explore it due to the details it holds on understanding and functioning of the life around. Self-Image is considered a crucial element in developing one's personality; it is the root of all cognition. Self-image renders the mental image of an individual; it can be either positive or negative depending upon the social environment, self-esteem or respect, etc. People with a positive self-image tend to lead healthy life battling their stress, anger, depression etc. With a negative self-image, an individual loses his mental immunity to face everyday problems. Our self-image goes through various phases because the image is built on reality, faced every day. Bradbury outsources the importance of Self-Image through the diminishing effect of humane feeling with the characters in his novel. In society, when an individual becomes conscious of the imposed self-image and tries to flee from it, he is branded as an outcast and made to suffer. It is this journey that Bradbury tries to explain in the novel. Two classifications of Self are found: the Self's decay and Return to the Self. The characters fall between these two classifications except for Guy Montag. His self-image starts in the decay phase moving to the realm of confusion and self-actualization, leading to the return of the Self.

Williams (2018) explains the magnitude of how the technological world is interacting with People: Technological systems are programmed to be an element of distraction, to keep their users being engaged as much as possible; the attention given to the technologies distorts our free will resulting in an enormous societal consequence, particularly in the field of politics and in the functioning of democracy. The novel moves in a Post-literature universe governed by surveillance, robotics, and virtual reality. So it is with these three elements; the essential human needs are accomplished in this universe. The contemporary era in which we live draws an elegant image of a post-literature universe. For example, in the surveillance context, it is pretty evident that most of our surroundings are under the surveillance of a government or private CCTV (Closed Circuit Television) camera; apps that we use on our smartphones and computers

can trace our location via GPS. With robotics, an UAV (Unmanned Aerial Vehicle) called a drone is an excellent example of our society's progress. For example, the assassination of Qasem Soleimani by the U.S.A on 3<sup>rd</sup> January 2020 is drone-based warfare. The whole operation has been carried out with the help of an unmanned drone controlled remotely. In the spectrum of virtual reality, the concept of how reality is outsourced by employing technological inventions to augment a virtual environment can see our reality being replaced with video calls, emails, virtual classrooms, online exam modules, VR headsets, and simulators. A Post-literature universe renders technology a monopoly on information, where technology acts as the primary source of generating news, communication, education etc. The current lifestyle is a prime example of it. Most rely on internet articles for information irrespective of their authenticities, such as click baits, flooded in social media like Facebook, Twitter, and WhatsApp. These kinds of sources are majorly fabricated from facts to please a targeted audience.

In the novel, the government controls the knowledge of its people by providing a restricted intellectual environment, thereby being futile for the possibility of cognition or independent thoughts to happen. Mundt (1947) explains that government controls its people's activities by having power over the information on what they come across reading or hearing. The objectivity of the government behind this is to enable uniformity in their citizen's thought processes, ideologies, motives etc., for establishing peace. The Firemen here have a strict duty to incinerate books and people possessing them. The protagonist, Guy Montag, a fireman who lives in a brainwashed society, drifts away from it when he finds out about the truth that his government is holding from its people. The characters in this novel develop a wide range of dehumanization effects resulting from their culture. The culture here is intentionally designed and made to believe in holding peace. Still, it resorts to various deformations of culture. In *Fahrenheit 451*, the objective of Self-Image is to reflect how technological innovation could lead to the decay of life.

### B. *The decay of the Self-Image*

In a universe where the government controls intellectualness, every book is being burned and restricted from reading because the government fears books to be a subject of social unrest or interrupting peace, people are brainwashed by the mass media, etc., leading to the formation of a culture where apathy becomes dominant. This apathy becomes the primary source of dystopia in the novel. Reich (2018) points out that the harmful impact of technological advancement and digital life originates from corporate and government powerhouses' control over technology to use it as a medium to control democratic power. The character spectrum in *Fahrenheit 451* deals with a wide range of contrasting personas; we have Mildred and her friends living, obeying, and enjoying the programmed life. The happiness associated with these characters is shallow and unreal, but they are culturally blinded to see it; Clarisse McClellan, who is only seventeen, lives a free life that the government considers unorthodox. Leading an unconventional life for society makes Clarisse a threat to the totalitarian government, giving out how everything is controlled; Officer Beatty, an intellectual hypocrite, firemen burn and read the books; Professor Faber and Granger form the educated minority of the novel. Finally, the protagonist, Guy Montag, is a third-generation fireman who at first works for the government by burning books and places. He then goes off reading books to answer the questions his Self has been asking him. "There must be something in books, things we can't imagine, to make a woman stay in a burning house; there must be something" (Bradbury, 1953, p. 48 ). Montag says these lines to his wife, Mildred. It explains Montag's path toward his return to Self. Montag burns his senior officer Beatty and becomes part of a rebellion to stop the totalitarian government in the end. "We'll just start walking today and see the world and the way the world walks around and talks, the way it looks. I want to see everything now" (Bradbury, 1953, p.154); these words by Montag explain the end of his quest to find his answers. Bradbury shows us the degenerate effect of technological development and brainwashed culture through his characters.

Ellis (2018) explains that the innovation of technology is turning its users towards digital addictions resulting in depression, loneliness, and destroying the social fabric of life. The character development of the personalities in the novel explains a quest for identifying their self-image, i.e., Bradbury gives his readers the concept of self-image when the characters are exposed to questioning their culture. It starts at the very opening of the story when Guy returns from his work of burning books, and on his way back to his home, he meets Clarisse; the conversation between them is simple, where Clarisse asks Guy, "Are you happy" (Bradbury, 1953, p. 7) at the end of their conversation, this starts the pursuit of self-image for Guy. Self-image is heavily influenced by what happens around us, and in this novel, they live a programmed life. Hence their self-image goes on a loop of stunted growth. Mildred and her friends Mrs. Phelps and Mrs. Bowles act as the perfect image for the decay of Self. Mildred is the first character seen with the effect of what society has done to her self-image. She has no emotions, is addicted to the mass media, and lives a shallow life with her husband, Guy. Mrs. Phelps and Mrs. Bowles reflect the culture that their society possesses. Mrs. Phelps has no interest in having children "You know I haven't any! No one in his right mind, the Good Lord knows; would have children!" (Bradbury, 1953, p. 92). Mrs Phelps' apathy for children illustrates the dehumanizing effect and the advent of self-centered living. Mrs. Phelps brings in the subject of a self-centered life, she is married to Pete, which is her third marriage, and their relationship is shallow, "Anyway, Pete and I always said, no tears, nothing like that" (Bradbury, 1953, p. 91) The emotional attachment shared by Phelps and Pete uncovers the dehumanizing effect that Bradbury wanted us to feel of the technological developments. On the other end, Mrs. Bowles has two children and is also married thrice. She opting for C-sections even when the doctors advise against it best portrays society's attitude.

In the scene where Guy reads 'Dover Beach' by Matthew Arnold to his wife and her friends, their reaction sums out the government's brainwashing. Mrs. Phelps bursts into tears, Mrs. Bowles, gets mad at Guy and Mildred tries her best to solve it. The readers can see the hatred that this society has over books." poetry and tears, poetry and suicide and crying and awful feelings, poetry and sickness..." (Bradbury, 1953, p. 97). Upon examining Mrs. Bowles' statement, it explains how people are turned out against things which are branded wrong by the government. In the post-literature world of Bradbury, people were exposed to the aesthetic nature of poetry; they could not comprehend its beauty since the Self here is devoid of the emotional Self. Polunsky (2016) explains how technology destabilizes an individual by disrupting the OODA cycle, the psychological process of evaluating things around through observing, orienting, deciding, and acting. A heavily constructed self-image by manipulating the government can be seen throughout the novel. It is with Officer Beatty where we find the Self to be twisted. He is a fireman, just like Montag, but he has read books and has vast knowledge. He is shown as an intellectual who is hypocritical to his Self-image and the government.

### C. *The Return of the Self-Image*

Bradbury provides a universe where everything is controlled or restricted, painting the picture of dystopia in his novel. Mott (2016) explains the process of relying on technologies for a solution as a hazardous act because it disrupts the introspection of an individual, leading to the psychological problem of understanding oneself and anxiety. Bradbury also draws a picturesque solution to this dystopia with several characters of his who form the pillar of hope from the degenerating society. Bradbury states the stagnation of intellectualness as the primordial evil which has led to all the deterioration found in the novel's people and culture. In the character ensemble of *Fahrenheit 451*, most of the characters are subjected to the decay of their Self-image. With figures like Clarisse, Faber, Granger, and even Guy act as an antithesis to decayed characters because they drift away from the proverbial programming of their society. Bradbury elucidates to his readers how his feelings stabilize their image in an apathy-driven culture where the government is against the notion of free will and independent thought processing. It is to understand that these characters are subjected to stand out from society's conformist reforms and are considered rebels and outlaws. These features make their self-image decay, i.e., being free to feel what they want rather than being confined to an atmosphere where everything is formulated to judge by an external element such as technological innovations, drugs, control over knowledge, and information.

Clarisse McClennan is the first character that readers could envision being away from the conformist society and possessing a self-image that is not tainted. Syvertsen and Enli (2019) state how a digital detox is useful when it comes to the authenticity in the connection to the human Self this is because over usage will result in a state of delirium. A teenage girl is an anomaly in her society with a curiosity to understand the natural world and philosophies. She condemns ignorance like a child, which makes her prey to society. Her nature of questioning things is what Bradbury tries to explain how human nature and tendencies should be. However, this quality of Clarisse makes things uncomfortable for people around her. A girl who simply wants to seek knowledge without any objective behind it. She does not have the objectivity of utilizing her knowledge like Guy, who seeks to solve his internal conflicts or Beatty, who acquires knowledge to use it as a weapon or like Faber, Ganger or the Drifters to use it to remedy it cure the flaws of the society. It is her inception in the novel which makes Guy question his life and seek answers to it

I rarely watch the 'parlour walls' or go to races or Fun Parks. So I've lots of time for crazy thoughts, I guess. Have you seen the two-hundred-foot-long billboards in the country beyondtown? Did you know that once billboards were only twenty feet long? But cars started rushing by so quickly they had to stretch the advertising out so it would last." "I didn't know that!" Montag laughed abruptly. "Bet I know something else you don't. There's dew on the grass in the morning He suddenly couldn't remember if he had known this or not, and it made him quite irritable. "And if you look"-she nodded at the sky-"there's a man in the moon." He hadn't looked for a long time. (Bradbury, 1953, p. 7)

The dialogue mentioned above between Clarisse and Guy at the start of the novel shows what kind of a naïve being she is with her free flow of thoughts. Still, the replies of Guy explain the conditioned life that their culture has made them live. James (1890) classified Self into Self as 'Me' and the Self as 'I,' stating the former as the Self as an object of experience and the latter reflecting Self as a subject of experience. A conditioned life where the connection between man and nature has diminished. However, with Clarisse, it is axiomatic that she is free from it. She is pure of her Self, not letting external factors degrade it. Her answers are evident that she ignores the conditions that society wants her to fit in, and it gives the imagery of how pure Self-Image is a pure reflection of humanity. Bradbury explains the characteristics of Clarisse to show how society can be saved if it sticks to its nature of itself. Though Clarisse's presence in the novel is short-lived, her left marks a more significant sense. A design of how Self-Image not only persuades Guy to endure his journey in search of his Self-Image but also a quest in understanding what it is meant to be humane in a mechanical universe.

Following Clarisse, Bradbury's character articulates how returning to their Self-Image is the answer to all chaos is Professor Faber. Howe (1991) states Self is a construct of the mind, a hypothesis of what we are in the social environment. Faber is a professor of literature, an older man who lived his life visioning the fall of intellectualness. He watched how society demolished the concept of intellectualness but did nothing to save it. Bradbury draws a parallel tract with Faber and Captain Beatty; Faber hates society, believes in the power of reading and the effects it has on

humanity, but unlike Beatty, he is scared of society, does not use his knowledge to lend a hand to save but flees away for his survival.

Mr. Montag, you are looking at a coward. I saw the way things were going, a long time back. I said nothing. I'm one of the innocents who could have spoken up and out when no one would listen to the 'guilty,' but I did not speak and thus became guilty myself. And when finally they set the structure to burn the books, using the firemen, I grunted a few times and subsided, for there were no others grunting or yelling with me... (Bradbury, 1953, p. 78)

Faber's Self-Image is the mere reflection of ignorance's result. Faber could have changed the stature of the intellectualness, but he feared to do so, resulting in him living a life of regret. Only after his encounter with Guy, Faber plan on returning to relive his self-image by doing what he can to save humanity. Bradbury draws the fine line of Self and its ignorance through Clarisse and Faber. Clarisse is seen as an individual who takes no chance for ignorance when understanding nature and knowledge. On the other hand, Faber, who has all practical understanding, succumbed to ignorance. In the end, Faber comes to his senses after meeting Guy because his self-image, an image which he obtained through knowledge from literature, is breaking bad to set things right.

Bradbury states how self-image could triumph in a universe where ignorance has become the prime evil through Granger and his group of intellectuals called Drifters. They are introduced in the novel when Faber instructs Montag to meet them when he flees away from the authority. Granger and the Drifters are a group of intellectuals who have abandoned the life given by society to live in the wilderness. Bradbury, throughout the novel, explains the idea of the cycle of life. It is through Granger that he makes that idea explicit. Unlike Faber, Granger has a healthy self-image because he knows the cycle of life. He believes in how this cycle goes through dark and bright times.

"We all made the right kind of mistakes, or we wouldn't be here. When we were separate individuals, all we had was rage." (Bradbury, 1953, p. 143)

The quote above, which Granger says to Guy, explains the understanding he has over himself. Granger and his men are a group of exiled intellectuals because they know how the conditioned lifestyle could result in the deformation of humanity. Hence they secluded themselves from society to live a life where they could preserve their self-image.

Finally, Guy Montag, the novel's protagonist, comes on the quest for Self-Image. The journey of his Self-Image starts with him being a model conformist to being a threat to society. Guy is portrayed as a good citizen following all the norms and excelling in his duties as a Fireman to burn all the books since their possession is considered offensive. Guy believes himself to be living happily, but he soon finds himself living a shallow life when he learns the truth about his Self-image that he is conditioned to live a life and the subject of happiness is irrelevant. The journey to search for his Self-image begins when Guy meets Clarisse at the opening of the novel. It is his understanding of his Self-Image that forms the book's trajectory. "Of course I'm happy. What does she think? I'm not?" (Bradbury, 1953, p. 8); this quote which is what Guy thinks after his first conversation with Clarisse, explains the level that the conditioning of his society has buried his Self-Image.

Guy soon discovers that his Self-Image is nothing but an artificially constructed phase by society. When he evaluates his married life pragmatically, he understands that his life is a lie and their existence is merely mechanical. Anyone could be in their roles as husband and wife and still make the same impact. Guy finds his profession as a fireman to be proud and contempt, a service he has rendered for his society for ten years and a third-generation fireman. "Let me come in. I won't say anything. I just want to listen. What is it you're saying?" (Bradbury-Ray, 1953, p. 15); these words which Guy thinks outside Clarisse's home, which he tries to visit but fails and listens to them on the sidewalk, explains the pathetic state of his Self which attempts to find out what is meant to be living. Guy could find himself in a phase where he finds his Self-Image missing an essential part.

How did you get shaken up? What knocked the torch out of your hands?" "I don't know. We have everything we need to be happy, but we aren't happy. Something's missing. I looked around. The only thing I positively knew was gone was the books I'd burned in ten or twelve years. So I thought books might help. (Bradbury, 1953, p. 78)

The following dialogues are exchanges between Guy and Professor Faber. In Guy's unrelenting journey to finding his Self-Image, he seeks professor Faber, whom he met a year ago in a park. Although his primordial feelings for Self-Image originated from Clarisse, her departure left him clueless. With the death of an old woman who burned herself along with her books, Guy understands that maybe books might be his solution. His visit to Faber answers all his questions and conflicts. He finds the idea of how to rely upon contempt for life through natural means of his Self.

Bradbury postulates the concept of how Self-Image is an essential and critical factor in leading a successful life. He states that it can only achieve through our understanding of nature and our connection to it. He explains the necessity for human feelings that are to be cultivated from reading habits because it nurtures the cognition of the human Self. Through his dystopia, Bradbury explains how technological innovations should never replace the natural ways of human life. Harmony in human life can only be achieved through means of connections with our Self-Image.

#### IV. CONCLUSION

Alter (2017) states that the new technologies are designed to breed behavioral addictions. In most cases, the addictive properties are part of the design employing intermittent positive reinforcement and the thirst for social approval.

Bradbury's universe portrays the dystopian outcome of futuristic advancement in technologies, conditioning, and government, ultimately leading to alienation of the Self. Though human beings can render machinery to ease their living, it can never replace its natural mode of cognition. Tainting the raw mode of life would result only in the disintegration and devastation of humanity. The decay of the Self in the novel is a fine example of what Bradbury tries to explain of the futuristic innovation human beings are obsessed with finding. The objectivity of these innovations makes life easier but results in a dehumanizing effect that is a rift in the evolution of humanity. The decaying impact of self-image in the novel, which has turned people into zombie-like beings, and they could not even identify the shallowness their life is enduring, is the dystopian conditioning Bradbury fears. The idea of how society is progressing through technology looks elegant. Still, these ideas converge on the brink of meddling with human nature. The psyche of the human Self though being intervened by various futuristic factors, but the characteristic of Montag, Faber, Granger etc. resort to the clarity of their Self; this is because of the aspect of how human beings are hardwired to feel things the way they want irrespective of any apathetic conditioning leading to the return of the self-image. This paper explains the delirium that a mental persona is forced to face when their self-image is diminished by artificial means of life.

## REFERENCES

- [1] Alter, Adam.; Pauli, Stephan. (2018). *Unwiderstehlich: Der Aufstieg suchterzeugender Technologien und das Geschäft mit unserer Abhängigkeit* (German Edition) (2. ed.). eBook Berlin Verlag.
- [2] Anderson, Janna.; Rainie, Lee. (2018, 17 April). *The Future of Well-Being in a Tech-Saturated World*. Pew Research Center: Internet, Science & Tech. <https://www.pewresearch.org/internet/2018/04/17/the-future-of-well-being-in-a-tech-saturated-world/>. Retrieved February 2021,
- [3] Aqil, A. (2020, February 13). Decline in book-reading culture. *Daily Times*. Retrieved April 28, 2022, from <https://dailytimes.com.pk/557666/decline-in-book-reading-culture/>.
- [4] Arendt, Hannah. (1968). *The Origins of Totalitarianism*. Harcourt, Brace & World.
- [5] Bell, Daniel. (2000). *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties, with "The Resumption of History in the New Century"* (2nd ed.). Harvard University Press
- [6] Bradbury, Ray. (2019). *Fahrenheit 451*. Editions Super Terrain.
- [7] Fein, S.; Spencer, Steven. J. (1997). Prejudice as self-image maintenance: Affirming the self through derogating others. *Journal of Personality and Social Psychology*, 73(1), 31–44. <https://doi.org/10.1037/0022-3514.73.1.31>
- [8] Franken, R. (1994). *Human motivation* (3rd ed.). Pacific Grove, CA: Brooks/Cole Publishing Co.
- [9] Guenther, Corey & Alicke, Mark. (2008). Self-enhancement and belief perseverance. *Journal of Experimental Social Psychology*. 44. 706-712. 10.1016/j.jesp.2007.04.010.
- [10] Howe, Irving. (1991). "The Self in Literature." *Salmagundi*, no. 90/91, pp. 56–77. JSTOR, [www.jstor.org/stable/40548259](http://www.jstor.org/stable/40548259). Accessed 11 July 2021 .
- [11] James, William. (1890). *The Principles of Psychology*. New York, NY: H. Holt and Company.
- [12] Lachowicz-Tabaczek, Kinga, and Justyna Śniecińska. (2011). "Self-Concept and Self-Esteem: How the Content of the Self-Concept Reveals Sources and Functions of Self-Esteem." *Polish Psychological Bulletin*, vol. 42, no. 1, pp. 24–35., doi:10.2478/v10059-011-0005-y.
- [13] Maltz, Maxwell.(1993). *The Magic Power of Self-Image Psychology: the New Way to a Bright, Full Life*. Jaico Publishing House.
- [14] Michal (Michelle) Mann, Clemens M. H. Hosman, Herman P. Schaalma, Nanne K. de Vries. (2004). Self-esteem in a broad-spectrum approach for mental health promotion, *Health Education Research*, Volume 19, Issue, Pages 357–372, <https://doi.org/10.1093/her/cyg041> .
- [15] Mokyr, Joel, Chris Vickers, and Nicolas L. Ziebarth. (2015). "The History of Technological Anxiety and the Future of Economic Growth: Is This Time Different?" *Journal of Economic Perspectives*, 29 (3): 31-50. DOI: 10.1257/jep.29.3.31.
- [16] Mundt, Karl. E. (1947). Government Control of Sources of Information. *The ANNALS of the American Academy of Political and Social Science*, 250(1), 26–31. <https://doi.org/10.1177/000271624725000105>
- [17] Purkey, William W. (1988). *An overview of self-concept theory for counselors*. ERIC Clearinghouse on Counseling and Personnel Services, Ann Arbor, Mich. (An ERIC/CAPS Digest: ED304630)
- [18] Rosenberg, Morris. (2016). *Society and the Adolescent Self-Image*. Princeton University Press.
- [19] Ross Walsh. (2016). "Post-Literature." *University Observer*, [universityobserver.ie/the-post-literature-age](http://universityobserver.ie/the-post-literature-age). Retrieved June, 2021
- [20] Selst, Mark Van., and Mark H. Ascraft. (2006). *Instructor's Manual Cognition*, Fourth Edition Mark H. Ashcraft. Pearson/Prentice Hall.
- [21] Singelis, Theodore M., Bond, Michael Harris., Sharkey, William F., Lai , Chris Siu Yiu. (1999). Unpackaging Culture's Influence on Self-Esteem and Embarrassability: The Role of Self-Construals. *Journal of Cross-Cultural Psychology*. 1999;30(3):315-341. doi:10.1177/0022022199030003003
- [22] Steele, Claude. M., Spencer, Steven John.; Lynch, Martin F. (1993). Self-image resilience and dissonance: The role of affirmational resources. *Journal of Personality and Social Psychology*, 64(6), 885–896. <https://doi.org/10.1037/0022-3514.64.6.885>
- [23] Syvertsen, Trine.; Enli, Gunn. (2019). Digital detox: Media resistance and the promise of authenticity. *Convergence: The International Journal of Research into New Media Technologies*, 26(5–6), 1269–1283. <https://doi.org/10.1177/1354856519847325>
- [24] Williams, James. (2018). *Stand Out of Our Light (Reprint ed.)*. Cambridge University Press.

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# An Examination of Students' English Achievements Taught by Native Versus Non-Native English Teachers

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**Abstract**—In recent decades, the issue of being a native English-speaking teacher (NEST) or a non-native English-speaking teacher (NNEST) has become an increasingly important area of study in non-native English-speaking countries. However, in some academic institutions, not all non-native speakers (NNSs) and NNS teachers are treated the same way because of the perception that one group is better than the other, which could negatively affect the teaching process as a whole. For this reason, this study endeavours to investigate Saudi students' achievements in four English courses. By adopting a quantitative design for collecting and analysing data, students' scores in English courses taught by both NESTs and NNESTs were compared and statistically analysed. The findings revealed that students performed equally in the exams regardless of their English teachers' nationalities and mother tongues. Such findings suggest that both NESTs and NNESTs had their own contributions to the profession if they were given equal support and working conditions. Finally, the study concluded with some suggestions and recommendations for further research.

**Index Terms**—English teachers, EFL, native speakers, non-native speakers

## I. INTRODUCTION

The division of native speakers (NSs) from non-native speakers (NNSs) has its roots in applied linguistics, second language acquisition, and L2 teaching literature (Agudo, 2017). However, there has been a long dispute regarding native and non-native teachers who teach English in 'teaching English to speakers of other languages' (TESOL) contexts, raising many issues and concerns (Paikeday, 1985; Davies, 2003, 2013; Medgyes, 1992, 1994; Brain, 2005; Mahboob, 2018; Riordan, 2018). One of the most notable issues is the belief that an NS should be the norm, which is not accurate and acceptable because there are several English varieties that exist in the world, such as English as a lingua franca (Nelson et al., 2020). Another issue is that the employment of the term 'native' to produce perfectness carries a discriminatory practice, and it should be applied by proficiency as a criterion (Paikeday, 1985; Davies, 2003). More importantly, professional jealousy might occur as a consequence of such discriminatory practices among teachers; not everyone can control or cope with it. Such a belief comes from different sources, and each one should be dealt with separately, such as native English-speaking teachers (NESTs) themselves or the preferences of students and their parents regarding NESTs and non-native English-speaking teachers (NNESTs) (Harmer, 2015).

However, the distinction between NESTs and NNESTs is still problematic and racist in some instances (Davies, 2003; Kachru, 1985). According to Kachru's (1985) model, three circles are to be considered to better understand the classification of English used all over the world. In the inner circle, English represents the traditional historical basis, and English is used as the mother tongue and first language in daily life and by the government in countries such as the United States, the United Kingdom, and Canada. The second is the outer circle, which represents countries that are often former colonies of the British empire, and English is used as the second language for social life or for practical purposes, such as in India, Kenya, Ghana, and others. The third circle is the expanding circle, which represents countries that use English as a means of international communication in business and education, and English is regarded as a foreign language. Countries such as Saudi Arabia, Japan, and Korea are included in this circle. This model has been criticised by many for oversimplification and other drawbacks. For example, Graddol (1999) maintains that the inner circle does not necessarily represent perfect English. Nevertheless, this model is still dominant and accepted by employers to differentiate between NESTs and NNESTs. In addition, there are opposing views on the strengths and weaknesses of NESTs and NNESTs as well as on how to test the English proficiency of NNESTs. Some suggest that such proficiency is determined by many factors, such as the accent degree and years of learning English (Hendricks & van Meurs, 2022). For this reason, a thorough look is required and other directions are needed to address these concerns considering other factors shown in the following account.

## II. LITERATURE REVIEW

### A. Theoretical Background

Medgyes (1992), as a pioneer in the field of teachers' nativeness, took the lead in the 1990s by proposing that both NSs and NNSs teach differently, but they can bring a lot to the profession and can become equally effective language professionals. What matters is language competence because nativeness does not guarantee successful language learning.

In the twentieth century, Brain (2005) asserted that scant research has emerged on the issues of NNSs, and he maintains,

This may be due to the sensitive nature of these issues because NNS teachers were generally regarded as unequal in knowledge and performance to [NESTs] . . . and issues relating to NNS teachers may have also been politically incorrect to be studied and discussed openly. (p. 11)

In addition, Mahboob (2018) pointed out that the literature on NNESTs is still new, and many stakeholders need to be reached, such as programme directors and managers, to reach a mutual awareness. Riordan (2018) held that scant research has been done on NNSs as language learners. She suggested that researchers should inform language teachers' programmes because such programmes can meet the needs of language learners. More importantly, pre- and in-service training teacher programmes have to move from theory into practice through the design of different activities and tasks inside classrooms as well as for continuing and professional development (Medgyes, 2017). Teachers need to address different concerns related to teaching practices and reflect on areas of strength and weakness.

English nowadays is taught over the world with an increased number of English teachers. For this reason, the number of NNESTs has become greater than that of NESTs where English is the dominant foreign language. More and more NNESTs are needed to cater to the growing demands of English-learning students (Canagarajah, 2012; Rose et al., 2021; Breeze & Guinda, 2021). English is regarded as an international language for communication in many countries around the world (Medgyes, 2017). For this reason, the discussion of this issue becomes open and looked at from different angles. For example, one way to look at nativeness is to examine the characteristics of NSs. An NS has acquired their mother tongue in childhood and has the intuitions and unique capacity to deal with the features and skills of their mother tongue efficiently, such as grammar, speaking, and writing (Davis, 2013). Davis used the term 'native user' to deal with the problematic use of NSs in terms of their varieties or the issue of bilinguals and maintains,

Putting the two elements together is a way of according status to the second language speaker, who is highly proficient and who uses the language in many (most?) aspects of life, both at work and at home. (p. 11)

Another way to tackle this issue is by ignoring the division between NESTs and NNESTs and replacing it with 'qualification and readiness' or employing multilingual speakers of English instead of NNESTs (Canagarajah, 2012), which leads to better English language teaching practices. Medgyes (1994) held that some characteristics give NNESTs superiority over NESTs, such as being more sensitive to their students and sympathetic to their language problems, being better guessers of language difficulties, and making better use of the students' mother tongue. Moreover, what constitutes good teachers, i.e. proficient teachers, is the needed skills and knowledge and who can teach any English course with efficiency regardless of their nationality and mother tongue. Being an NS does not guarantee being a proficient teacher (Kamhi-Stein, 2016). Hall (2017) asserted that the importance of NNSs cannot be ignored for now and in the future, and the attention would shift to what teachers can do rather than where they come from. Part of this problem could be attributed to the key role of teacher preparation programmes and in-service training workshops as well as how they address this concern as a kind of strategic advocacy (Mahboob, 2018).

### *B. Studies on NESs and NESTs*

Several studies were conducted to touch on the issue of nativeness from different perspectives and in different contexts. For example, Daoud and Kasztalska (2022) performed a study to delineate the criteria put by employers after reviewing 53 online job advertisements. They observed that NSs are regarded as models and a benchmark against which all other NNSs would be judged. They suggested that to deal with such discriminatory practices, other characteristics should be considered, such as how competent and qualified teachers are. Qui and Fang (2019) did another study to explore students' perceptions of teaching practices of content teachers, i.e. NSs and NNSs. They found that both categories employed teacher-centred approaches to teaching. However, NSs utilised more interactive practices with diverse teaching methods, but they lacked the knowledge of the home culture of the students, and NNSs were more aware of intra-cultural competence and attended easily to the students' learning obstacles. Similarly, the strategies used by NSs and NNSs to deliver their classes were explored by Vraciu and Curell (2022), who focused on the comprehensible input and students' interaction inside classrooms. They found that NSs implemented more strategies to maintain the comprehensible input, unlike NNSs, who were keener in fostering the students' interactions. Also, the views of the students towards NSs teaching other languages seem to be similar. Tiranant et al. (2022) determined the views of foreign students learning Thai by NSs. The students held more positive attitudes towards the different roles of NSs who taught grammar and pronunciation. Unlike with NNSs, the students believed that NSs were more experienced and knowledgeable about their mother tongue and were able to provide the students with authentic learning materials.

In a Saudi context, several studies were done by researchers to touch on the issue from different perspectives. One way is to evaluate the teaching effectiveness of both NESTs and NNESTs. For example, Elyas and Alghofaili (2019) examined the EFL Saudi language proficiency in listening and speaking skills to determine whether there was any significant difference between two groups of students. One group was taught by NNESTs and the other by NESTs. After utilising the pre- and post-test procedure, the findings indicated no significant effects based on the students'

performance as both groups performed equally. Students' positive or negative perceptions about NESTs and NNESTs and what postulates ideal teachers were investigated by Abdul Qadeer (2019). The results showed that both groups of teachers had their advantages and disadvantages, but the majority of students were in favour of NNESTs. The students believed that NNESTs were good at teaching reading, grammar, and writing, while NESTs were better at teaching listening and speaking. A similar study about students' perceptions done by Haque and Sharmin (2022) revealed that the students were in favour of native teachers for reading, listening, and speaking, while they preferred non-native teachers for grammar and writing skills. In another study, Alqahtani (2022) examined how NSs define the term 'native speakers' and react to discriminatory practices against NNSs with whom they work. The study revealed that although the recruiters and students had their own criteria to define NSs, focusing on the place of birth, the NSs defined themselves in a less direct and straightforward way. They also showed that they were unhappy about being superior to their NNS counterparts, although it gave them privilege and status.

It is clear from the above studies that the issues of NSs and NNSs have been examined from different perspectives, including students' views and attitudes towards NESTs and NNESTs, recruiters, NSs' views, and students' progress after being taught by NSs and NNSs. However, based on the local studies, few explore students' progress in a Saudi context, especially for university students. Therefore, it is the aim of this study to fill in this gap.

### C. Statement of the Problem

In Saudi Arabia, English has a consolidated and palpable role in the education system at all learning levels. It is considered the primary foreign language to be taught to students, especially in public schools. English also has official status in different sectors at various levels apart from the educational system, such as the political, economic, health, and industrial sectors. In many schools and universities, English is the main means of learning for students, especially in higher education, to place them in the global market as an aspect of globalisation. Before the university level, English is taught as a separate school subject by NESTs or NNESTs, such as those in some international schools. Later, English courses are taught in all private and public Saudi universities as a compulsory prerequisite for preparatory-year students, and they must pass these courses to pursue their academic studies. At different colleges, English is used exclusively and regarded as the main means of instruction. Both private and public universities and colleges as well as diverse industrial and government institutions hire NESTs and NNESTs to teach English to Saudi students. Indeed, having both NS and NNS teachers in academic organisations has its own ups and downs. On the one hand, one might give credit to institutions hiring and recruiting both NESTs and NNESTs as they have different employment methods and diverse opportunities, and the students, as a result, could have various learning opportunities. On the other hand, if not all teachers are treated equally and NNS teachers are especially treated as inferior and less capable of handling some language skills, those teachers would feel less confident in their language ability, marginalised, and therefore more stressed.

In the area where the study was conducted, however, teachers could not choose the courses they wanted to teach. Rather, the head of the English department and the coordinators of different courses, most of whom are NSs, tell the teachers what to teach. For example, speaking and writing courses are often given to NESTs, while reading and grammar courses are given to NNESTs. In addition, communication skill courses are only given to NESTs who are American or British speakers to ensure perfect English pronunciation. In exams, if a question has more than one answer, only NESTs can tell and suggest the closest answer to that question. In some cases, both NESTs and NNESTs are given the same courses to teach. To tackle this problem, the students' scores in the courses taught by both NESTs and NNESTs were compared. The study aims to answer the following questions:

1. Is there a significant difference between the students' grammar achievement scores as a result of their teaching by NESTs and NNESTs?
2. Is there a significant difference between the students' reading achievement scores as a result of their teaching by NESTs and NNESTs?
3. Is there a significant difference between the students' writing achievement scores as a result of their teaching by NESTs and NNESTs?
4. Is there a significant difference between the students' communication skills scores as a result of their teaching by NESTs and NNESTs?

## III. METHODOLOGY

### A. The Sample

A total of 640 male students participated in this study. The students were enrolled in a preparatory year program (PYP) at the English language department of the King Saud bin Abdulaziz University for Health Sciences in Riyadh. The sample was chosen purposively and divided into two groups for each taken course. One group was taught by NESTs from the United States, the United Kingdom, Australia, and Canada while the other by NNESTs from Saudi Arabia, Jordan, Sudan, and Philistine.

### B. Data Collection and Analysis

The data gained from this study were based on the students' scores after taking a unified mid-term exam on four English courses – i.e. grammar, reading, writing, and communication skills – after 10 weeks. For the communication skills course, the exam was divided into the listening part (taken on paper) and the speaking part (taken orally) and was conducted by the course teacher and an assessor. For data analysis, the data were collected and analysed quantitatively. A t-test was run to calculate the numerical differences between the two groups, such as the mean, standard deviation, and T-value of the data using the SPSS package. The ethical issues were taken into consideration while analysing the data. The researcher used numbers to refer to the students to protect their identities.

#### IV. RESULTS AND DISCUSSION

TABLE 1

T-TEST FOR THE SIGNIFICANCE OF THE DIFFERENCES IN THE AVERAGE ACHIEVEMENT OF THE GRAMMAR SUBJECT BETWEEN STUDENTS STUDYING WITH NATIVE TEACHERS AND STUDENTS STUDYING WITH NON-NATIVE TEACHERS

<u>Groups</u>	<u>N</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>T-value</u>	<u>Sig.</u>
Native	65	54.74	4.80	0.11	0.916
Non-native	65	54.63	6.64		(N. S.)

Table 1 is related to the first research question, 'Is there a significant difference between the students' achievement in grammar as a result of their teaching by native and non-native teachers?' It is clear from the information above that the value of (T) is not significant, which indicates that there are no differences in the average achievement of the grammar course between students studying with native teachers and students studying with non-native teachers.

TABLE 2

T-TEST FOR THE SIGNIFICANCE OF THE DIFFERENCES IN THE AVERAGE ACHIEVEMENT OF THE WRITING SUBJECT BETWEEN STUDENTS STUDYING WITH NATIVE TEACHERS AND STUDENTS STUDYING WITH NON-NATIVE TEACHERS

<u>Groups</u>	<u>N</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>T-value</u>	<u>Sig.</u>
Native	63	44.30	4.34	1.20	0.234
Non-native	63	43.37	4.45		(N. S.)

Table 2 answers the second research question, 'Is there a significant difference between the students' achievement in writing as a result of their teaching by native and non-native teachers?' As shown above, the value of (T) is not significant, which indicates that there are no differences in the average achievement of the writing course between students studying with native teachers and students studying with non-native teachers.

TABLE 3

T-TEST FOR THE SIGNIFICANCE OF THE DIFFERENCES IN THE AVERAGE ACHIEVEMENT OF THE READING SUBJECT BETWEEN STUDENTS STUDYING WITH NATIVE TEACHERS AND STUDENTS STUDYING WITH NON-NATIVE TEACHERS

<u>Groups</u>	<u>N</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>T-value</u>	<u>Sig.</u>
Native	96	46.68	6.44	0.08	0.936
Non-native	96	46.59	7.92		(N. S.)

In Table 3, an account is given to the third research question, 'Is there a significant difference between the students' achievement in reading as a result of their teaching by native and non-native teachers?' The value of (T) is not significant, which indicates that there are no differences in the average achievement of the reading course between students studying with native teachers and students studying with non-native teachers.

TABLE 4

T-TEST FOR THE SIGNIFICANCE OF THE DIFFERENCES IN THE AVERAGE ACHIEVEMENT OF THE COMMUNICATION SKILLS SUBJECT BETWEEN STUDENTS STUDYING WITH NATIVE TEACHERS AND STUDENTS STUDYING WITH NON-NATIVE TEACHERS

<u>Groups</u>	<u>N</u>	<u>Mean</u>	<u>Std. Deviation</u>	<u>T-value</u>	<u>Sig.</u>
Native	96	52.82	6.44	1.25	0.213
Non-native	96	51.73	5.66		(N. S.)

Table 4 answers the fourth research question, 'Is there a significant difference between the students' achievement in communication skills as a result of their teaching by native and non-native teachers?' Here, the value of (T) is not significant, which indicates that there are no differences in the average achievement of the communication skills subject between students studying with native teachers and students studying with non-native teachers.

The findings of this study clearly reflect those of Elyas and Alghofaili (2019), who postulated that students performed equally in the exams regardless of their English teachers. One possible explanation for this finding is that all the English teachers who were involved in this study followed the exact same syllabus and stuck to it for the whole semester. They also had to implement the same teaching practices and give the same teaching materials and exercises. The unification of exams was another important factor. All the English teachers had to contribute to the exams and make sure that these exams met the course objectives. The students were equipped with the same question format prior

to the exams and took the same unified exam. All these issues were discussed in the regular meetings with the courses' coordinators and supervisors as well as the workshops run by the same coordinators to attend to necessary related matters. This supports the notion that both NSs and NNSs have their own contributions to the profession, working with and benefiting from each other, as suggested by the related literature (Canagarajah, 2012; Medgyes, 1994; Kamhi-Stein, 2016; Hall, 2017). NSs utilise more interactive practices because they can communicate English naturally. NNS teachers know much about the home cultures of their students and how the school systems of their students have functioned since they started their education. For instance, such teachers can explain grammatical rules in a simple and direct way and may compare them with rules from the students' mother tongue to help them overcome learning difficulties.

This falls into the support and advocacy given to NNSs in pre- and in-service training programmes and workshops, which are vital in addressing this issue (Mahboob, 2018; Riordan, 2018). While such programmes and workshops offer new ways of teaching and supporting teachers with the knowledge and educational skills they need, many other issues still need to be addressed and discussed among NNS teachers. For example, teachers can share their experiences in teaching and suggest different developmental activities and training methods, especially to those in their early years of teaching. Also, more experienced teachers can suggest ways for novice teachers to adapt to various working conditions inside and outside classrooms. Such support would enable them to have more confidence in the classroom and to eliminate any sort of teaching insecurity. In a teachers' training programme, many topics are related to the students' and teachers' beliefs about learning and teaching English; these beliefs come from different sources and serve as a background that guides the process of teaching and learning, yet some of these beliefs are insufficient and based on only personal experiences. This would be a good starting point for NNESTs to discuss and examine when teaching and raising issues with NESTs.

The findings also disagree with those that give superiority to native English teachers in teaching EFL students (Daoud & Kasztalska, 2022; Qadeer, 2019). Based on the research results, any discriminatory practices from the employers are no longer justified. At the departmental level, practices and power relations between the head and the teachers as well as among the teachers within the institution can create tension in the workplace. These practices stem from the administrative institutional structure and its philosophy in teaching. The head of the department is a NEST, and all his decisions regarding operating the institution might be reflected in his background knowledge and beliefs about teaching and learning. His implicit prejudices clearly guide his actions and individual decisions at different levels. To tackle this, I think that NNESTs can initiate a friendly dialogue with the head of the department and openly address this concern and its consequences. Although a few of them have already done this, the head of the department would tell them that their students have reported their preferences in the course-end evaluation questionnaires, albeit making big decisions by listening to what the students say is unprofessional. Teaching as a profession requires taking responsibilities from highly positioned people to ensure professional practices. Teachers can also tell whether they were hired for their expertise and qualifications in the field as the majority of them have master's degrees and graduated from abroad. They want to share their decisions about the courses and what to teach and explain why they want to teach such courses but in a diplomatic way. They can raise this issue at departmental meetings from time to time to show that it is a common concern and that all teachers should be treated equally. Giving priority to NESTs over NNESTs can carry discriminatory views and practices in the whole workplace and result in tension.

As some employers justify what they do as a response to students' preferences, students' views and attitudes towards NESTs and NNESTs should be examined further, although helping them to dispel this presupposition is not easy (Vraciu & Curell, 2022; Tiranant et al., 2022; Abdul Qadeer, 2019). Students hold positive and negative preferences towards English teachers for different reasons. The investigation process can be done academically via research or informal discussions with students, who can be affected by implicit prejudices which determine their preferences for NS teachers. They might prefer NS teachers because they believe that such teachers have ownership of the English language and are the only ones who can produce perfect English. Another reason for this preference is that many students are familiar with American or British pronunciation because of the influence of media, and thus, they have better opportunities to hear and practice their pronunciation in front of their NS teachers. They can practice informal English with such teachers and learn more about slang expressions, or they might prefer NS teachers because they tend to use many words and phrases more naturally. Students might also be encouraged and motivated by NS teachers who can say anything in English, unlike NNS teachers, who often use their mother tongue to ask questions. Some students have already joined language institutes to learn English in Saudi Arabia. The way that such institutes advertise themselves is another important factor. They put American or British flags on their reception desks, and several pictures from the United States or the UK hang on their walls. Some institutes use catchy advertisements such as 'Be native with the help of native-speaking teachers', while other institutes hang pictures of NSs using words and phrases such as 'confidence', 'fluent', 'proficient', 'right choice', and so on to attract their students. Other institutes resort to mass media to market themselves to students. Indeed, the negative impact of mass media on formulating students' beliefs should be considered (Oda, 2017).

The students' perspectives – e.g. their parents' opinions about or preferences for NESTs – are another factor. In some situations, parents are the source of such beliefs (Harmer, 2015). Parents want their children to be taught by NS teachers because they had seen their usefulness when they studied abroad. Some parents might be disappointed by public schools

because they are full of poorly skilled NNS teachers, or they may think that their children being taught by NS teachers is a prestigious social marker. To address this, teachers remind their students that they began learning English before the university level by experienced NNS teachers. NNS teachers are living proof that the English language can be taught by any proficient teacher regardless of his or her nationality. What matters is the knowledge, skills, training, and quality of teaching that these teachers can bring to the table. English has become an international language spoken by hundreds of millions of people as a foreign language, and a great deal of people speak perfect English other than NS teachers.

#### V. CONCLUSION

This study investigated Saudi students' achievements in four English courses while being taught by both NESTs and NNESTs. It has gone towards enhancing deeper understanding of NESTs and NNESTs in a Saudi context. Overall, the findings revealed that students performed equally in the exams regardless of their English teachers. Such findings suggest that both NESTs and NNESTs would have their own contributions to the profession if they were placed in an equal supporting environment and worked together to achieve the courses' objectives.

Indeed, as the term 'native' is seen as problematic (Davis, 2013), the two terms 'native' and 'non-native', while seemingly in conflict with each other, could be looked at or treated as complementary rather than contradictory. Both NS and NNS English teachers, if treated equally, can collaborate with and benefit from each other to share their experiences of what works for the students and bring their best to the profession. NNESTs can help NESTs to better predict the language difficulties that some students encounter as they share the mother tongue of these students. At the same time, NESTs can explain cultural issues that maximise learning to NNESTs as they are more aware of their language and help to overcome any discriminatory practices as a result of this division (Paikeday, 1985; Davies, 2003). Finally, the findings suggest that there is no single root to this problem and that the problem should be addressed from different angles. Several factors might lead to the belief that only NS teachers would represent a better language model. More research is needed in the Saudi context to tackle this issue from different perspectives, including the students' views and attitudes toward NESTs and NNESTs, recruiters, NSs' views, and the students' progress whether they are taught by NSs or NNSs.

#### REFERENCES

- [1] Abdul Qadeer, A. (2019). Saudi EFL learners' perceptions about the teaching of English by native and non-native English teachers. *Arab World English Journal, Special Issue: The Dynamics of EFL in Saudi Arabia*. 137–153. DOI: <https://dx.doi.org/10.24093/awej/efl1.11>
- [2] Agudo, J. D. D. M. (Ed.). (2017). *Native and non-native teachers in English language classrooms: Professional challenges and teacher education* (Vol. 26). Walter de Gruyter GmbH & Co. KG.
- [3] Alqahtani, M. H. (2022). Blame the message senders, not the messenger: The defence case of the English "native speaker" teacher. *Education Research International*. DOI: <https://doi.org/10.1155/2022/3926977>
- [4] Brain, G. (2005). A history of research on non-native speaker English teachers. In *Non-native language teachers* (pp. 13–23). Springer, Boston, MA.
- [5] Breeze, R., & Guinda, C. S. (2021). *Teaching English-medium instruction courses in higher education: A guide for non-native speakers*. Bloomsbury Publishing.
- [6] Canagarajah, A. S. (2012). Teacher development in a global profession: An autoethnography. *Tesol Quarterly*, 46(2), 258–279.
- [7] Daoud, S., & Kasztalska, A. (2022). Exploring native-speakerism in teacher job recruitment discourse through legitimation code theory: The case of the United Arab Emirates. *Language Teaching Research*, 1–21. <https://doi.org/10.1177/13621688211066883>
- [8] Davies, A. (2003). *The native speaker: Myth and reality* (Vol. 38). Multilingual Matters.
- [9] Davies, A. (2013). *Native speakers and native users: Loss and gain*. Cambridge University Press.
- [10] Elyas, T., & Alghofaili, N. M. (2019). Native English speakers versus non-native English speakers: The impact of language teachers on EFL learner's English proficiency. *English Review: Journal of English Education*, 7(2), 27–38. DOI: 10.25134/erjee.v7i2.1773
- [11] Graddol, D. (1999). The decline of the native speaker. *AILA Review*, 13, 57–68.
- [12] Hall, G. (2017). *Exploring English language teaching: Language in action*. Routledge
- [13] Harmer, J. (2015). *The practice of English language teaching*. 5th edition. England.
- [14] Haque, M. N., & Sharmin, S. (2022). Perception of Saudi students about non-native English teachers and native English teachers in teaching English at Jazan University. *Journal of Language Teaching and Research*, 13(3), 503–514. DOI: <https://doi.org/10.17507/jltr.1303.06>
- [15] Hendriks, B., & Meurs, F. V. (2021). Foreign Accent Strength in English. In *Research Questions in Language Education and Applied Linguistics* (pp. 463–468). Springer, Cham.
- [16] Kachru, B. (1985). Standards, codification and sociolinguistic realism: English language in the outer circle. In R. Quirk and H. Widowson (Eds.), *English in the world: Teaching and learning the language and literatures* (pp. 11–36). Cambridge: Cambridge University Press.
- [17] Kamhi-Stein, L. & D. (2016). The non-native English speaker teachers in TESOL movement. *ELT Journal*, 70. 180–189.
- [18] Mahboob, A. (2018). NNEST Lens: Implications and directions. *The TESOL Encyclopedia of English Language Teaching*, 1–7.
- [19] Medgyes, P. (1992). Native or non-native: Who's worth more? *ELT Journal*, 46.4, 340–349.
- [20] Medgyes, P. (1994). *The non-native teacher*. London: Macmillan.
- [21] Medgyes, P. (2017). *The non-native teacher* (3rd ed.). Callander, Scotland: Swan Communication.

- [22] Nelson, C. L., Proshina, Z. G., & Davis, D. R. (Eds.). (2020). *The handbook of world Englishes*. John Wiley & Sons.
- [23] Oda M. (2017). Native-Speakerism and the roles of mass media in ELT. In: Martinez Agudo J (ed.) *Native and non-native teachers in English language classrooms: Professional Challenges and Teacher Education*: Berlin: Walter de Gruyter. pp.99-115.
- [24] Paikeday, T. M. (1985). *The native speaker is dead!* Toronto and New York: Paikeday.
- [25] Qiu, X., & Fang, C. (2019). Creating an effective English-medium instruction (EMI) classroom: Chinese undergraduate students' perceptions of native and non-native English-speaking content teachers and their experiences. *International Journal of Bilingual Education and Bilingualism*. DOI: <https://doi.org/10.1080/13670050.2019.170776>
- [26] Riordan, E. (2018). *Language for teaching purposes: Bilingual classroom discourse and the non-native speaker language teacher*. Springer.
- [27] Rose, H., McKinley, J., & Galloway, N. (2021). Global Englishes and language teaching: A review of pedagogical research. *Language Teaching*, 54(2), 157–189.
- [28] Tiranant, P., Khumsat, T., Ngamnikorn, T., & Wiboolyasarin, W. (2022). Beliefs about native-speaking teachers in grammar and pronunciation instruction: Views and voices from second language learners. *International Journal of Language Studies*, 16(1), 45-72.
- [29] Vraciu, A., & Curell, H. (2022). Language learning opportunities in native vs. non-native EMI lecturer input: Insights for a language-aware approach to EMI teacher training. *Innovation in Language Learning and Teaching*. DOI: 10.1080/17501229.2022.2059666

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# The Combination of Production-Oriented Approach and Flipped Classroom Teaching Model: An Experimental Research in the Listening and Speaking Class in Chinese Senior High School\*

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**Abstract**—The widespread adoption of a production-oriented approach (POA) in classroom instruction design has established its operability and effectiveness in foreign language teaching. This study constructs a teaching model combining POA and flipped classroom teaching model to enhance the oral production ability of high school students. The model was applied to oral English teaching in an experimental class, and a paired-sample *t*-test was conducted on the pretest and posttest scores of the class to validate the effect of the model. Then, an interview was conducted to survey students' attitudes toward spoken English. We observed significant improvement in students' oral English ability and their interests in spoken English. Furthermore, the application of the new teaching model transformed the traditional input-driven teaching into output-driven teaching, fully mobilizing students' subjective initiative in learning the English language.

**Index Terms**—production-oriented approach, flipped classroom, oral English teaching in senior high school

## I. INTRODUCTION

To enhance the efficiency of English teaching in senior high school, Chinese studies have been investigating theories and methods of language teaching to augment students' language communicative competence. The production-oriented approach (POA), proposed by Wen (2015), is a teaching theory that advocates the combination of learning and application. At present, the POA theory has not only exerted a certain impact on academic circles but attained preliminary results in English teaching practice. Moreover, the POA theory emphasizes the link between input learning and output application, and each teaching phase focuses on what students can learn, reflecting the significance of the new teaching model.

In recent years, micro-video has become very popular with the rapid progress of the Internet, making it feasible to use micro-video in college English instruction. The newly revised *English Curriculum Standard for Senior High School* in 2017 stipulated that it is crucial to apply mobile Internet technology to cultivate students' listening and speaking abilities and intercultural communicative competence. Besides, English instruction should make full use of information technology to promote the integration of teaching and technology. This study applies the POA theory to oral English teaching in senior high school, as it is suitable for the training of students' listening and speaking abilities. Of note, this research is designed specifically to determine the impact of the POA-based teaching model on students' oral English proficiency and students' attitudes.

## II. THEORETICAL FRAMEWORK

### A. Framework of the POA Theory

POA is a language teaching theory proposed by Wen (2015). The predecessors of the POA theory are “output-driven hypothesis” and “output-driven and input-enabling hypothesis” (Wen, 2014). Traditionally, the theory has been taken as a multifaceted concept comprising three components—teaching principles with the function of ideological guidance, teaching hypotheses that support the teaching processes, and teaching processes that reflect the teaching principles and

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teaching hypotheses.

The teaching principles comprise the learning-centered principle, learning-using integration principle, and whole-person education principle (Wen, 2015), and these principles highlight that teaching activities should focus on the implementation of teaching objectives. The teaching hypotheses are output-driven hypothesis, input-enabled hypothesis, and selective-learning hypothesis. The teaching processes cover three core phases, namely, motivating, enabling, and assessing. Figure 1 shows the framework.

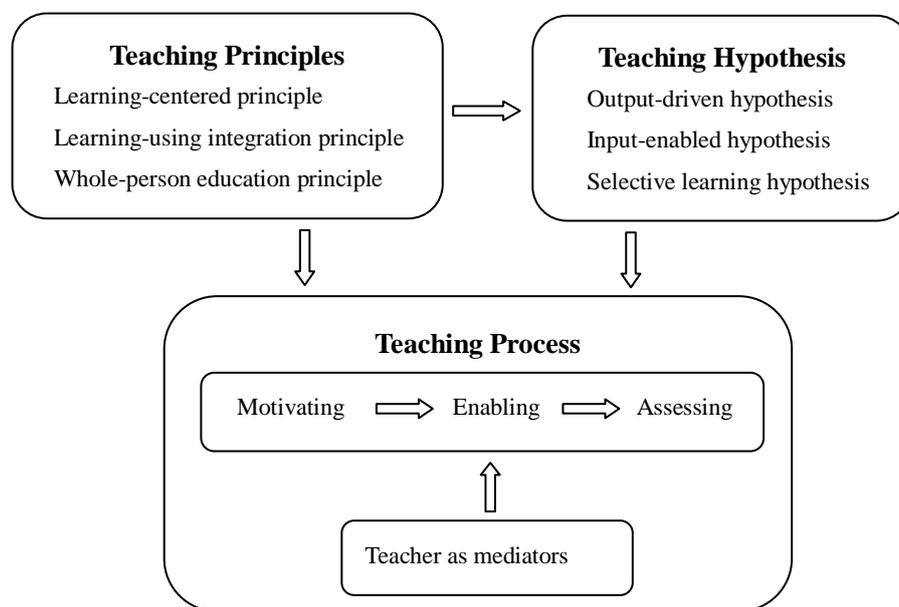


Figure 1 The System of POA Theory

The POA theory system combines the curriculum theory and second language acquisition theory. Teachers should complete theme-related activities that fulfill the requirements of the curriculum theory, including formulating apt teaching objectives, selecting teaching materials that suit the teaching objectives, adopting teaching methods, and a reasonable evaluation system. In contrast, teachers should focus on whether the second language acquisition theory has been tested and applied reasonably at different stages.

### B. Model Construction

In the traditional teaching model, teachers spend the most time teaching the related knowledge to obtain the best teaching results. Owing to the limited time, it is primarily teacher-centered where students have few opportunities to speak. Without consideration, students become passive in the receptive knowledge environment. The “teaching before learning” model in the flipped classroom (Gerstein, 2012) belongs to the transformation of the teaching model from “input-driven” language learning to “output-driven” language learning.

Wen (2017) highlighted that the POA advocates the close combination of input-learning and output-using, and that all language teaching activities closely correlate with the language using to attain the integration of learning and application. This aligns with the flipped classroom teaching model, where students and teachers focus on both learning and using language simultaneously, integrating and smoothly articulating each, thereby promoting the efficacy of output activities.

Students must complete listening materials on their own before class under the guidance of the POA. With adequate teacher guidance, they need to complete productive activities, and teachers check the results and provide in-time guidance. The “check” of the flipped classroom is the assessing phase of the POA.

To date, many scholars have used the POA theory and flipped classroom teaching model in English teaching. Zhang (2015) took curriculum design and teaching units as examples to demonstrate that the POA can be applied to writing courses in college. The experimental results revealed that the POA could help students to use the key points of writing, suggesting that the POA is feasible and effective in English teaching in China. Bi (2019) compared the similarities and differences in the design and application of teaching materials based on the POA and task-based approach; the study was designed specifically to address that the POA is in line with the characteristics and needs of English learners. Qiu (2017a) selected and transformed teaching materials based on the POA into enabling activities, presenting specific strategies that were proposed by Wen Qiufang for enabling design to examine the three criteria through illustrative examples. The proposal of these strategies made the design of enabling activities more feasible. Furthermore, Wu (2019), who designed the teaching model for listening and speaking, analyzed the network platform and the data obtained from questionnaires and tests, verifying the rationality of the teaching model process, which could enhance students’ listening and speaking abilities.

The previous studies of the POA theory and flipped classroom teaching models exerted a certain impact on academia and improved English teaching. In addition, most previous studies either focused on teaching materials or relied on curriculum design. The traditional English teaching in senior high school neglected the cultivation of students' listening and speaking abilities. The POA theory can enter the level of practice only by using the flipped classroom teaching model and the modern educational network technology. The principal reason is that the enabling and assessing phases in the POA can be well combined with the flipped classroom teaching model.

Per the requirements of the newly revised *High School English Curriculum Standards* in 2017, the first step to this end is to devise criteria for assessment jointly among teachers and students, including content, structure, pronunciation, grammar, fluency and interaction. The assessment can be divided into three levels—excellent, good, and average. Students' oral scores can be recorded per the assessment standard. Second, students need to submit their tasks. A deadline and format must be clearly specified in advance so that students' submitted products are presented in a required format and handed in on time. Finally, the crucial step is collaborative assessment.

Referring to the construction process of other scholars, this study designs specifically to construct and adjust the POA-based flipped classroom teaching model. Of note, this is an output-driven teaching model. Figure 2 presents the teaching process.

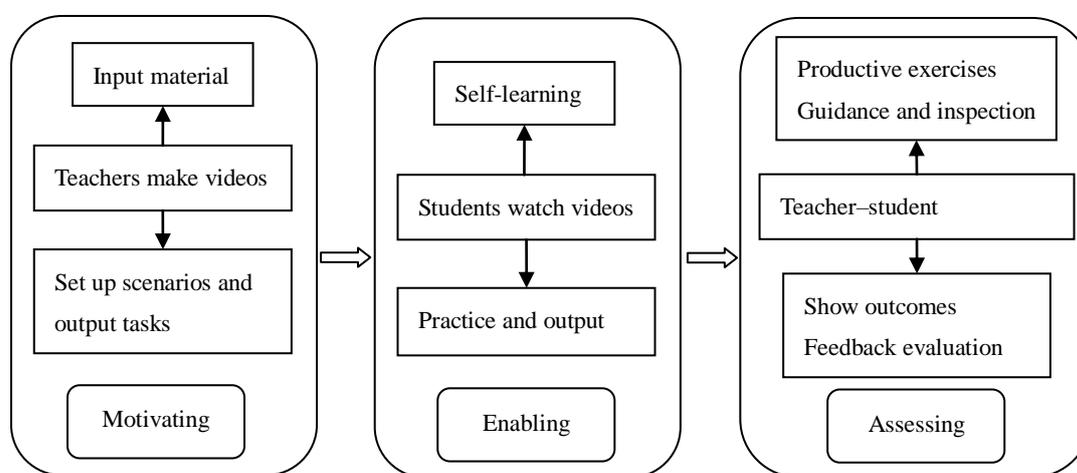


Figure 2 Flipped Classroom Teaching Process Based on POA.

### C. Implementation Procedure

Based on the teaching process, both teachers and students prepare for class.

In the motivating phase, teachers ask students to watch micro-videos before class, presenting the corresponding communication scenarios and describing to-be-finished tasks. They select videos from network resources based on the teaching objectives and crucial points of this unit, or it will happen in the future.

In the enabling phase, students watch videos for selective learning and practice productive activities that are divided into mini-tasks. Teachers provide guidance and check results so that students can immediately apply the results of selective learning to the output tasks. Teachers must choose appropriate enabling materials, including content, language form, and discourse structure when they guide students.

In the assessing phase, students show results and communicate with partners or groups, and they can discuss more difficult questions. Here, teachers' role changes from narrators to valuers, and they evaluate students' accomplishments, whereas students' role changes from the knowledge receiver to the practitioner, and they give full play to their imagination and creativity. Teachers as the leader and students as the main body should complete the phase together.

### D. Teaching Case

In this study, we selected "cultural relics" of Module 2 Unit 1, which is a compulsory English course in senior high school. The new teaching model will be used in listening and speaking class. The teaching objectives will be categorized into language ability, cultural awareness, thinking quality, and learning ability. First, students should be proficient in words and expressions of relevant cultural relics to improve oral accuracy and fluency. Second, students should have their own understanding of cultural relics, which will augment their cultural self-confidence. Third, students should have logical, critical, and innovative thinking, which is helpful to enhance their analytical and problem-solving abilities. Finally, students should strive to improve learning efficiency and autonomy and have good learning habits.

#### (a). Motivating Phase

Before class, students are categorized into four groups, and teachers provide them communication scenarios. The following is a case. A foreign friend wants to visit the local cultural relics in your hometown, and you are a volunteer in a local museum. The communication scenario is common in daily life. Teachers encourage students to try to accomplish the communicative task. At the time, students may encounter difficulties and realize what they lack in performing, which would stimulate their interest and motivation.

The teaching objectives of language ability is about new words and phrases (such as dynasty, belong, gift, fancy, style, wooden, reception, look into, belong to, at war, take part in/join in, think/speak highly of, and so on) and sentence patterns (e.g., I think highly of...; As far as I am concerned, I think ...; I would like to say...; Don't you agree/think that...; The relics about...with a long history...). The teacher presents a list of students' oral tasks.

- a) Are there any cultural relics worth protecting in your hometown?
- b) What are they? Give the reasons.
- c) Introduce a special cultural relic.
- d) Do you have any good suggestions about protecting cultural relics?

Teachers present the output tasks above and ask students to complete the following reading exercises of related words and sentences in the video.

#### (b). *Enabling Phase*

To attain productive activities, students should complete mini-tasks per the requirements, and teachers only provide guidance. The section specifies the arrangements for productive mini-tasks, including selection, transformation of input materials, and the design of output-driven activities. The teaching process is as follows:

##### Task 1: Cultural relics worth protecting in hometown

Teachers play a 5-min video about world-famous cultural relics, and students must retell the key information heard in the video, which is used to describe the cultural relics worth protecting. Students watch the video again, and the key expressions and language knowledge are given by the teacher. Then, they use the above information to describe cultural relics worth protecting in their hometown. Throughout the process, students finish tasks on their own and try to output while teachers assess their learning effects in time.

Students discuss cultural relics worth protecting in their hometown in groups. Examples of some sentence patterns are: As far as I am concerned, I think ...; I would like to say...; As I see it...; As we all know, ... and students use them to complete conversations about cultural relics in their hometown. Teachers give timely evaluations.

##### Task 2: Introduce a special cultural relic

Students discuss cultural relics in their hometown with partner and ask each other questions about where they plan to travel this year and whether there are cultural relics worth protecting in the local area. Teachers give timely assessments.

##### Task 3: Good suggestions about protecting cultural relics

Students are asked to read an article about the protection of cultural relics and give some suggestions for the protection of cultural relics. Students work in groups, and everyone has to prepare a 3-min presentation. Students find grammatical and phonetic errors when other students are speaking, and they correct their errors immediately. Then, one member of the group acts as a volunteer and others acts as tourists. After discussions between volunteer and tourists, students start voting and evaluating whether the volunteer gave satisfactory explanations to tourists.

After the teaching procedures are finished, students are asked to complete many activities under the teacher's guidance. Based on the new teaching model, students will also prepare presentations about cultural relics in their hometown.

#### (c). *Assessing Phase*

In the class, teachers and students should first summarize the common expressions of the protection of cultural relics. Then, teachers provide several related topics on cultural relics and students have role-play. Based on the students' performance, teachers can change groups to allow students to have speaking training. Considering the listening situation in different groups, teachers select several student representatives to show in turns. After students finished, teachers assess the productive activities after class, and students also evaluate each other's performance.

### III. RESEARCH DESIGN

#### A. *Problems, Subjects, and Instruments of the Research*

This study will address the two following questions:

(1) What are the effects of the POA-based flipped classroom teaching model on students' oral English proficiency in senior high school?

(2) What is the senior high school students' attitude toward POA-based flipped classroom teaching model?

The research combines quantitative and qualitative analyses. To execute the research smoothly, the thesis has modified the research procedures and methods several times to be the 16-week research for senior high school students under the guidance of research group and teachers. The students have reached the level of A2 or above per the *Common Reference Framework for European Languages* (Wen, 2015). We selected 50 students from a senior high school in central China as subjects. The experiment lasted 4 months (September 10, 2019 to January 10, 2020).

The three research instruments used were questionnaire, oral test, and interview. The interview aimed to obtain a more detailed and specific understanding of the application of the new teaching model in English instruction and know students' attitude toward the model. The questionnaire covered four aspects of students, namely, learning attitude, learning motivation, task completion and learning evaluation, and the effect on the new model. In the entire process of the experiment, pretest and posttest were conducted to know about the changes of students' oral scores.

#### *B. Research Procedure, Data Collection, and Analysis*

The research lasted 16 weeks, and its procedures were divided into three parts. First, students took an oral examination in the first 2 weeks. In the third week, teachers introduced the POA theory and flipped classroom teaching model. Students had a general understanding of the teaching method to raise awareness of the significance of the research. Second, students were taught using the POA-based flipped classroom teaching model for 3 months. Finally, posttest and questionnaire were conducted in the last 2 weeks. Notably, students had to be able to understand the criteria of the speaking rating scale, as well as the content of the oral test at the beginning. After the experiment, students selected randomly were interviewed after informing them that the interview will have no impact on their performance.

We collected quantitative data, which refers to questionnaires and tests, and qualitative data, which refers to interviews. The interview content was analyzed and compared, and the questionnaires were issued after the experiment. A pretest was conducted before and a posttest after the experiment. Meanwhile, relevant data were collected sufficiently. The oral English rating scale was adapted for senior high school students based on China Standards of English and the IELTS. All the research subjects and teachers were Chinese, so the rating scale was also Chinese to reduce the errors. Finally, the collected data were analyzed and presented by SPSS17.0, and a paired-sample *t*-test was used to detect the significant differences between the pretest and the posttest in the experimental class.

### IV. RESULTS

This part illustrates the results of the collected data with tables and questionnaires, expressed as a percentage, the test was analyzed using SPSS (ver. 17), and the interview data were analyzed in the form of text.

#### *A. Questionnaire*

After the experiment, 50 questionnaires were distributed among students, all of which were collected and valid. Here are 15 questions in the questionnaire. Questions 1–5 were about the extent to which students attach importance to learning spoken English and relevant practice. Questions 6–10 focused on students' learning motivation and the completion of tasks. The last 5 questions were students' evaluations of the effectiveness of the teaching model.

Based on the results of the questionnaire, as for questions 1 and 2, 100% and 98% of students were interested in and liked the listening and speaking class, respectively. Regarding question 3, 93% of students supposed that productive activities about spoken English could promote learning, and even 64% of students strongly agreed with the opinion, indicating that spoken English learning is still significant. Question 4 was about the topics that are helpful for students' daily communication. About 73% of students agreed that the topic in the class was close to communication in real life. However, 36% of students still displayed an uncertain attitude toward this view, probably, because these students seldom communicated with others in English. Regarding question 5, about 89% of students were willing to spend extra time and energy in oral practice, clearly stating that they were willing to actively cooperate with each other to facilitate outputting.

Regarding question 6 (I can study independently before class and finish the task conscientiously), almost half of the students' opinion, they could learn and complete tasks independently in the teaching model. The POA theory shows that output can stimulate students' enthusiasm and curiosity in output learning than input; thus, they can learn to complete productive tasks actively. Regarding question 7 (the communicative task in class can stimulate my motivation and enthusiasm in English learning), 89% of students maintained that their motivation and enthusiasm were promoted by the real communicative activity in class, which is also a key step in the teaching process. Regarding question 8 (I can consult relevant materials that need to learn before class and I can practice on my own), compared with other questions, 34% held uncertain views about the question, which could be because teachers had not selected the enabling materials well, or students did not pay adequate attention to speaking, for example, the time was too limited to finish the heavy task. The selective-learning principle plays a vital role in the POA theory, which can cultivate students' ability of independence and creativity.

Regarding question 9 (the times of output in class has increased compared with the previous semester), 86% of students supposed that the new teaching model could improve the frequency of outputting. Question 10 (my classroom learning efficiency has improved this semester) was designed to study whether to attain new linguistic elements or skills through input activities must be linked seamlessly by using what has just been learned through the input in productive activities. Although the teaching model provided more opportunities for practice than before, 26% of students still stated that they did not make it clear that the teaching model could improve the efficiency of output, perhaps, because of the limited time available for output or because they were not yet familiar with the teaching method.

Regarding question 11 (I will solve the problems on my own in learning spoken English in the teaching model), 72% of students could problems in spoken English actively, and 16% were not sure whether they could solve the problems

actively. There are many causes for the phenomenon, for example, some tasks were still difficult for some students, and they needed a certain time to solve problems on their own, such as some difficult words and related expressions. Regarding question 12 (In this teaching model, I can actively participate in the discussion), most students were willing to discuss actively, but 22% thought they could not, of which 14% students strongly disagreed. During the practice, some students might have felt a certain degree of anxiety due to to-be-finished tasks; moreover, they were shy and did not want to express themselves in class. Regarding question 13, 86% of students supposed that their overall ability of spoken English improved, suggesting that the teaching model is effective. Regarding question 14, almost all students considered that they could develop good habits in learning, stating that students have a positive attitude toward oral English. Regarding the last question, students were fond of the teaching model. Thus, mode can arouse students' desire for learning so that they can overcome difficult tasks, having a clear focus on their learning.

The data provided above showed that students can cooperate actively to practice oral English after the implementation of the POA-based flipped classroom teaching model in the senior high school, and they were full of confidence in learning oral English. Moreover, their support and love for the teaching model showed that it can be applied to high school language instruction and aligns with students' current learning level.

### B. Tests

The pretest aimed to evaluate students' real oral score before applying the teaching method. The paired-sample test analyzed the results, as shown in Table 1.

TABLE 1  
GROUP STATISTICS OF PRETEST SCORES IN EC

	Mean	N	SD	SEM
EC pretest scores	66.50	50	7.031	0.994

As shown in Table 1, the average score was 66.50 before applying the POA-based flipped classroom teaching model. The standard deviation (SD) of the class was 7.03, indicating that the level of students' oral English was uneven. To determine whether the performance had improved significantly after the experiment, the posttest results were obtained. Of note, all the posttest results covered five aspects: structure, content, pronunciation, grammar, and interaction relation

TABLE 2  
PAIRED-SAMPLE STATISTICS OF PRETEST AND POSTTEST IN EC

	Mean	N	SD	SEM
EC pretest scores	66.50	50	7.031	0.994
Posttest scores	78.64	50	5.965	0.843

Table 2 shows that the average score of oral English is 78.64 after one semester, which is significantly higher than that of pretest (66.50), demonstrating that students performed better in the posttest than pretest, and the oral score of students is significantly improved. The SD of the posttest is 5.965, and it is lower than that of the pretest, indicating that the oral English score of the posttest is closer to the average than the pretest, and the overall score is improved.

TABLE 3  
PAIRED-SAMPLE CORRELATIONS OF PRETEST AND POSTTEST IN EC

	N	Correlation	Sig.
EC pretest and posttest scores	50	0.655	0.000

Table 3 shows that the correlation between the pretest and posttest values is high, which is 0.65. In addition, the sig value is 0.000, which is  $<0.05$ . Thus, a significant statistical difference was found between the pretest and the posttest. Besides, a linear relationship was observed between the two variables, indicating that the paired-sample test could be conducted.

TABLE 4  
PAIRED DIFFERENCES OF PRETEST AND POSTTEST IN EC

EC	Mean	SD	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig (two-tailed)
				Lower	Upper			
Pretest scores Posttest scores	-12.140	5.484	0.775	-13.698	-10.581	-15.651	49	0.000

In Table 4, the mean difference is -12.140, SD is 5.484, and the standard error mean (SEM) is 0.775. Table 4 also shows that 0 is not within 95% confidence interval (CI) of the difference. A significant difference was found between the two variables, and the value of sig (two-tailed) was 0.000, which is  $<0.05$ , further proving that the difference of two variables is significant. These findings answer the first research question that it can improve students' oral English scores and efficiency.

Next, a paired-sample analysis of the oral English test was performed in each aspect to understand the specific impact of the new teaching model. Table 5 presents comparison of each aspect of the data more clearly.

TABLE 5  
GROUP STATISTICS OF PRETEST AND POSTTEST IN EC

Item	EC	N	Mean	SD	SEM
Structure & Content	Pretest scores	50	13.14	1.726	0.244
	Posttest scores		15.80	1.399	0.197
Fluency	Pretest scores	50	13.26	1.723	0.243
	Posttest scores		15.80	1.355	0.191
Pronunciation	Pretest scores	50	13.56	1.643	0.232
	Posttest scores		15.72	1.640	0.232
Grammar	Pretest scores	50	13.36	1.548	0.219
	Posttest scores		15.78	1.298	0.183
Interaction relation	Pretest scores	50	13.32	1.695	0.239
	Posttest scores		15.62	1.828	0.258

Table 5 illustrates that there are five aspects of students' oral English test. After a semester of the experiment, the average performance of these five aspects improved. Meanwhile, Table 5 shows that the SD of the posttest is almost smaller compared with the pretest, indicating that students' oral score is getting closer to the average.

In addition, the score of structure and content improved, implying that students had a clearly logical thinking when speaking. Moreover, fluency improved greatly, showing that students had a good command of context. After a semester of practice, students' oral English also made great progress, and they were glad to talk with each other. However, the SD of interaction relation increased, stating some students could join the activities actively while others are not.

The paired-sample test showed that the students' oral English scores improved after applying the teaching method; that is, the teaching method could improve students' oral efficiency, making structure more complete, content richer, logic clearer, and spoken language more fluent when students are speaking.

TABLE 6  
PAIRED-SAMPLE CORRELATIONS OF PRETEST AND POSTTEST IN EC

EC	N	Correlation	Sig.
Structure & Content	50	0.603	0.000
Fluency	50	0.673	0.000
Pronunciation	50	0.778	0.000
Grammar	50	0.691	0.000
Interaction relation	50	0.593	0.000

Table 6 suggests a great correlation between the pretest and the posttest, and the correlation value is high in every part. In addition, Table 6 shows that the sig value of each part is 0.00, which is  $<0.05$ , indicating a linear correlation between the pretest and the posttest of oral English scores. Thus, the paired-sample test can be performed.

TABLE 7  
PAIRED DIFFERENCES OF PRETEST AND POSTTEST IN EC

EC		Mean	SD	SEM	95% Confidence Interval of the Difference		t	df	Sig. (two-tailed)
					Lower	Upper			
Structure & Content	Pretest-Posttest	-2.660	1.422	0.201	-3.064	-2.255	-13.218	49	0.000
Fluency	Pretest-Posttest	-2.540	1.459	0.206	-2.954	-2.125	-12.303	49	0.000
Pronunciation	Pretest-Posttest	-2.160	1.094	0.154	-2.471	-1.848	-13.952	49	0.000
Grammar	Pretest-Posttest	-2.420	1.263	0.178	-2.778	-2.061	-13.547	49	0.000
Interaction relation	Pretest-Posttest	-2.300	1.593	0.225	-2.753	-1.846	-10.203	49	0.000

Table 7 shows that 0 is not within 95% CI of the difference of each part, highlighting a significant difference between the two variables. Moreover, the sig value of each item is 0.00, which is  $<0.05$ . All features demonstrate statistically significant changes. These findings suggest that students' oral performance improved significantly after the implementation of the new teaching model, which addressed the first research question.

### C. Interview

To determine students' attitude toward the teaching model, we recorded and analyzed the interview data. To guarantee students to talk freely, interviews were conducted in Chinese. A total of 6 students at three levels were randomly selected for interviews, including 5 questions. The interview data were as follows:

The first question was whether students liked the teaching model and the reasons for it. Five students stated that they liked it, while only one said that he didn't like the teaching model. Student 6 said, "I don't like the new teaching model because there are so many to-be-finished tasks before class which makes me tired and could not concentrate on oral English class." Meanwhile, 5 students revealed that the teaching model benefited them in several ways. First, students

understood and tried to complete the tasks before class so that they could know what they lacked, stimulating their interest in learning. Second, the topics discussed in class correlated with daily life, so they liked to participate in the discussion. With the help of other students, they could imitate or create several topic examples, making them feel relaxed and happy, thereby creating a real context for oral English learning. Third, the teacher presented different enabling materials to students at different levels, making students know about their tasks clearly.

Question 2 was about the biggest obstacle encountered in the process of oral English learning. Students 4 and 6 indicated that they were afraid of making mistakes when expressing their ideas, but the situation was much better after several lessons. Student 5 said, "Faced with these to-be-finished tasks, it is difficult to rely on myself to complete them without the help of teachers or dictionaries." Other students said that they encountered challenges in the learning process but they could solve them.

Question 3 was about which teaching step was the most helpful to students and the reason for it. On this issue, the views of each student differed markedly. Students with high levels of ability said, "I think the most helpful step is arranging output task before class and the teacher divided it into several small tasks, on the one hand, it can improve my autonomous learning ability, on the other hand, it can cultivate my creative thoughts." For middle-level students, the most helpful step was the enabling phase. Students considered that there were many topics close to life in the oral English practice, providing them with several real contexts. Low-level students could complete a series of tasks per the teachers' guidance, which enhanced their confidence in the process of English learning. Briefly, the process design of the teaching model was complete, and teachers considered students' learning ability in each step.

Question 4 was about students' attitudes toward the teaching model after a semester. Students 4 and 6 supposed that they had a sense of urgency in completing a series of small tasks assigned by their teacher, but they felt satisfied after completion, which improved their sense of self-identity. Students 1 and 5 thought that the topics and materials set by the teacher could make every listening and speaking class exciting and rich, which stimulated their interest and improved their self-confidence. Students 2 and 3 believed, "...in the process of completing tasks and peer communication, I speak out the words and sentence patterns related in micro-videos to achieve the learning purpose, and it can reduce the tension of face-to-face communication with teachers in class." Perhaps, all students displayed a positive attitude in the teaching model.

Question 5 was about the expectations for oral English learning in the future. As mentioned by Student 5, "I hope the teacher can provide more teaching materials or videos so that we can choose to complete a variety of communication tasks, which will be helpful for our oral communication in the future." In addition, Student 6 agreed that it would be better for the teacher to give them more examples. Others hoped that teachers could provide them with a good frame of reference so that they could complete their tasks better.

In a nutshell, we found that the POA-based flipped classroom teaching model was high after the interview won the students' approval. Students now had a positive attitude toward oral English and they were willing to learn oral English using the teaching model.

#### *D. Effectiveness and Attitudes*

##### *(a). Effectiveness*

The interview revealed that the POA-based flipped classroom teaching model could play a positive role in enhancing students' oral English efficiency. The teaching model improves students' oral ability, especially in structure, content, fluency, grammar, vocabulary, and interaction. The reasons for the effectiveness of the teaching method are summarized as follows:

First, under the guidance of teaching principles, such as "learning-centered principle" "learning-using integration principle," and "whole-person education principle," a new teaching model is formed by combining POA and flipped classroom. The learning-centered principle breaks the traditional idea that teachers play a dominant role in class. Although teachers have been given many titles, such as helpers, consultants, and leaders, their responsibilities have not been brought into full play. This study claims that the accomplishment of teaching goals and the learning efficiency of students in the classroom should be the focus on teachers' attention, which is also accentuated by the teaching concept of POA. Reportedly, POA insists on whole-person education, but it does not mean that the realization of humanistic objectives requires more time in the classroom (Wen, 2014). Teachers should be able to establish a correct outlook on life, spread Chinese culture, and cultivate students' spirit of collaboration when choosing input materials, also emphasized in oral English test; this also aligns with the concept of the flipped classroom teaching model. Under the teachers' guidance, students are allowed to explore independently and find the inherent laws by themselves. Both POA and flipped classroom teaching model focus on productivity and learning efficiency, and all these characteristics can enhance students' oral English scores.

Furthermore, each step of the teaching process is designed to augment students' oral English. In the motivating phase, teachers present tasks to students, which might be the scenario with the high communicative value that they will encounter in the future. It not only saves class time but also enters the enabling phase. When students try to communicate with others, they realize that their language competence is not adequate, and they want to learn or improve their oral English. Finally, teachers set teaching goals, which are divided into two categories: (i) communicative goal, which is to complete the communicative task of a certain topic; (ii) language goal, including the

word, phrase, or grammar knowledge all emphasized in the oral test. Above all, language goals should serve communicative goals. Students learn and explore by themselves before class, eventually achieving knowledge internalization under teachers' guidance. Mobile technology not only creates the possibility for students to repeat exercises independently but also gets rid of the limitation of time and space. To illustrate the internal relationship in various knowledge points in a few minutes, teachers must make each part of the listening learning content, and then present the textbook content in the form of modules. Moreover, the design can form a complete knowledge structure system, which is convenient to train the listening and speaking abilities.

In the enabling phase, input materials should be carefully selected by teachers to serve the topic. To complete the task, students primarily accomplish the content, and the form of the language and grammar, which are all emphasized in the oral test. Per the hypothesis of selective learning, each stage should have a learning focus. For example, this study emphasizes the content, as well as the practice of language expression, including words, phrases, and key sentence patterns in teaching cases. Regarding students in the experimental class, they finish their oral tasks and practices before class, which is a good start to the enabling phase. Thus, students have made significant progress in the aspect of vocabulary and structure in posttest.

In addition, assessment is one of the ways to promote teaching effectiveness. Teachers have two ways to evaluate students' learning: timely assessment and delayed assessment. Timely assessment is the evaluation of students' oral English learning effect in the selective learning and mini-productive task, which occurs in the enabling phase. It is best to adopt the way of teacher-student collaborative assessment in the classroom, which is also a type of assessment method in the POA theory. This way, teachers can have a comprehensive understanding of students' oral output in time, as well as summarize the issues encountered by students in practice. Thus, teachers can upgrade their teaching methods. Furthermore, students can not only receive feedback in time and analyze their limitations in-depth but also check deficiency.

In conclusion, teachers can not only realize the importance and advantages of the teaching model but also the teaching model enrich the oral English teaching in senior high school. In the process of teaching practice, students' oral ability in the experimental class can be improved by using the POA-based flipped classroom teaching model, which demonstrates that the teaching model is suitable for senior high school English instruction.

#### *(b). Attitude*

The questionnaire and interview findings revealed that students have a positive attitude toward oral English learning after the application of the new teaching model. Under teachers' continuous guidance, students gradually break their inner obstacles in classroom learning and can express their ideas in group cooperation, thereby gradually increasing students' enthusiasm for learning English. Consequently, the learning efficiency improves significantly. Based on the analysis of the interview and questionnaire, students' attitude toward oral English is summarized into the following aspects:

First, real communication scenes and relevant micro-videos are given, which can stimulate students' interest to learn English. Then, teachers select rich input materials suitable for students at different levels and can complete tasks without fear of difficulties. Most importantly, suitable materials can stimulate students' interest in oral English learning because the topics selected are related to daily life.

Second, the selection of useful relevant materials can enhance the efficiency of oral English learning in the enabling phase. Students are willing to complete learning tasks on their own. Moreover, not only can they practice alone but also practice related sentence patterns and discuss related topics with their peers. In addition, peer communication and cooperation can boost students' confidence in the completion of tasks. Students have sufficient time to prepare before class, which can decrease anxiety of face-to-face communication in class. Furthermore, students may have a strong desire for learning before completing the task, but they are very satisfied after completing the task.

Finally, vast input materials about daily life topics and various productive activities create a good learning atmosphere, enabling students to study in a relaxing environment, which is also the reason why students have a positive attitude toward the teaching model.

Briefly, the new teaching model transforms the traditional input-driven teaching into output-driven teaching, which fully triggers students' initiative to explore knowledge and improves the teaching effect on oral English.

## V. CONCLUSION

This study establishes that the POA-based flipped classroom teaching model can be constructed through the three-step teaching process of motivating-enabling-assessing. The application of the new teaching model transforms the traditional input-driven teaching into output-driven teaching, fully mobilizing students' subjective initiative in learning and exploration and enhancing the teaching effect on English language instruction.

For the first research question, the thesis validates that the teaching model can effectively enhance the oral English efficiency of senior high school students. The pretest and posttest revealed that the average oral English score of the experimental class increased by 12.14, indicating that students' oral English scores improved markedly after applying the teaching model. The oral English score of the experimental class is much better in content and grammar than that at the beginning of the semester. Furthermore, students in the experimental class displayed great interest in oral English

and could participate actively in the discussion in the class, which is a great improvement.

Regarding the second question, this study verifies that students have a positive attitude toward the new teaching model. After a semester's experiment, students in the experimental class built their confidence in oral English learning and reportedly benefited a lot from the teaching model, as well as improved their efficiency to learn independently. Teachers design and arrange the micro-videos carefully, which is convenient for students to master knowledge key points in a relatively short time. In addition, teachers use various curriculum resources, which can create a real English language environment. Moreover, they are willing to search for related materials about learning. From the actual effect, the mode model does improve the enthusiasm and self-confidence of students when they participate in listening and speaking courses. Furthermore, this study establishes the new teaching model to attain the ultimate goal of forming a deep fit between teaching methods and educational effects.

Besides considering effectiveness and attitudes, teachers should not only consider the completion of teaching and target tasks but also take care of students' actual acceptability and learning efficiency when choosing teaching models and teaching methods; only this way can they make full use of limiting time in class. Students have a desire for new knowledge, which is a unique step in the motivating phase of the teaching model. Students strongly hope to learn new knowledge to complete new communicative topics. In particular, students devote themselves to completing the tasks assigned by teachers and improving their output efficiency after realizing the gap between their own oral English level and output task standards. Last but not least, the entire teaching process complies with the laws of students' physical and mental development. Teaching activities not only reflect the gradual and orderly learning processes but also follow the order of students' learning process. From output task to teacher-student collaborative assessment, students can fully experience the joy and satisfaction of oral output, as well as establish the self-confidence of oral expression, which can decrease students' frustration in oral English learning.

#### REFERENCES

- [1] Brunzell, E. & Horejsi. (2013). A Flipped Classroom in Action. *The Science Teacher*, 80 (2): 8.
- [2] Cumming, A. (2017). Design and Direction for Research of POA. *Chinese Journal of Applied Linguistics*, 40(4): 459-463.
- [3] Ellis, R. (2003). *Task-based Language Learning and Teaching*. Oxford: Oxford University Press.
- [4] Ellis, R. (2017). The Production-oriented Approach: Moving Forward. *Chinese Journal of Applied Linguistics*. 40(4):454-458.
- [5] Gerstein, J. (2012). *The Flipped Classroom: The Full Picture*. Washington, DC: Pearson Education Press.
- [6] Krashen, S. D. (1985). *The Input Hypothesis: Issues and Implications*. London: Longman.
- [7] Liu, R. (2015). *Research Methods in Foreign Language Teaching*. Beijing: Foreign Language Teaching and Research Press.
- [8] Mc Nulty, R. (2009). The Flipped Classroom Strategy: What is it and How Can it Best be Used. *Distance Learning*, (1): 160-167.
- [9] Qiu, L. (2017a). The Step-by-step Design of Language Activities in the Production-oriented Approach. *Modern Foreign Languages*, 40 (03): 386-396+439.
- [10] Qiu, L. (2017b). Selecting and transforming teaching materials into enabling activities: Process and evaluation. *Foreign Language Education in China*, (2): 32-39.
- [11] Wen, Q. (2014). *The Production-oriented Approach (POA) to Teaching Chinese adult L2 Learners*. A Keynote Speech at the 7th International Conference on English Language Teaching (ELT) in China: Localization and Individuation: Reforms and Research from 24 to 26 October 2015, in Nanjing, China.
- [12] Wen, Q. (2015). Developing a Theoretical System of Production-oriented Approach in Language Teaching. *Foreign Language Teaching and Research*, 47 (04): 547-558+640
- [13] Wen, Q. (2016). The Production-oriented Approach to Teaching University Students English in China. *Language Teaching*, (1):1-15.
- [14] Wen, Q. (2017). Chinese Features Displayed in the Production-oriented Approach. *Modern Foreign Languages*, (3):348-358+438.
- [15] Wen, Q. (2018a). Dialectical research paradigm: Theory and application. *Foreign Language World* (2): 2-10.
- [16] Wen, Q. (2018b). Production-oriented approach in Chinese as a second language. *Chinese Teaching in the World*, (3): 387-400.
- [17] Wen, Q. (2020). Designing Scenarios for the Motivating Phase in the Production-oriented Approach: Key Elements and Examples. *Foreign Languages Education in China*, 3(02):4-11+90
- [18] Sun, Sh. (2020). Teacher-Student Collaborative Assessment in the Production-oriented Approach: Elaborating Principles with Examples. *Foreign Languages Education in China*, 3(02): 20-27+90-91.
- [19] Zhang, L. (2017). An Experimental Study on the Effectiveness of the Production-oriented Approach. *Modern Foreign Languages*, 40(03): 369-376+438.
- [20] Zhang, L. (2020). The Application of Production-oriented Approach to ELF Teaching. *Foreign Language Education in China*, 3(03): 3-10+90.
- [21] Zhang, W. (2016). Applying Production-oriented Approach to College English Classroom: A Teaching Experiment. *Foreign Languages and Their Teaching*, (02): 106-114+147.

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# The Sustainability of Eco-Lexicons in Socio-Ecological Spatial Dynamics of the Rice Fields' Community in Central Tapanuli, Indonesia

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**Abstract**—This paper aims to describe the sustainability of the eco-lexicons of rice fields in Barus, central Tapanuli, Indonesia. The theory used is an eco-linguistic theory emphasizing the survival level of the Barus Malay language (BML). The data were collected using the listening method with the basic tapping technique and the verbal method with the encouragement technique. From the results of the analysis, it could be seen that the lexicons of rice fields in BML consist of 10 lexicon groups, namely (1) the lexicons of the rice field, (2) rice field's objects, (3) crop production equipment, (4) rice, and secondary crops, (5) agricultural tools and machinery, (6) flora lexicons in rice fields, (7) fauna lexicons in rice fields, (8) fishing gears, (9) medicinal plants in rice fields, and (10) bird catchers. There were 190 noun lexicons and 40 verb lexicons from the ten lexicons. The total lexicons found in rice fields and farms in the Barus district were 239 lexicons. Using 239 eco-lexicons of rice fields, the survival rate of the noun lexicons of the rice field was 95% and the verb lexicons 96.3%. This percentage showed that the eco-lexicons of rice fields in the Barus district still exist in the cognitive skills of the Barus Malay-speaking community.

**Index Terms**—language survival, eco-lexicons, rice fields

## I. INTRODUCTION

Because each region has its unique language and customs, many different cultures differ from one area to another (Asmara & Khamimah, 2019). The Barus Malay language (abbreviated as BML) describes the reality of the environment and the speaking community. BML plays an essential role as a communication tool, a unifying tool, and a revealer of the identity of the speaking community. It is also well-known as a milestone of Malay language development (Sahril, 2020). As a communication tool, BML builds a network of interactions between the speaking community and the natural environment, and the speaking community and the socio-cultural environment. Then, BML creates harmony between people's sociological and ideological functions as a unifying tool. BML can reveal and record everything within the speaking community as an identity revealed.

The cultural landscape is rapidly changing. As a result, social civilization, including language, faces a significant challenge, particularly in light of the effects of the globalization era and cross-cultural migration and the shift in norms in society and the environment (Faridah et al., 2014). As time goes by and the social dynamics of people's lives are the living spaces of these languages, the original terms used have begun to shift, change, or be marginalized by terms outside of BML, which the speakers increasingly accept. For example, the Barus community who live close to rice fields or farmers are familiar with the terms *pangku* as 'hoe' and *sabik* as 'sickle.' However, with the development of an increasingly sophisticated era that affects the social interactions of the people, there, the rice fields' terms are increasingly eroded because they have been replaced with new terms.

Rice fields are the core of agriculture in Indonesia because most Indonesian people make rice as a staple food and other agricultural products. The character of soil fertility in most parts of Indonesia is growing and developing, supporting rice cultivation in rice fields (Ladyanna & Almos, 2019). The rice field eco-lexicons are part of the local language vocabulary full of cultural wisdom. They lived centuries ago and still exist today and have a reciprocal relationship between language and their environment, both on a macrocosmic scale and a microcosmic scale. Inside them, a material culture product originates in the natural environment. In the eco-lexicons are stored wealth of meaning and value of human life. The whole process of rice fields is full of noble cultural symbols, including symbols in the form of language. This is understandable because the function of rice fields is essential in life, as are many ethnic groups in the Indonesia archipelago region.

The environment and language in the speaking community also change over time. The most rapidly evolving linguistic level is the lexicon level. This change is influenced by three dimensions, which are ideological, social or sociological, and biological dimensions. Changes in the language of an environment are studied in eco-linguistic studies. From an eco-linguistic perspective, language and its speaking community are seen as organisms that live systematically

with other organisms in life (Mbeti, 2009). This study analyzes some of the lexicons of rice fields in the Barus Malay language. The lexicons of rice fields will show the form of wealth and culture of the environment that coexists with the life of the local community. In other words, this research will reveal various lexicon inventories stored in the rice fields reflecting the use of the BML.

Speakers and people who speak any language must know, master, and use a set of words or discourses related to their environment, both social and natural environment, which is the initial hypothesis of this research. It is essential for the author to re-discover the various eco-lexicons of the rice field environment that was restored in Barus, Central Tapanuli. The conservation of the eco-lexicons in BML must be done immediately so that the language does not change or even become extinct. Suppose the phenomenon of language change has been seen. In that case, the track record needs to be traced, and the cause needs to be investigated and observed so that later there will be an appropriate solution to prevent the language change from spreading.

As one of applied linguistics, ecolinguistics helps expose and challenge texts, as well as contributing to the search for new ones and examining ideologies, metaphors, frames, and a range of linguistic forms of language (Adliza et al., 2021; Dharmawati & Widayati, 2021; Ekawati, 2013; Marhadi et al., 2019; Mliless & Larouz, 2018; Purnomo, 2021; Septevany et al., 2019; Tualaka, 2016; Yusuf et al., 2021). It exists to address environmental issues by examining the historical and cultural languages within the human ecosystem. It exists to address the environmental problems by examining the historical and cultural languages within the human ecosystem. It exists to address environmental issues by examining the historical and cultural languages within the human ecosystem. Ecolinguistic studies investigate language changes related to environmental factors, including natural and cultural social environments. Language activity is a permanent human activity. Some people argue that language needs to be preserved to develop continuously. The language users can determine the survival of the language. Then, the closer people's lives are to an object, the more variances in how they express their opposition to it (Fuad et al., 2018).

Language and environment have a strong relationship. This relationship is created based on the interrelation, interaction, and interdependence of humans, language, and their environment (language/eco-linguistic ecology parameters). It means that changes from the (physical) point of view of the environment can lead to changes in language or vice versa. Here, humans are placed as actors. Humans are the dominant component of the environment. Human nature is a social being, so language exists in the speaking community. It is present in verbal and written communication and interaction. Thus, the dynamics of people's lives, environmental changes, and the dynamics of language are three interrelated things influencing each other.

The terminology of language elements, sound systems, and word meanings reflects the relationship between language and the environment. At the vocabulary level, the attachment appears. The total vocabulary represents the characteristics and uniqueness of the supportive community's physical and cultural background. As a result, language and environment work together to form a system. Ecolinguistics situates human and cultural resources in the natural environment, verbally represented by language. Ecolinguistics studies language's relationship to the natural or social background, including language and cultural symbols representing verbal symbolic causality between humans and humans, humans and gods, and humans and their natural surroundings (Rosidin & Muhyidin, 2021).

The lexicon is defined as 'vocabulary,' i.e., the language component that contains all the information about the meaning and use of words in the language; the richness of words owned by a language. The lexicon includes components that collect all information about words in a language, such as semantic, syntactic, morphological, and phonological behavior. At the same time, vocabulary emphasizes the richness of words owned by a person or language. The diversity of environmental languages manifested in the lexicon, which consists of the eco-lexicon, is a form of interaction between a certain language and a particular environment.

The environment's vocabulary, or eco-lexicon, is a collection of nuances of culture and natural richness in its surroundings, i.e., human, cultural, and societal wealth (Widayati & Hasibuan, 2018). A language community owns it represents cultural values and local ecological wisdom that related to the processing of natural resources to meet the needs of life (Rosidin & Muhyidin, 2021). Putri and Nurita (2021) assert that environmental factors can harm some lexicons in society. When it comes to human greed for nature to invest, the interaction between ecosystems and language is even more crucial. The language of the lexicon will change throughout time. However, it cannot be denied that the genetic revolution not only causes positive changes but also has the potential to cause adverse changes due to changes in the lexicon's function. Some lexicons have lost their true meaning due to changes in the lifestyle of the people.

Some scholars explore the study dealing with lexicon and eco-linguistics in many languages. Tualaka (2016) explores the farming ecollexicon in the Waijewa language. He says that in the Waijewa language, ecollexicons of the verb category are made up of original verbs, and derived verbs form compound words. And which are adjectives, semantically may define the level, and the level does not contain the size, color, or sensory perception. Mulyadi and Kurniawan (2017) explore the linguistic characteristics of the vocabulary of traditional farming equipment in the Bima community undertake research using an ecolinguistic viewpoint backed by lexical semantics. Widayati and Hasibuan (2018) attempt to depict culinary eco-lexicons as a representation of the environmental wealth of the Panai Malay community in North Sumatra, Indonesia, towards its culinary culture through its lexicons. Their research reveals that any language formed by gastronomic diversity implicitly reflects local cultural expertise. Sari (2020) did the other

research to explore language maintenance of dryland farming lexicon by the young speaker of Dawan language using region. She says that Dawanese teenagers, in general, have less knowledge of their language, particularly when it comes to dryland farming, which is one of the society's living resources. Wibowo (2020) attempts to see linguistic categories about the field of agriculture, as seen through the eyes of culture about plants and their environment, the elaboration of local wisdom with regards to plants and their environment about agriculture as a source of subsistence. Referring to the previous studies, this paper aims to describe the sustainability of the eco-lexicons of rice fields in Barus, Central Tapanuli, Indonesia.

## II. METHOD

This study employed a qualitative approach. The data were obtained from the results of the lexicon competency test. The results of the interviews were separated by lexicon groups and then translated into units to make conclusions so that they were easy to understand. Furthermore, the data were analyzed using qualitative methods. The answers of each informant were symbolized in the form of numbers in the table. These numbers were then added up and converted into percentages, then tabulated to see specific trends. Quantitative descriptive analysis describes or presents data from the BML vocabulary based on a questionnaire distributed to respondents to determine the level of understanding and persistence of the Barus Malay vocabulary. In analyzing the data, the Barus Malay speaking community's knowledge of the noun and verb lexicons in rice fields was obtained from the lexicon groups of respondents in Barus District. The tested lexicon was on three generations, teenagers (12-24 years), adults (25-45 years), and advanced adults (above 45 years).

## III. RESULT AND DISCUSSION

### A. *Lexicon of Rice Fields in BML*

The lexicons found in this study originated from the interaction and interrelation of the Barus community with their rice fields environment. Several sub-districts and villages in the Barus sub-district each have a land area that the residents use. These lands are classified as fertile, so that the land use in Barus District consists of residential villages, rice fields, fields, ponds, swamps, etc. Apart from anglers, the people of Barus have income from agricultural products. The area has a stretch of rice fields planted with rice. The community needs rice yields for their daily needs.

Based on the research results, it was found that the rice field lexicons were grouped into ten groups. The grouping was based on topography, objects, and activities in the rice fields and surrounding areas. The lexicon was also organized into two types, the noun, and verb lexicons. From the findings in the field, it was found that there were 199 noun lexicons and 41 verb lexicons. The entire lexicon found in rice fields was 240 lexicons. The rice field eco-lexicons in the Barus Community consist of 10 lexicon groups, (1) the rice field section, (2) rice fields objects, (3) crop production equipment, (4) rice and secondary crops, (5) agricultural tools and machinery, (6) flora lexicons in the rice field environment, (7) fauna lexicons in rice field environment, (8) fishing gears, (9) medicinal plant in rice fields environment, and (10) bird catcher. The lexicons were grouped into two types, noun and verb lexicons. From the ten groups of lexicons, there were 199 noun lexicons and 40 verb lexicons. The entire lexicon found in the rice fields in Barus District was 239 lexicons.

### B. *Level of Understanding of Rice Fields Noun Lexicons in BML*

The results of data analysis on understanding the lexicons of rice fields in the BML from three generations in category 1 in general obtained the number of understandings (JP) 5883 (54%). Category 2 had a complete understanding of (JP) 5281 (41%), Category 3 got the number of understanding (JP) 351 (3.2%), and Category D obtained the number of understanding (JP) 425 (1.8%). The highest number of understanding was in category 2, the noun lexicon group of medicinal plant names in rice fields, with (JP) 1740 (45.3%) from the three generations of the age group. Category 4 has the lowest lexicon group in the rice field objects of the noun lexicon group with a total understanding of (JP) 1 (0.1%). From the tested four categories on three age groups, it can be concluded that understanding the BML in the rice fields in Barus District from category one and category 2 of the noun lexicon still exists and survives. Meanwhile, several lexicons also experienced shrinkage, even extinction, seen in category three and category 4. This was due to the diversity of situations, so a linguistic shift led the lexicon to demise. A description of the understanding of the Barus Malay language community will be described based on the age grouping.

### C. *Levels of Understanding of Rice Field's Verb Lexicons in BML*

The results of data analysis showed that the understanding of the verb lexicons in category 1 obtained the number of (JP) of 1470 (55.8%). Category 2 got the number of experience (JP) as many as 856 (40.5%). Category 3 got the number of understanding (JP) 62 (3%). In category 4, the number of understanding obtained (JP) was as many as 12 (0.7%). From the four categories had been tested on the three-generation groups, it can be concluded the verb lexicons still exist and survives even though some of the lexicons had experienced shrinkage or extinction, as seen in category 4 (never heard, seen, and did) with the percentage level reached (0.7%). This was because the spatial dynamics of the Barus people continued to experience changes in a more modern linguistic era. The development of the digital world,

such as social media, also influenced the language there. Linguistic dynamics were one of the causes of the loss of lexicons because the rarely used in daily linguistic interactions. Even though it was a small percentage, attention to lexicons of category four must be carried out and preserved so that the lexicon can be reused and not experience extinction again. In the following, a description of the understanding of the BML community will be described based on the age grouping.

#### D. Sustainability of the Eco-Lexicon of Rice Fields in BML

For the noun lexicon categories accumulated from categories 1 and 2, about 95% of the people of Barus knew the 199 noun lexicons of rice fields included on the research questionnaire sheet. It means that the eco-lexicons of rice fields in the Barus District survive. Furthermore, about 3.2% of people who knew but had not heard or seen it for a long time did not use the lexicons in their language. In other words, there are several lexicons of rice fields that were under threat. The lexicon with the highest threat level was the agricultural tools and machines lexicons. Therefore, some efforts are needed so that the community remains familiar with the lexicon of farm tools and machines and that the language survives.

Meanwhile, 1,8% of people did not know the 199 lexicons of rice fields included on the research questionnaire sheet. It means that the extinction of the eco-lexicon of rice fields had been found in the Barus Malay language. Most of the extinction of the rice field eco-lexicon was found in the lexicons of medicinal plants in the rice field environment. This showed that traditional medicines sourced from the environment were rarely used, resulting in the use of the lexicons being lost from the cognitive ability of the Barus Malay-speaking community.

From the accumulation of categories 1 and 2, about 96.3% of Barus people knew the lexicons for the eco-lexicon category of rice fields. It proved that the Barus Malay rice field eco-lexicon kept its socio-ecological spatial dynamics up. People often did activities within the scope of rice fields so that the lexicons were stored in the cognitive ability of the speaking community there. Furthermore, as much as 3% of the people still heard but no longer saw and used the lexicons. It showed that the rice field lexicons were under threat. The highest danger lies in the verb lexicon of the rice field section. Not only that, but extinction also occurred in the verb lexicon, which is indicated by the percentage number of category 4, which showed 0, 7% of the people were no longer familiar with the rice field lexicons. Even though the percentage figure was small, it was necessary to make serious efforts for the Barus community farmer groups to introduce and use the rice field lexicons to survive and be known by the community.

#### IV. CONCLUSION AND SUGGESTION

The eco-lexicon of rice fields in the Barus community consisted of 10 lexicon groups. The lexicon was grouped into two types of lexicon noun and verb lexicons. The ten lexicon groups obtained 199 noun lexicons and 40 verb lexicons. The total lexicons found in the rice fields in the Barus district were 239 lexicons. The rice field noun lexicons reached 95%, which indicated the lexicon survived in its socio-ecological spatial dynamics. Meanwhile, the rice field verb lexicons reached 96.3%, indicating that the lexicons still survived and were known by the Barus Malay-speaking community. However, a lexicon has also begun to be threatened, even become extinct. The factors of the threat and extinction of the lexicons were due to age. This study is limited to discussing the sustainability of eco-lexicons in socio-ecological spatial dynamics of the rice fields' community in Central Tapanuli. Further research is suggested to explore eco-lexicon in other settings such as in the lake, river, and agricultural areas.

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#### REFERENCES

- [1] Adliza, Oktavianus, & Usman, F. (2021). Leksikon verba dan nomina bahasa Tanjung Pucuk Jambi kabupaten Tebo provinsi Jambi dalam lingkungan perladangan: Kajian ekolinguistik. *Lingua*, 18(1), 48–61.
- [2] Asmara, R., & Khamimah, K. (2019). Keterancaman leksikon dan kearifan lokal dalam perkakas pertanian tradisional Jawa. *Transformatika: Jurnal Bahasa, Sastra, dan Pengajarannya*, 3(1), 1–11. <https://doi.org/10.31002/transformatika.v3i1.1935>
- [3] Dharmawati, & Widayati, D. (2021). Ecolinguistics in the grain lexicon of Mandailing language. *Britain International of Linguistics Arts and Education (BIoLAE) Journal*, 3(2), 143–150. <https://doi.org/10.33258/biolae.v3i2.468>
- [4] Ekawati, N. K. R. (2013). Erosi leksikon bidang persawahan di Bali: Suatu kajian Ekolinguistik. *Langua*, 2(2), 35–48.
- [5] Faridah, F., Sinar, T. S., Mbete, A. M., & Setia, E. (2014). KelambiR's eco-lexicals in Serdang Malay: An eco-linguistic approach. *IOSR Journal of Humanities and Social Science*, 19(11), 52–58. <https://doi.org/10.9790/0837-191125258>
- [6] Ladyanna, S., & Almos, R. (2019). Variety of rice-field lexicons from Luhak to Rantau. *Proceedings of the First International Conference on Advances in Education, Humanities, and Language, ICEL 2019, Malang, Indonesia, 23-24 March 2019*. Presented at the First International Conference on Advances in Education, Humanities, and Language, ICEL 2019, Malang, Indonesia, 23-24 March 2019, Malang, Indonesia. <https://doi.org/10.4108/eai.23-3-2019.2284884>
- [7] Marhadi, A., Ino, L., & Maliudin, . (2019). Surviving the medicinal plants lexicon of Culambacu Language. *Proceedings of the International Conference on Education, Language and Society*, 5–12. Jakarta, Indonesia: SCITEPRESS - Science and Technology Publications. <https://doi.org/10.5220/0008993000050012>

- [8] Mbete, A. M. (2009). *Problematika keetnikan dan kebahasaan dalam perspektif ekolinguistik*. Presented at the Seminar Nasional Budaya Etnik III, Medan.
- [9] Mliless, M., & Larouz, M. (2018). An ecolinguistic analysis of environment texts in Moroccan English language teaching textbooks. *International Journal of Research in Environmental Studies*, 5, 103–116.
- [10] Mulyadi, & Kurniawan. (2017). Leksikon alat pertanian tradisional masyarakat Bima: Perspektif ekolinguistik dalam pembelajaran berbasis lingkungan di SD dan program desa wisata. *Jurnal Pendidikan Bahasa*, 7(1), 1–8.
- [11] Purnomo, D. T. (2021). Studi ekolinguistik dalam dinamika tutur bahasa Jawa ragam pertanian pada masyarakat Buddha di dusun Gunung Kelir Kulon Progo. *ABIP: Agama Buddha dan Ilmu Pengetahuan*, 3(2), 15–25. <https://doi.org/10.53565/abip.v3i2.224>
- [12] Putri, I. G. A. V. W., & Nurita, W. (2021). Critical condition in Balinese lexicon extinction. *Journal of Language and Linguistic Studies*, 17(4), 1773–1786. <https://doi.org/10.52462/jlls.129>
- [13] Rosidin, O., & Muhyidin, A. (2021). Leksikon ekoagraris dalam budaya pertanian masyarakat kecamatan Sumur kabupaten Pandeglang. *Widyaparwa*, 49(2), 228–241. <https://doi.org/10.26499/wdprw.v49i2.883>
- [14] Sahril, S. (2020). Bahasa Melayu: Antara Barus dan Malaka. *Sirok Bastra*, 8(2), 196–210. <https://doi.org/10.37671/sb.v8i2.206>
- [15] Sari, N. (2020). Language maintenance of dryland farming lexicon In Dawan language: Eco-linguistics analysis. *Proceedings of the Proceedings of the First International Seminar on Language, Literature, Culture and Education, ISLLCE, 15-16 November 2019, Kendari, Indonesia*. Presented at the Proceedings of the First International Seminar on Language, Literature, Culture and Education, ISLLCE, 15-16 November 2019, Kendari, Indonesia, Kendari, Indonesia. <https://doi.org/10.4108/eai.15-11-2019.2296250>
- [16] Septevany, E., Dyah, W., & Darlina, L. (2019). *Khazanah leksikon kepadian sawah komunitas tutur Sunda: Kajian ekolinguistik*. 8–17.
- [17] Tualaka, D. (2016). Bentuk khazanah ekoleksikon pertanian bahasa Waijewa. *Melanesia: Jurnal Ilmiah Kajian Bahasa dan Sastra*, 1(1), 105–113. <https://doi.org/10.30862/jm.v1i1.742>
- [18] Wibowo, R. M. (2020). Leksikon dalam aktivitas pertanian masyarakat Yogyakarta. *SASDAYA: Gadjah Mada Journal of Humanities*, 4(2), 105–125. <https://doi.org/10.22146/sasdayajournal.59661>
- [19] Widayati, D., & Hasibuan, N. H. (2018). Culinary Eco-lexicon of Panai Malay Community: *Proceedings of the International Conference of Science, Technology, Engineering, Environmental and Ramification Researches*, 1254–1260. Medan, Indonesia: SCITEPRESS - Science and Technology Publications. <https://doi.org/10.5220/0010071112541260>
- [20] Yusuf, M., Widayati, D., Mbete, A. M., & Aswani, A. (2021). Eco-lexicon Forms in Children Book of North Sumatran Folktales. *Journal of Physics: Conference Series*, 2000(1), 012004. <https://doi.org/10.1088/1742-6596/2000/1/012004>

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# The Future of Colonialism in Australian Indigenous Fiction – A Psychoanalytic Study of Trauma in *The Swan Book* and *Terra Nullius*

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**Abstract**—The goal of this study is to examine the colonial concerns depicted in the futuristic Australian fictions *Terra Nullius* and *The Swan Book*. *The Swan Book*, a 2013 Australian novel by Alexis Wright, digs deeply into subjects like climate catastrophes and the repressive condition of the natives in a future Australia. Claire G. Coleman's fantasy novel *Terra Nullius*, on the other hand, presents a futuristic Australia in which many colonial themes are subtly and implicitly depicted. This research article aims to emphasize the aftermath effects of colonization and to put together how they are thinking about Australia's problems in the future by analyzing the two novels of these indigenous authors using important psychoanalytic theories. This study also highlights the impact of magic realism in these texts.

**Index Terms**—colonialism, post traumatic stress disorder, indigenous people, magic realism

## I. INTRODUCTION

This article is organized around a significant topic in the Australian context known as “The Great Australian Silence”. Edward Stanner coined the phrase, which stresses how the people often remain silent despite seeing the injustice and inhumane deeds committed against Australian aborigines. This “silence” has been broken by many Australian authors and particularly the indigenous authors are quite conscious of this problem. According to a recent survey, only 3.3% of Australians are indigenous, thus the topic of what comes next for them is crucial. Hopefully, these two novels hypothesize some of the problems they may face in the future. The “Great Australian Silence” refers to the silence around the sufferings of the indigenous population. The logical writings of the native Australian authors, however, shatter this stillness.

The purpose of this essay is to highlight the potential problems that the aboriginal people are going to face in the future. The plot of the novel *The Swan Book* is about a mute teenage girl Oblivia Ethylene who is a gang-raped victim and she is looked after by a refugee woman Bella Donna and also this novel primarily focuses on the state of the Australian indigenous people in future who are forcibly pushed to live in a swamp. Moreover, it also speculates an Australian Aboriginal president in future. On the other hand, Claire G. Coleman's *Terra Nullius* proclaims that the Australian native inhabitants can be tormented and subjugated. She also insists that there is a huge possibility that the native children will be treated as slaves in future. Indigenous people are traumatized by events like physical abuse, childhood trauma and psychological trauma. In both these texts, the indigenous people are mostly traumatized physically and psychologically.

These two novels can be categorized under speculative fiction which deals with subjects like ghosts, aliens, supernatural elements, science fiction and so on but these novels emphasize the Australian future. Speculative fiction encompasses a broad range of genres like science fiction, gothic fiction, supernatural elements and cyberpunk novels. Oziewicz (2017) argues that “speculative fiction” can be categorized into many different varieties which will depart from the “consensus reality” (p.1). The research article is structured in three parts in which the first part deals with the psychoanalytic study of the novels, the second part is a brief analysis of the magical realistic perspectives and the final part discusses oppression and violation in futuristic Australia.

## II. REVIEW OF LITERATURE

Gleeson-White (2016) in her research article “Country and Climate Change in Alexis Wright's *The Swan Book*”, affirms about the climatic issues depicted in the future Australia in *The Swan Book*.

Renes's (2021) article “Alexis Wright's *The Swan Book*: Indigenous-Australian Swansong or Songline?”, explicates various issues indicated in the novel and it also focuses on bringing a better future to the native inhabitants.

In the article titled “Going viral: The Swan Book by Alexis Wright”, Gleeson-White (2013) narrates the climatic issues indicated in this novel and this article emphasizes how the past works of Alexis Wright have differed from this fiction.

Singeot (2021) in the article “The Swamp and Desert Tropes in Post-Apocalyptic Australian Indigenous Fiction: The Swan Book (2013) by Alexis Wright and Terra Nullius (2018) by Claire Coleman”, scrutinized the desert and the climatic degradation effect in both these novels.

These are some of the articles which primarily highlighted various themes in these futuristic Australian texts. But this article aims to blend the effect of psychoanalysis and magic realism implemented in these novels to profoundly insist on the futuristic issues narrated by these authors.

### III. A PSYCHOANALYTIC STUDY OF *THE SWAN BOOK* AND *TERRA NULLIUS*

Anamorphosis is a technique implemented by Jaques Lacan in psychoanalysis which insists that a distorted vision gives a clear picture for anamorphic images. In research projects, this approach is also applied to the field of literature. This article makes the case that by approaching these two futuristic novels from a different perspective; we can gain a lot of fresh insights into the perspectives of the indigenous people. A critical study is essential to interpret the texts. If we read a book from a psychoanalytic perspective, we can critically analyze the text. For instance, if we read fiction from an uncritical perspective, we may only learn the tale of the fiction.

Alexis Wright and Claire G. Coleman, who belong to the Waanyi and Noongar indigenous cultures respectively, wrote the futuristic fictions *The Swan Book* and *Terra Nullius*. Although Alexis Wright is most known for her books *Plains of Promise* and *Carpentaria*, in which she wrote about the painful consequences of colonization, she distinguished the future from the past in *The Swan Book* by speculating on future problems that might be seen through a psychoanalytic lens or in other words by a distorted viewpoint from an ordinary perception by using Lacan’s ‘Anamorphosis’ technique. In Australian literature, indigenous Australian writers like Alexis Wright and Claire G. Coleman envisioned a future for the indigenous people in Australia. Indigenous futurism can be found in a variety of media, such as books, movies, comic books, video games, and more. For instance, Afrofuturism which makes predictions about the native African population, also emphasizes the highly developed technological and cultural characteristics of the African people and it is exemplified by Ryan Coogler in his *Black Panther*. Afrofuturism primarily stressed the black African future in which people live with improved technology and rich cultural values. The same similar assumption applies to Australia, a wealthy country for settlers but one where the indigenous population still lacks privileges. Australian futuristic literature addresses problems including climatic degradation and the stolen generation. These books are primarily categorized under speculative fiction, which may not directly allude to the oppressive effects of settler colonialism but instead gives a symbolic importance. *The Swan Book* by Alexis Wright and *Terra Nullius* by Claire G. Coleman may not directly address colonial themes, but both these books convey a strong message through magical and fantasy components.

Alexis Wright is a famous writer and she is predominantly known for winning the Miles Franklin Award for her novel *Carpentaria* in 2006. *The Swan Book* deals with the story of Oblivia Ethylene, a female protagonist who experiences the trauma of sexual assault and violence right from the start of the book. She is a survivor of gang rape who is working to move on from the horror of her past. Bella Donna, a refugee woman engaged in what is known as a traumatic transference in psychoanalysis, in which she expressed her feelings regarding the indigenous earlier trauma in the past. Transference is a condition in psychoanalytic dynamics when the patient’s emotion is passed on to the recipient. Positive and negative transference can be used to categorize this. In the case of Bella Donna, she conveys her past terrible experiences to the populace and insists on protecting their possessions from those in authority. This is communicated to the populace in the swamp and is implied as a sign of warning in this fiction. This is the speculation of the author which is conveyed through Bella Donna and this can be justified by the words of Renes (2021), “Slow violence informs the academic and political debate on Aboriginal dispossession, displacement, dispersal and assimilation, in which colonization (and now neo-colonization) is described as either benign or destructive” (p.2).

Although in Alexis Wright’s *The Swan Book*, we could derive a lot of potential issues indicated by the author like climatic degradation, environmental hazards, sexual harassment and oppression; we can apply several psychoanalytic theories to critically interpret it which are applicable to speculate about the possible issues in future. Post-traumatic stress disorder is a mental state that happens due to the traumatic events which happened in the past. It may happen due to the overthinking of flashbacks, severe traumatic events and so on. In this fiction, Oblivia suffers from traumatic experiences and could be a victim of this PTSD. The protagonist is victimized and sexually assaulted by some petrol-sniffing youths and also she is abducted by Warren Finch who is about to be the future aboriginal president of Australia. This emphasizes the pathetic condition of the indigenous women in Australia who are obnoxious with their insecurity. Oblivia is depicted as a mute and dumb girl which is the representation of the voiceless indigenous people. The novel revolves around two major characters Oblivia and Bella Donna, in which Bella Donna recollects the past traumas of the indigenous people through her stories which is a psychological aspect to retrieve the past sufferings of the aborigines about how they are mutilated and violated and to warn them about the present scenario. In this regard, we could find that even in the future, the aborigines are still threatened. Wright (2016) in *The Swan Book* stresses the condition of the natives in the fiction, “The swamp now renamed Swan Lake was nothing special. It was the same as dozens of fenced

and locked Aboriginal detention camps. Only starving skin-and-bone people with hollow-eye children who refused to speak came off those trucks and Army buses” (p.43).

On the other hand, Claire G. Coleman’s *Terra Nullius* elaborately discusses the issues of the slavery system in Australia. Claire G. Coleman is a Noongar Australian writer and she was awarded the ‘black&write! indigenous writing fellowship’ for her debut novel *Terra Nullius*. As the author belongs to the Noongar aboriginal sector she could connect this fiction with her own life in which she reformulates the cultural trauma which is embedded in her mind. This could be argued with the intensity of her novel as the novel begins with the uncertainty of the protagonist Jacky who tries to escape from the camp. He has a quest for his identity and he runs away from the settlers throughout the novel which highly reconnects the past traumas of the indigenous people. In the words of Fanon (2008), “We understand now why the black man cannot take pleasure in his insularity. For him there is only one way out, and it leads into the white world” (p.36). The inter-generational trauma is brought into the fiction by the author that is all about the intensity of the traumatic incidents which affected the whole life of their ancestors. Hook (2009) in his article “A Critical Psychology of the Postcolonial” expressed the psychological issues undergone by the native black people in terms of cultural, physical, epistemic and psychic violence (p.2). This can be interconnected with *Terra Nullius* which is set in the futuristic Australia which bewilders the readers about the future of Australia as there are multiple potential issues indicated by the author like the stolen generation, climatic degradation and the slavery system. The pertinent aspect of the novel is that it highlights that Australia is colonized by the aliens referred to as ‘Toads’ which highly offers the readers to speculate about the issues in future. One might neither believe nor be familiar with the aliens and other such aspects but the point here is that the imagination of the native writer and she tries to insist that the native inhabitants will be affected in one or the other way and this speculative fiction highlights that the native children will be treated as slaves in future. This is an unconscious effect of colonization which happened in the past which the author tries to ‘transfer’ to the readers perhaps in an underlying way. Certain incidents are not explicit in this indigenous futuristic fiction but the intensity of the issue emphasized by Claire G. Coleman is a soaring one. In the words of Hook (2009), “Fanon’s linking of psychology and politics is at its most forceful here, in his understanding of colonialism as not only a means of appropriating land and territory, but of appropriating culture and history themselves, that is, as a way of appropriating the means and resources of identity, and hence affecting powerful forms psychic distress and damage” (p. 9). Colonization can be not only taken as a means of violence, subjugation and oppression but rather the psychological dominance of the colonizers played a crucial role in their dominance and this aspect plays a pertinent role in modern-day colonization. This psyche of the colonizers/settlers is displayed in the futuristic perception where the native children are treated as slaves and this pertinently asserts that the slavery system will be there in future. Characters like sister Bagra and the antagonist Devil are ruthless that they deliberately tormented the native children who are brought up as slaves. The children are treated by sister Bagra mercilessly and they are ill-treated and also not provided with good food.

#### IV. THE IMPACT OF MAGIC REALISM

Magic realism focuses on fantasy, supernatural, and other such themes. *Midnight Children* by Salman Rushdie is a work of Indian literature that incorporates magic realism into a work of postcolonial literature. Magical realism is an element outside of reality that draws readers into a completely different environment. The employment of magic realism in fiction nowadays is utilized to describe probable future problems that can be seen as the worrying signs for the future. *The Swan Book* by Alexis Wright contains several magical realistic aspects that help us to predict the problems that will arise in the future. For instance, the role of genies, speaking monkey and the ghost of Bella Donna can be categorized under the magic realism theme. This could be argued with the words of Wright (2016) in *The Swan Book*, “The Harbour Master was missing his monkey friend who lived in an overseas country and who he claimed was a genius of world politics” (p.34). The spirit of Bella Donna helps Olivia to come out of her troubles and this is one of the major magic realistic aspects in this novel. The black swans in this fiction allegorically refer to the indigenous people in Australia. Australian psychoanalyst Alison Ravenscroft stresses the significance of magic realism in postcolonial fictions. In the words of Ravenscroft (2012), “What are the literary practices and histories to which Australian critics refer when they produce Indigenous-signed texts as magic realist? It quickly becomes clear that magic realism has been taken up in the name of literary postcolonialism’s interests in the possibilities of reading and writing difference between the coloniser and the colonised” (p.61).

Similarly in *Terra Nullius*, the indigenous author Claire G. Coleman incorporated a lot of fantasy elements to tell the story of a futuristic Australia and, more importantly, to recall the previous horrific events that the native indigenous people of Australia had to go through. This fiction makes an allegory of settler colonialism and features science fiction elements like space and aliens. The author uses the term “Toads” to refer to the alien species that are the settlers in futuristic Australia. The interesting aspect of this fiction is that the “Toads” did not differentiate the Australian people as natives and settlers and all the humans are equal before the aliens. This apocalyptic state expressed in the novel can be argued with the words of Lejeune S. (2019), “Stories like these, from Aboriginal authors like Coleman, are important to rebalance the story of Australia’s history and acknowledged the enduring trauma of living in an apocalyptic world” (p.2).

#### V. EXPLOITATION IN FUTURE

### A. Climatic Degradation

In *The Swan Book*, the first chapter of the book is titled 'Dust Cycle' in which the protagonist Oblivia and other refugees are in search of a hospitable land which emphasizes the futuristic scenario of Australia. The lives of the aboriginal people are crumbled due to the climatic effect and also due to the strict measures of the army. Bella Donna and other refugees are forced to live in a swamp. The novel also intensifies the state of the lakes in Australia which are polluted due to the climatic effects. The first chapter of the novel alludes to the apocalyptic scenario as the country is affected by various natural disasters like dust storm, floods and fire. Although they are highly affected by natural catastrophes, the aboriginal people are very much attached to their lands and they are not ready to leave their lands which were the belongings of their ancestors. This novel also intensifies the impact of polluted water as it is stressed by the author that the people are affected with bellyache after drinking the contaminated water in the lake. In the words of Gleeson-White (2013), "The Swan Book is Wright's most ambitious novel to date. If *Plains of Promise* is about the fate of three women severed from their ancestral land and *Carpentaria* is about a community's battle to prevent the mining of its ancestral land, *The Swan Book* is concerned with the entire Earth" (p.8). Similarly, Claire G. Coleman's *Terra Nullius* also deeply digs about the climatic issues like lack of rain, instability in farming and the state of desert trope regions in the future.

### B. Stolen Generation

Stolen Generation is the act of forcibly removing the children from the parents of the indigenous people and they were brought up in camps or perhaps the 'foster parents'. This method was indeed adopted by the European settlers to primarily eliminate the aboriginal 'hybrid' generation and also to eradicate their identity and culture. The abolition of the aboriginal identity is the major goal of this act. This is profoundly problematized in *Terra Nullius* in which the native children are forcibly taken away from their parents and are brought up as slaves for the 'Toads'. This could be argued with the words of Krieken (1999), "The relationship between European and Indigenous Australian children has broader significance because the removal of Aboriginal children was centrally a 'civilizing project', despite the fact that the subsequent critique of that practice is also undertaken in the name of 'civilization'" (p.4). Although this is not widely expressed in Alexis Wright's *The Swan Book*, her previous novel *Plains of Promise* intensified this issue as this fiction is about Ivy Koopundi who is born in St. Dominic's, a missionary for aboriginals who is taken away from her mother long back when she was a child. This novel also problematized the issues of the half-caste children. Cultural trauma is reflected in most of the novels of Alexis Wright. Similarly, Claire G. Coleman's *Terra Nullius* brings the cultural trauma back here in this novel which recollects all sorts of traumatic experiences like physical violence, psychological trauma, cultural degradation, and so on. This cultural trauma is deeply embedded in the minds of the aboriginal people is carried away from one generation to the next and this memory turns into an inter-generational trauma.

### C. Oppression and Violation

The major theme in both these novels is oppression. The protagonists of these fictions are extremely tormented by the oppressors which insist that the oppression might happen in future but rather in different aspects as Oblivia is sexually assaulted and Jacky is troubled with the slavery system. In *The Swan Book*, the very own native people are forced to live in swamps and they are deprived of the privileges. This indicates the pitiable state of the natives and the significant point to be noted is that even an aboriginal president could not save them in the future as he is a puppet of the authority. This is the cultural trauma expressed by the indigenous author Alexis Wright. The female protagonist is dumb and mute and she is not accepted anywhere after the rape. Although she does not have dialogues to express her trauma, her character arc gives the readers a great impact indeed. A reference can be made to Ania Loomba's *Colonialism/Postcolonialism* (2005) in which she addressed the issues of the native women and how they were treated as she indicated that from the beginning of colonialism women were treated as 'conquered lands'(p.129). Alexis Wright's previously published novels too dealt with the sexual violence endured by the aboriginal women. For instance, her *Plains of the Promise* significantly dealt with the issues concerned with the native women. It can be argued with the words of Ravenscroft (2012),

In the course of these few sentences, the point of view has shifted suddenly to indirect discourse, carrying Jipp's interior voice to us and bringing with it a disconcerting intimacy with his pleasure too; pulling a reader into the field of his desires, with all the disturbance that this might evoke in many readers. We begin by looking upon the girl's rape from a position outside the act but we are then positioned with Jipp, looking at the girl through his eyes (p.49).

Similarly in Claire G. Coleman's *Terra Nullius* many fantasy elements are introduced by the author to engage the readers into a futuristic world but the ultimate goal of the author is to convey the past traumatic experience of the colonized through fantasy fiction which also alarms the natives about their future. *Terra Nullius* insists that the impact of colonization is not over but rather it prolongs with the issues like the quest for identity, abolition of the rights and so on. The distinguished aspect of this novel is that it is not explicit about the 'whiteness' or settler colonialism but rather it significantly focuses on the colonial issues in future with the usage of science fiction and fantasy elements. For instance, 'Toads' are the aliens who are the dominators in the novel which is not a real living species but it alludes to the settlers who were dominant during the colonization of Australia and also the natives are referred to as 'savages' which can be interconnected with the British imperialism who pretended that they were there to 'civilize' the people.

## VI. CONCLUSION

This article encompasses a broad study of Alexis Wright's *The Swan Book* and Claire G. Coleman's *Terra Nullius* in which the ultimate objective is to scrutinize the colonial issues to be faced by the Australian aboriginal people in futuristic Australia. Various issues have been dealt with in the novels like climatic degradation, the stolen generation, slavery system, cultural degradation and so on and these fictions emphasized a note that even after hundred years, the settlers might take away the rights and privileges of the indigenous people in one or the other way which is why the in *The Swan Book*, the climatic degradation and lake pollution are dealt explicitly. Meanwhile, in *Terra Nullius*, the antagonist's name is Devil which is itself a right away indication of the cruelty and the character of the Nun sister Bagra is characterized in such a way that she treated the native children as slaves, and they are brought up to be the slaves for the settlers. These novels are highly transformative in the depiction that these novels exemplified the other major issues of the natives apart from past horrendous events that happened in Australia with bloodshed and violence. These novels could give us various assumptions if we could view it through a psychoanalytic lens.

## REFERENCES

- [1] Coleman, C. G. (2017). *Terra nullius*. Hachette Australia.
- [2] Fanon, F. (2008). *Black skin, white masks*. Grove press.
- [3] Gleeson-White, J. L. (2016). Country and climate change in Alexis Wright's 'The Swan Book'. *Swamphen: A Journal of Cultural Ecology (ASLEC-ANZ)*, 6, 29-38.
- [4] Gleeson-White, J. (2013). Going Viral: The Swan Book by Alexis Wright. *Sydney Review of Books*.
- [5] Hook, Derek (2005). A critical psychology of the postcolonial [online]. *LSE Research Online*, London.
- [6] Haskins, V., & Jacobs, M. D. (2002). *Stolen Generations and Vanishing Indians: The Removal of Indigenous Children as a Weapon of War in the United States and Australia, 1870-1 940*. Faculty Publications, Department of History, 10.
- [7] Krieken, R. V. (1999). The Stolen Generations' and cultural genocide: the forced removal of Australian Indigenous children from their families and its implications for the sociology of childhood. *Childhood*, 6(3), 297-311
- [8] Lejeune, S. (2019). Speculating reality: a review of Claire Coleman's "Terra Nullius". *NEW: Emerging scholars in Australian Indigenous Studies*, 5(1).
- [9] Larsen, Svend Erik. (2017) Australia between White Australia and Multiculturalism: a World Literature Perspective, *Comparative Literature: East & West*, 1:1, 74-95, DOI: 10.1080/25723618.2017.1339510.
- [10] Loomba, A. (2005). *Colonialism/Postcolonialism*. Routledge, London and New York.
- [11] Oziewicz, M. (2017). Speculative Fiction. *Oxford Research Encyclopedia of Literature*. Retrieved 19 Jul. 2022, from <https://oxfordre.com/literature/view/10.1093/acrefore/9780190201098.001.0001/acrefore-9780190201098-e-78>.
- [12] Ravenscroft, Alison (2012). *The Postcolonial Eye: White Australian Desire and the Visual Field of Race*. Ashgate publishing Company.
- [13] Renes, C. (2021). Alexis Wright's The Swan Book: Indigenous-Australian Swansong or Songline?. *Humanities*, 10(3), 89.
- [14] Singeot, Laura. (2021). "The Swamp and Desert Tropes in Post-Apocalyptic Australian Indigenous Fiction: The Swan Book (2013) by Alexis Wright and Terra Nullius (2018) by Claire Coleman", *Commonwealth Essays and Studies* [Online], URL: <http://journals.openedition.org/ces/7448> ; DOI: <https://doi.org/10.4000/ces.7448>
- [15] Webby, E. (Ed.). (2000). *The Cambridge companion to Australian literature*. Cambridge University Press.
- [16] Wright, A. (2016). *The Swan Book: A Novel*. Simon and Schuster. Atria Books.



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# The Syntax of Nominal Appositions in Modern Standard Arabic

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**Abstract**—The current paper argues that there are three types of nominal appositions, i.e. two juxtaposed noun phrases (NPs), in Modern Standard Arabic (MSA). Each type shows special properties in terms of the nominal category of the two units, the deletion of the NP, word order, case agreement, and semantic relation. For each type, we propose a separate structural analysis. An adjunction analysis is motivated for Type I appositions which consist of a common noun followed by a proper name. For Type II appositions which involve two common nouns, we propose that they take a spec-head structure. A head-complement structure is finally proposed for Type III appositions which involve a pronoun followed by an accusative-marked NP.

**Index Terms**—apposition, Modern Standard Arabic, adjuncts, specifiers, complements

## I. INTRODUCTION

Apposition is a grammatical relation in which two elements, typically NPs, are placed side by side, as illustrated in (1)<sup>2</sup>.

(1) The linguist, *John McCarthy*, published a new article.

In (1), the first underlined phrase is called ‘the anchor’ (Huddleston & Pullum, 2002) while the second one in italics is called ‘the appositive’ (Potts, 2005). The nominal construction in (1) is the clearest manifestation of apposition, to the degree that early grammarians restrict the phenomenon of apposition to NPs only (Fries 1952, p. 187; Francis, 1958, p. 301). However, other “grammarians vary in the freedom with which they apply the term ‘apposition’” (Quirk et al., 1985, p. 1302), extending it to adjectives, adverbials, pronouns, genitives, participles and predicates as shown in the following examples (cf. Meyer, 1992, p. 1-2).

- |   |                                |
|---|--------------------------------|
| (2) <u>the room</u> <i>above</i>              | [adjectival apposition]        |
| (3) They met <u>here</u> , <i>in London</i> . | [adverbial apposition]         |
| (4) <u>You yourself</u> must set some tasks   | [reflexive pronoun apposition] |
| (5) <u>The vice</u> <i>of intemperance</i>    | [genitive apposition]          |
| (6) He <u>sat</u> <i>smoking</i> .            | [participle apposition]        |
| (7) He <u>came home</u> <i>sick</i>           | [predicative apposition]       |

In light of these variations, it has been argued in the literature that apposition is a type of relatives (Grosu, 2000; De Vries, 2006; O’Connor, 2008; Cardoso & De Vries, 2010), a process of correction or repetition (Ortner, 1985; Schindler, 1990; Rath, 1995), a special kind of epithets (Klein, 1977) or a type of reformulation (Rubio, 2003; Jasinskaja, 2007). These different proposals are put forward due to the irregular behaviors that appositions display from a cross-linguistic perspective. Even within the same language, appositions are not uniform, showing unsystematic properties. Molitor (1979), for instance, draws a distinction between subordinative and coordinative appositions in German, arguing that the appositive unit in the former always takes the nominative irrespective of the case of the anchor, whereas the two units in the latter agree in case (see also a similar analysis advanced by Burton-Roberts, 1975).

Given that the situation in Modern Standard Arabic (MSA) is not quite different from other languages and most of the earlier works on Arabic appositions are traditional and descriptive (Wright, 1967; Howell, 1986; Suleiman, 1999; Fischer, 2002; Ali, 2012; Sawaie, 2014 among others), we aim in this study to provide the first formal theory-driven analysis to these constructions. We will focus here on nominal appositions, leaving non-nominal ones for future works. In her Arabic grammar book, Ryding (2005, p. 224-5) provides (8) through (10) as representations of nominal appositions in MSA.

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<sup>2</sup> Abbreviations used in this article are as follows: 1 = First Person; 2 = Second Person; 3 = Third Person; ACC = Accusative; AP = Adjective Phrase; DP = Determiner Phrase; DU = Dual; F = Feminine; FP(s) = Functional Projection(s); GEN = Genitive; IMPERF = Imperfective; INDEF = Indefinite; M = Masculine; MSA = Modern Standard Arabic; NOM = Nominative; NP = Noun Phrase; PERF = Perfective; PL = Plural; PNC(s) = Pronoun-Noun Construction(s); and SG = Singular.

- |      |   |                                       |  |                                     |
|------|---|---------------------------------------|--|-------------------------------------|
| (8)  | dʒa:ʔa<br>come.PERF.3.M<br>'The prophet, Muhammad, came.'                     | <u>n-nabiy-y-u</u><br>the-prophet-NOM | <i>Muḥammad-un</i><br>Muhammad-NOM     |                                     |
| (9)  | qarrar-ati<br>decide.PERF-3.F<br>'The states, the members, decided to leave.' | <u>d-duwal-u</u><br>the-states-NOM    | <i>l-ʔaʕdʕa:ʔ-u</i><br>the-members-NOM | l-muʔa:darat-a<br>the-departure-ACC |
| (10) | <u>naḥnu</u><br>We.NOM<br>'We, the Arabs, say that.'                          | <i>l-ʕarab-a</i><br>the-arab.PL-ACC   | naqu:lu<br>say.IMPERF.1.PL             | ʕa:lika<br>that                     |

Two properties confirm that the above constructions are appositional. According to previous works, the first property of apposition is that the two appositional units are juxtaposed side by side (see e.g. Huddleston & Pullum, 2002; Potts, 2005; Heringa, 2011 among others). The constructions in (8) through (10) also consist of two adjacent nominal elements, i.e. NP-NP as in (8) and (9) or pronoun-NP as in (10).

The second property of apposition reported in the literature follows from the reference of the two appositional units to a single person or entity (see Sopher, 1971; Quirk et al., 1985; Koktová 1986; Hannay & Keizer, 2005). This referential property is also attested in constructions (8) through (10). In (8), for instance, *the prophet* and *Muhammad* refer to the same person in the external world. The NPs *the states* and *the members* in (9) also refer to the same entities. In (10), both the pronoun *we* and the NP *the Arabs* refer to the plural first person speaker who produced sentence (10). These two properties show that (8) through (10) are in fact appositional constructions in MSA.

We will, however, show that each example in (8) through (10) represents an independent type of apposition with specific characteristics. To highlight this hypothesis, let us call example (8) 'Type I apposition', example (9) 'Type II apposition', and example (10) 'Type III apposition', extending this classification to all other examples that are similar to these examples (see examples 11 through 13 in section A below). By this classification, we will be able to demonstrate that these types of appositions should not receive a uniform syntactic account, but each type requires a separate structural analysis.

The remainder of the article will be organized as follows. Section (II) will present the differences between the three types discussed above. Section (III) will provide a syntactic analysis for each type. Concluding remarks will be presented in section (IV).

## II. THE DISTINCTIONS BETWEEN TYPE I, II, AND III APPPOSITIONS

In this section, we will present five distinctions that can be drawn between the three types of Arabic nominal appositions. We will address these distinctions in terms of the nominal categories of the two units, word order, case agreement, NP deletion, and finally semantic classes.

### A. Nominal Categories of the Two Units

The nominal category of each element in Arabic nominal appositions separates the three types repeated below using different examples. These new examples are intended to show that these types are productive in MSA.

- |         |  |  |  |   |
|---------|--|--|--|---|
| (11) a. | dʒa:ʔa<br>come.PERF.3.M<br>'The prophet, Muhammad, came.'                        | <u>n-nabiy-y-u</u><br>the-prophet-NOM  | <i>Muḥammad-un</i><br>Muhammad-NOM     |   |
| b.      | dʒa:ʔa<br>come.PERF.3.M<br>'My father, Ali, came.'                               | <u>ʔabi</u><br>father.my.NOM           | <i>ʕali-un</i><br>Ali-NOM              | (Type I)  |
| (12) a. | qarrar-ati<br>decide.PERF-3.F<br>'The states, the members, decided to leave.'    | <u>d-duwal-u</u><br>the-states-NOM     | <i>l-ʔaʕdʕa:ʔ-u</i><br>the-members-NOM | l-muʔa:darat-a<br>the-departure-ACC             |
| b.      | qarrar-ati<br>decide.PERF-3.F<br>'The company, the mother, decided to withdraw.' | <u>l-ʕarikat-u</u><br>the-company-NOM  | <i>l-ʔumm-u</i><br>the-mother-NOM      | l-insiḥa:b-a<br>the-withdrawal-ACC<br>(Type II) |
| (13) a. | <u>naḥnu</u><br>We.NOM<br>'We, the Arabs, say that.'                             | <i>l-ʕarab-a</i><br>the-arab.PL-ACC    | naqu:lu<br>say.IMPERF.1.PL             | ʕa:lika<br>that                                 |
| b.      | <u>ʔana</u><br>I.NOM<br>'I, the teacher, acknowledge that...'                    | <i>l-muʕallim-a</i><br>the-teacher-ACC | ʔaʕtarif-u<br>acknowledged.IMPERF.1.M  | ʔanna ...<br>that ...<br>(Type III)             |

As shown from the examples above, the Type I appositions in (11) consist of a common noun followed by a proper name whereas the Type II appositions in (12) involve two adjacent common nouns. As far as the Type III appositions in (13) are concerned, they contain a pronoun followed by a common noun. In other words, we can conclude that the two units in each type are different in terms of their nominal categories.

### B. Case Agreement

The constructions in (8) through (10) also differ in terms of case agreement. The appositive agrees in case with the anchor as shown in (14) for Type I and (15) for Type II. In these types, the two elements share the same case suffixes in different syntactic positions: *-u* for the nominative (i.e. a-examples), *-a* for the accusative (i.e. b-examples) and *-i* for the genitive (i.e. c-examples).

- (14) a. *dʒa:ʔa* *n-nabiyy-u*, *Muḥammad-u-n*  
 come.PERF.3.M the-prophet-NOM Muhammad-NOM-INDEF  
 ‘The prophet, Muhammad, came.’
- b. *qa:baltu* *n-nabiyy-a*, *Muḥammad-a-n*  
 meet.PERF.1.S the-prophet-ACC Muhammad-ACC-INDEF  
 ‘I met the prophet, Muhammad.’
- c. *marartu* *bi* *n-nabiyy-i*, *Muḥammad-i-n*  
 pass.PERF.1.S by the-prophet-GEN Muhammad-GEN-INDEF  
 ‘I passed by the prophet, Muhammad.’ (Type I)
- (15) a. *qarrar-ati* *d-duwal-u* *l-ʔaʕdʕa:ʔ-u* *l-muʔa:darat-a*  
 decide.PERF.3.F the-states-NOM the-members-NOM the-departure-ACC  
 ‘The states, the members, decided to leave.’
- b. *qa:baltu* *d-duwal-a* *l-ʔaʕdʕa:ʔ-a*  
 meet.PERF.1.S the-states-ACC the-members-ACC  
 ‘I met the states, the members.’
- c. *taḥadaθtu* *maʕa* *d-duwal-i* *l-ʔaʕdʕa:ʔ-i*  
 talk.PERF.1.S with the-states-GEN the-members-GEN  
 ‘I talked with the states, the members.’ (Type II)

However, the pronominal anchor in the Type III apposition in (16a) takes only the nominative whereas the appositive takes the accusative. It should be noted that Type III appositions are restricted to subject positions as in (16a) and do appear in non-subject positions as in (16b,c).

- (16) a. *naḥnu* *l-ʕarab-a* *naqulu* *ʕa:lika*  
 We.NOM the-arab.PL-ACC say.IMPERF.1.PL that  
 ‘We, the Arabs, say that.’
- b. *\*ʔaḥmad-u* *qa:bal-na* *l-ʕarab-a*  
 Ahmed.NOM meet.IMPERF.3.M.S-us.ACC the-arab.PL-ACC  
 ‘Ahmed met us, the Arabs.’
- c. *\*ʔaḥmad-u* *takallama* *ʕan-na* *l-ʕarab-a*  
 Ahmed.NOM talk.IMPRF.3.M.S about-us.GEN the-arab.PL-ACC  
 ‘Ahmed talked about us, the Arabs.’ (Type III)

The sentences in (16b,c) are ungrammatical because the anchor cannot be a clitic. These sentences can be rescued if we insert the whole appositional phrase *naḥnu l-ʕaraba* ‘we, the Arabs’ after the pronominal clitics attached to the verb or the preposition as shown in (17) and (18) respectively. However, in both examples, the two elements *naḥnu l-ʕaraba* ‘we, the Arabs’ maintain their case markings, i.e. the nominative and the accusative respectively.

- (17) *ʔaḥmad-u* *qa:bal-na*, *naḥnu* *l-ʕarab-a*  
 Ahmed.NOM met.3.M.S-us.ACC, we.NOM the-arab.PL-ACC  
 ‘Ahmed met us, we the Arabs.’
- (18) *ʔaḥmad-u* *takallama* *ʕan-na*, *naḥnu* *l-ʕarab-a*  
 Ahmed.NOM talked.3.M.S about-us.GEN, we.NOM the-arab.PL-ACC  
 ‘Ahmed talked about us, we the Arabs.’

To conclude, the two units of Type I and II appositions show case agreement whereas those of Type III do not.

### C. Word Order

Another distinction between the three types of Arabic nominal appositions follows from the ordering of their two units. As apparent from (19), Type I appositions allow the common noun to precede or follow the proper name.

- (19) a. *ʔan-nabiyy-u*, *Muḥammad-un*  
 the-prophet-NOM Muhammad-NOM  
 ‘The prophet, Muhammad’
- b. *Muḥammad-un*, *an-nabiyy-u*  
 Muhammad-NOM the-prophet-NOM  
 ‘Muhammad, the prophet’ (Type I)

However, Type II and III appositions impose ordering restrictions. As shown in the Type II apposition in (20a), the first common noun *ʔadduwalu* ‘states’ must precede the second common noun *l-ʔaʕdʕa:ʔu* ‘the members’. The reverse ordering is disallowed as shown in (20b).

- (20) a. *ʔad-duwal-u* *l-ʔaʕdʕa:ʔ-u*  
 the-states-NOM the-members-NOM  
 ‘The states, the members’

- b. \**ʔal-ʔaʕdʕa:ʔ-u*                      *d-duwal-u*  
 the-members-NOM                      the-states-NOM  
 ‘The members, the states’                      (Type II)

The same applies to the Type III apposition in (21). The pronoun must precede the common noun as in (21a), and the reverse as shown in (21b) is not allowed, irrespective of the case the common noun takes, be it the nominative or the accusative.

- (21) a. *naḥnu*                      *l-ʕarab-a*  
 We.NOM                      the-arab.PL-ACC  
 ‘We, the Arabs’  
 b. \**ʔal-ʕarab-u/a*                      *naḥnu*  
 the-arab.PL-NOM/ACC                      we.NOM  
 ‘The Arabs, we’                      (Type III)

From this section, we conclude that Type I appositions allow their two units to be freely ordered. However, there is a strict ordering of the two units in Type II and III appositions.

#### D. NP Deletion

In their seminal work, Quirk et al. (1985, p. 1302-3) refer to three primary characteristics of the two units of appositions. These three characteristics are summarized in (22).

- (22) A. Each of the appositional units can be separately omitted without affecting the grammaticality of the sentence.  
 B. Each fulfills the same syntactic function in the resultant sentences.  
 C. It can be assumed that there is no difference between the original sentence and either of the resultant sentences in extralinguistic reference.

Following these properties, Quirk et al. (1985, p. 1302-3) call appositions which fulfill all the criteria in (22) ‘full appositions’ as exemplified in (23). Those which do not meet all the requirements in (22) as shown in (24) are termed as ‘partial appositions’.

- (23) a. *A neighbor, Fred Brick, is on the telephone.*  
 b. *A neighbor is on the telephone.*  
 c. *Fred Brick is on the telephone.*                      (Full Apposition)  
 (24) a. *An unusual present was given to him for his birthday, a book on ethics.*  
 b. *An unusual present was given to him for his birthday.*  
 c. \**Was given to him for his birthday, a book on ethics.*                      (Partial Apposition)

The three types of Arabic nominal appositions also differ in terms of their fulfillment of the three conditions in (22). Let us start with the Type I apposition in (25).

- (25) a. *qa:la*                      *n-nabiyy-u*                      *Muḥammad-un* ...  
 say.PERF.3.M                      the-prophet-NOM                      Muhammad-NOM ...  
 ‘The prophet, Muhammad, said...’  
 b. *qa:la*                      *n-nabiyy-u*                      ...  
 say.PERF.3.M                      the-prophet-NOM ...  
 ‘The prophet said...’  
 c. *qa:la*                      *Muḥammad-un* ...  
 say.PERF.3.M                      Muhammad-NOM ...  
 ‘Muhammad said...’

As is clear from (25), Type I is a full apposition because it meets all the requirements in (22). Either NP in the Type I apposition above can be deleted as in (25b,c) without affecting the grammaticality of the resultant sentence (Requirement A). Note here that the deletion applies to either NP in (25a) without changing the inflection of the verb as well. Moreover, each NP in (25b,c) fulfills the same syntactic function in sentence (35a), namely a subject (Requirement B). Requirement C is also satisfied given that the resultant sentences in (25b,c) are not different from the original sentence in that both resultant sentences can capture the extralinguistic referent. To illustrate, the referent in the subject position in both (25b,c) is still extralinguistically identified in the appropriate discourse, and it is the same person referred to in (25a).

Type II appositions are ‘partial appositions’ because they meet a few of the requirements in (22) as shown in (26) below.

- (26) a. *qarrar-ati*                      *d-duwal-u*                      *l-ʔaʕdʕa:ʔ-u*                      *l-muʔa:darat-a*  
 decide.PERF-3.F                      the-states.F-NOM                      the-members.M-NOM                      the-departure-ACC  
 ‘The states, the members, decided to leave.’  
 b. *qarrar-ati*                      *d-duwal-u*                      *l-muʔa:darat-a*  
 decide.PERF-3.F                      the-states.F-NOM                      the-departure-ACC  
 ‘The states decided to leave.’  
 c. \**qarrar-ati*                      *l-ʔaʕdʕa:ʔ-u*                      *l-muʔa:darat-a*  
 decide.PERF-3.F                      the-members.M-NOM                      the-departure-ACC  
 ‘Indented meaning: the members (= the states) decided to leave.’

d. qarrara	<u>l-ʔaʕdʕa:ʔ-u</u>	l-muya:darat-a
decide.PERF.3.M	the-members.M-NOM	the-departure-ACC
‘The members decided to leave.’		

Type II appositions only allow the deletion of the second NP *lʔaʕdʕa:ʔu* ‘the members’ from (26a) as shown in (26b) but not the first NP *adduwalu* ‘the states’ as in (26c). One might assume that the ungrammaticality in (26c) is due to the incorrect subject-verb agreement. When subject-verb agreement is corrected, it becomes grammatical as in (26d). Although this is true, it is noteworthy that Type II appositions differ from Type I ones in that the deletion of the appositive from Type I apposition in (25b) and (25c) does not initiate any change in subject-verb agreement. By contrast, Type II appositions require the verb to inflect in agreement with the appositive. All else being equal, the appositive *lʔaʕdʕa:ʔu* ‘the members’ in the Type II apposition in the corrected example in (26d) still does not capture the extralinguistic referent *adduwalu* ‘the states’ in the original sentence (26a).

The same applies to Type III appositions in (27). The deletion of the second NP is allowable as in (27b), but the deletion of the first unit, i.e. the pronoun, causes ungrammaticality as in (27c) unless we correct the subject-verb agreement as in (27d). However, the extralinguistic referent in both (27b,d) cannot be associated with the same person, i.e. *we*, mentioned in sentence (27a).

(27) a. <u>naḥnu</u>	<i>l-ʕarab-a</i>	naqu:lu	ʕa:lika
We.NOM	the-arab.PL-ACC	say.IMPERF.1.PL	that
‘We, the Arabs, say that.’			
b. <u>naḥnu</u>	naqu:lu	ʕa:lika	
We.NOM	say.IMPERF.1.PL	that	
‘We say that.’			
c. * <i>ʔal-ʕarab-u</i>	naqu:lu	ʕa:lika	
the-arab.PL-NOM	say.IMPERF.1.PL	that	
‘Indented meaning: The Arabs (= we) say that.’			
d. <i>ʔal-ʕarab-u</i>	yaqu:lu:na	ʕa:lika	
the-arab.PL-NOM	say.IMPERF.3.PL	that	
‘The Arabs say that.’			

In light of these distinctions, we conclude that Type I allows the NP deletion without altering the verb inflection, whereas Type II and III do not allow the deletion of the first unit unless the verb-subject agreement is repaired. Even with the correction of subject-verb agreements, the appositive in Type I and II does not refer to a deleted anchor. These differences suggest that Type I appositions are full, whereas Type II and III ones are partial. It is worthwhile to note here that being partial appositions does not mean that the latter types (i.e. Type II and III) are not appositional any longer. They are still viewed as appositions according to Quirk et al. (1985, p. 1302-3) and they are similar to other partial appositions found in French and English which do not respect the requirements in (22) (for further discussion, see O’Connor, 2008; Hannay & Keizer, 2005).

### E. Semantic Classes

The semantic relations between the two units in (8) through (10) are also suggestive of the differences between the three types of nominal appositions in MSA. It should be noted that, in this section, we refer to descriptive non-formal semantics. We will show that these relations can reduce the Arabic appositional types to different classes, depending on the information with which the appositive provides the anchor.

Using non-formal semantic terminologies, Meyer (1992, p. 73) demonstrates that apposition, in general, is a relation where the second unit adds specificity to the interpretation of the first one. In most cases, the second unit involves more specific information than the first one. Under this view, many scholars propose different semantics classes for appositional constructions such as appellation, characterization, identification, attribution, inclusion among many others (Meyer, 1992; Heringa, 2011).

According to Meyer (1992, p. 76), the class of ‘appellation’ includes apposition where the second unit specifies the name of the first one. In other words, the second member is a proper name. Given that the Type I apposition in (28) fares well with this class, we propose that Type I appositions fall under ‘appellation’ class.

(28) qa:la	<u>n-nabiyy-u</u>	<i>Muhammad-un</i> ...
say.PERF.3.M	the-prophet-NOM	Muhammad-NOM ...
‘The prophet, Muhammad, said...’		
(Type I)		

However, as discussed in section (C) above, we know that Type I appositions can allow the reverse order of the two units: (i) the proper name and (ii) the common noun as in (29) below. With that word order, ‘identification’ is a more appropriate semantic class for Type I appositions. Identification means that the first unit is followed by an NP that ‘identifies’ the referent of the first one (Meyer, 1992, p. 75), and this definition fits the example below.

(29) qa:la	<i>Muhammad-un</i> ,	<u>an-nabiyy-u</u> ,	...
say.PERF.3.M	Muhammad-NOM	the-prophet-NOM	...
‘Muhammad, the prophet, said...’			
(Type I)			

Taking these variations into account, we conclude that Type I appositions can fall under either ‘appellation’ or ‘identification’, depending on the ordering of the two units.

Concerning the Type II apposition in (30) below, we propose that it belongs to the ‘characterization’ class.

- (30) qarrar-ati                      d-duwal-u                      l-ʔaʕdʕa:ʔ-u                      l-muʔa:darat-a  
 decide.PERF-3.F      the-states-NOM                      the-members-NOM                      the-departure-ACC  
 ‘The states, the members, decided to leave.’                      (Type II)

The ‘characterization’ class requires that the second unit of the apposition is attributive and can provide “general ‘characteristics’ of the first unit” (Meyer, 1992, p. 78). This requirement fits Type I appositions where the second unit behaves as a characterizing modifier to the first one. Although one might argue that this construction becomes a noun-adjective phrase rather than an apposition, it is important to note that this relation is semantic rather than syntactic. Modifying appositives, where the appositive functions as an attributive noun, are common in the literature (see e.g. Doron, 1994; Acuña-Fariña, 1996; Potts, 2005).

As for the Type III apposition in (31), it shares many properties that fit the ‘identification’ class.

- (31) naḥnu                      l-ʕarab-a                      naqu:lu                      ʕa:lika  
 We.NOM                      the-arab.PL-ACC                      say.IMPERF.1.PL                      that  
 ‘We, the Arabs, say that.’                      (Type III)

According to Meyer (1992, p. 75), the ‘identification’ class allows the second unit to identify the referent of the first one, even if the latter is a pronoun such as *what* as in (32) or *we* as in (33).

- (32) Most important of all, this description of the linguistic configuration of metaphor brings out the truth of *what* some writers on metaphor have been at pains to point out: that is, *that with a metaphor one can make a complex statement without complication the grammatical construction of the sentence that carries the statement.* (SEU, w. 9.4.56-2, 56-3).  
 (Meyer, 1992, p. 75, ex. 56).

- (33) *We, John and I, intend to resign.* (Quirk et al., 1985, p. 1309)

Given that the Type III apposition in (31) also includes a pronoun identified with the NP *alʕaraba* ‘the Arabs’, we propose that it fits the ‘identification’ class. To conclude this section, we argue that Type I appositions fare well with ‘appellation’ or ‘identification’ classes based on the order of the two units, while Type II and III ones fall under ‘characterization’ and ‘identification’ respectively.

F. Intermediate Summary

To recapitulate the distinctions between the three types of Arabic nominal appositions under study, consider Table 1.

TABLE 1  
 DISTINCTIONS BETWEEN THE THREE TYPES OF ARABIC NOMINAL APPPOSITIONS

Distinctions	Type I	Type II	Type III
Nominal Category of the two units	Common noun+Proper noun	Common noun+Common noun	Pronoun+Common noun
Case Agreement	Yes	Yes	No
Word Order	Free	Restricted	Restricted
NP Deletion	Yes	No	No
Semantic Class	Appellation & Identification	Characterization	Identification

As obvious from Table 1, the NP deletion seems to follow from the free ordering of the two units. Given that Type I appositions allow the two units to be freely ordered, the deletion of either NP is permitted. However, because Type II and III appositions impose restrictions on the ordering of their two units, the first unit is always maintained.

We conclude from Table 1 that the distinctions between the three types of Arabic nominal appositions suggest that they cannot take a unified account. Rather, a separate analysis should be developed for each type.<sup>3</sup>

III. THE SYNTAX OF ARABIC NOMINAL APPPOSITIONS

<sup>3</sup> One reviewer claims that our three-fold classification of appositions (i.e. Type I, II, III) has been addressed in the traditional literature; thus, accreditation is needed. In fact, this is not true. The traditional literature reduces appositions to three types: whole appositions, partitive appositions and possessive appositions. Whole appositions occur when an element wholly replaces the other as in (i).

i. dʒa:ʔa                      ʕali-u-n                      ʕamm-u-ka  
 come.PERF.3.M                      Ali-NOM-INDEF                      uncle-NOM-your  
 ‘Ali, your uncle, came.’

Our classification (Type I, II, and III) is subsumed under this type (whole apposition). Partitive appositions occur when the second element is a part or a quantity of the first one as in (ii), while possessive appositions appear when the first element is the possessor of the second one as in (iii). In the latter two types, the second element must bear a clitic bound to the first element.

ii. qaraʔtu                      l-kita:b-a                      nisʕa-hu/ʔuluʔ-a-hu/baʕdʕa-hu  
 read.PERF.1.M                      the-book-ACC                      half-ACC-its/third-ACC-its/some-ACC-its  
 ‘I read the book, half/third/some of it.’

iii. ʔuhibbu                      l-marʔat-a                      haði:ʔ-a-ha/ʔaxla:q-a-ha  
 love.IMPERF.1.M                      the-woman-ACC                      talk-ACC-her/manner.PL-ACC-her  
 ‘I love the woman, her talk/manners.’

From a syntactic perspective, it seems that the last two types in the literature involve the movement of the first element, being associated with a pronominal clitic attached onto the second element. Given that our tripartite classification does not involve any clitics, neither on the first unit nor the second, nothing in the traditional literature is related to our proposal.



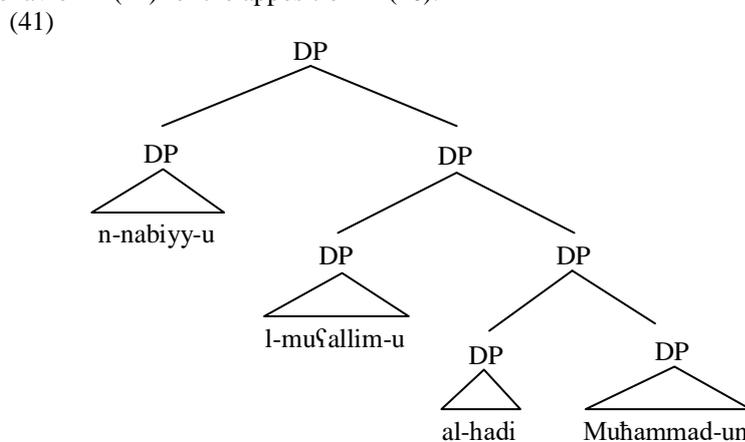
account for the NP deletion from Type I appositions. Being an adjunct, the proper name *Muhammadun* ‘Muhammad’ or the common noun *nabiyyu* ‘the prophet’ is removable as shown in (39b) and (39c) respectively.

- (39) a. *dʒa:ʔa*                      n-nabiyy-u                      *Muhammad-un*  
 come.PERF.3.M                      the-prophet-NOM                      Muhammad-NOM  
 ‘The prophet, Muhammad, came.’
- b. *dʒa:ʔa*                      *Muhammad-un*  
 come.PERF.3.M                      Muhammad-NOM  
 ‘Muhammad came.’
- c. *dʒa:ʔa*                      n-nabiyy-u  
 come.PERF.3.M                      the-prophet-NOM  
 ‘The prophet came.’

Iterativity is a third characteristic of adjuncts (Bresnan, 1982; Svenonius, 1994; Stroik & Putnam, 2013), offering further evidence for structure (35) as a plausible analysis for Arabic Type I appositions. Under the adjunction account, we predict that Type I appositions allow iterative DPs and this prediction is also borne out as exemplified in (40).

- (40) *dʒa:ʔa*                      n-nabiyy-u,                      l-muʕallim-u,                      l-ha:di,                      *Muhammad-un*  
 come.PERF.3.M                      the-prophet-NOM                      the-educator-NOM                      the-guide.NOM                      Muhammad-NOM  
 ‘The prophet, the educator, the guide, Muhammad, came.’

Observe that all the iterative units in (40) are not adjectives but nouns, i.e. DPs. Also, all these iterative DPs refer to the same individual, namely *Muhammad*. Consider how the adjunction structure in (35) can capture this iterative behavior in (41) for the apposition in (40).



Given that these iterative DPs are adjuncts, we also predict that they can be freely ordered. This prediction is borne out as shown in (42) where the iterative DPs above take different word orders<sup>4</sup>.

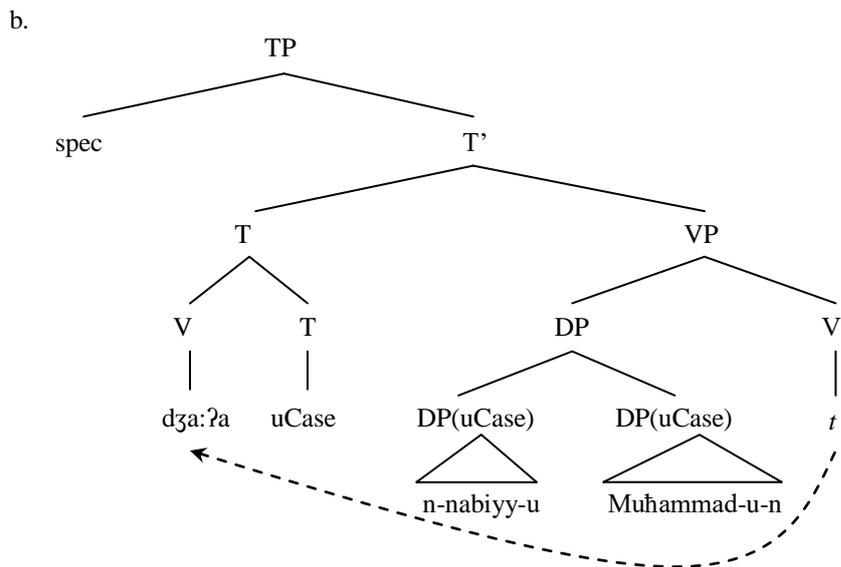
- (42) a. *dʒa:ʔa*                      n-nabiyy-u,                      l-muʕallim-u,                      l-ha:di,                      *Muhammad-un*  
 come.PERF.3.M                      the-prophet-NOM                      the-educator-NOM                      the-guide.NOM                      Muhammad-NOM  
 ‘The prophet, the educator, the guide, Muhammad, came.’
- b. *dʒa:ʔa*                      l-muʕallim-u,                      l-ha:di,                      n-nabiyy-u,                      *Muhammad-un*  
 come.PERF.3.M                      the-educator-NOM                      the-guide.NOM                      the-prophet-NOM                      Muhammad-NOM  
 ‘The educator, the guide, the prophet, Muhammad, came.’
- c. *dʒa:ʔa*                      l-ha:di,                      l-muʕallim-u,                      n-nabiyy-u,                      *Muhammad-un*  
 come.PERF.3.M                      the-guide.NOM                      the-educator-NOM                      the-prophet-NOM                      Muhammad-NOM  
 ‘The guide, the educator, the prophet, Muhammad, came.’

A fourth advantage of our adjunction account follows from the fact that it handles the so-called case agreement in Type I appositions. Given that the two units in these appositions agree in case, we can simply propose that the anchor-DP, which is commonly the first member, receives case from the clause and share it with the appositional-DP, as diagrammed in (43b) for the Type I apposition in (43a).

- (43) a. *dʒa:ʔa*                      n-nabiyy-u                      *Muhammad-u-n*  
 come.PERF.3.M                      the-prophet-NOM                      Muhammad-NOM-INDEF  
 ‘The prophet, Muhammad, came.’

<sup>4</sup> Generally speaking, it is preferable to end these iterative DPs with the proper name *Muhammad*. However, the proper name in these appositions can still occur between these iterative DPs as in (i).

i. *dʒa:ʔa*                      n-nabiyy-u,                      Muhammad-un,                      l-muʕallim-u,                      l-ha:di  
 come.PERF.3.M                      the-prophet-NOM                      Muhammad-NOM                      the-educator-NOM                      the-guide.NOM  
 ‘The prophet, Muhammad, the educator, the guide came.’



As shown in (43b), the verb in the past tense moves from V to T, which is a common movement operation for VSO word order in MSA (see Aoun et al., 2010). Adopting Pesetsky and Torrego's (2007) view of Agree as a feature sharing approach, we assume that the anchor-DP is endowed with an uninterpretable feature [uCase], with which the feature [uCase] of the appositive-DP initiates a case relation. After linking the two features of both the anchor and the appositive together, the anchor's case is checked against the uninterpretable feature [uCase] on the tense head T, and the appositive immediately derives the same case given to the anchor. This leads to case agreement attested in Type I appositions. In short, the adjunction analysis is preferable for Type I appositions because it can also capture the case agreement between the two elements.

It should, however, be noted that case agreement between the two appositional units does not necessarily mean that both units must as well agree in morphological definiteness. Both units in (43a) above are semantically definite, even though each of them takes a separate marker. Proper names, albeit definite, are marked in MSA with an indefinite suffix *-n* as in (43a) perhaps because 'many of these Arabic names are derived from adjectives which describe particular attributes' (Ryding, 2005, p. 164). Under this analysis, we take it for granted that the head D of each DP in the adjunction structure hosts the definite article *ʔal-* 'the' or the indefinite suffix *-n*. Therefore, we follow Alqarni (2015, p. 233) who argues that Arabic has a requirement that every noun must be marked in either definiteness or indefiniteness. If a noun is not morphologically marked in definiteness, the indefinite suffix *-n* must be inserted to it even if it is definite by default. In other words, the indefinite suffix *-n* attached to the proper name *Muhammad* in (43a) is morphologically required even though *Muhammad* is definite from a semantic perspective.

Proper names cannot take the definite article as shown in (44) below, unless they have an attributive interpretation. After all, under the attributive interpretation, proper names do not entertain reference to specific individuals.

- (44) \*dʒa:ʔa                      n-nabiyy-u                      *l-Muḥammad-u*  
 come.PERF.3.M                      the-prophet-NOM                      the-Muhammad-NOM  
 'The prophet, the Muhammad, came.'

As demonstrated below, the two units cannot take indefiniteness markers either.

- (45) \*dʒaʔa                      nabiyy-u-n                      *Muḥammad-u-n*  
 come.PERF.3.M                      prophet-NOM-INDEF                      Muhammad-NOM-INDEF  
 'A prophet, Muhammad, came.'

In light of these syntactic-semantic behaviors, we argue that each unit in Type I appositions does not agree in definiteness, but only in case. We therefore assume that the two elements in Type I appositions are semantically definite, regardless of the markings they bear. In fact, the adjunction structure in (35) allows each DP to take a separate (in)definiteness marker according to the Arabic (in)definiteness rules stipulated for nouns and proper nouns (see Alqarni, 2015: 233 for a justified account). If we assume that the anchor is DP and the appositive is NP agreeing with it in definiteness, we will expect the proper name in (43a) to take the definite article. If it depends on the definiteness of the anchor, the proper name, as NP, will not be able to generate its own definiteness markers (*-n*). Thus, structure (35) receives further support, allowing the two DPs to take definiteness markers on their own.

From the above discussion, we find that the adjunction structure in (35) is the most plausible account for Type I appositions in MSA. This proposal can account for all the properties arising from Type I appositions such as free ordering, NP deletion, iterativity, case agreement and definiteness markers.

Before closing this section, we will now argue against an alternative analysis that might be proposed for Type I appositions, namely coordination structure. In the literature, it has been assumed that the syntax of apposition and coordination is indistinguishable (Burton-Roberts, 1975; Sturm, 1986; Sadler & Nordlinger, 2006; De Vries, 2006;



attend.PERF.3.M                      the-prophet-NOM                      guide-NOM-INDEF                      Muhammad-NOM  
 ‘The prophet, a guide, Muhammad, attended.’

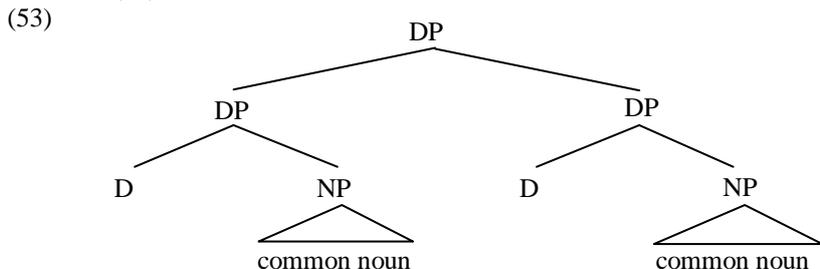
In light of these observations, we conclude that Type I appositions are not compatible with the coordination structure in (46). The two elements in Type I appositions are better treated as adjuncts.

*B. The Syntax of Type II Appositions*

Type II appositions, like the one repeated in (52) below, consist of two common nouns. We have earlier pointed out that these appositions do not allow the two NPs to be freely ordered (e.g. 20), neither do they allow the deletion of the first NP (e.g. 26). As regards case, the two NPs display case agreement (e.g. 15).

(52) qarrar-ati                      d-duwal-u                      l-ʔaʕdʕa:ʔ-u                      l-muʔa:darat-a  
 decide.PERF-3.F                      the-states-NOM                      the-members-NOM                      the-departure-ACC  
 ‘The states, the members, decided to leave.’ (Type II)

Before proposing a separate analysis to Type II appositions, let us show how the adjunction structure that we proposed for Type I appositions cannot be motivated. If we adopt an adjunction analysis, Type II appositions will be drawn as in (53).

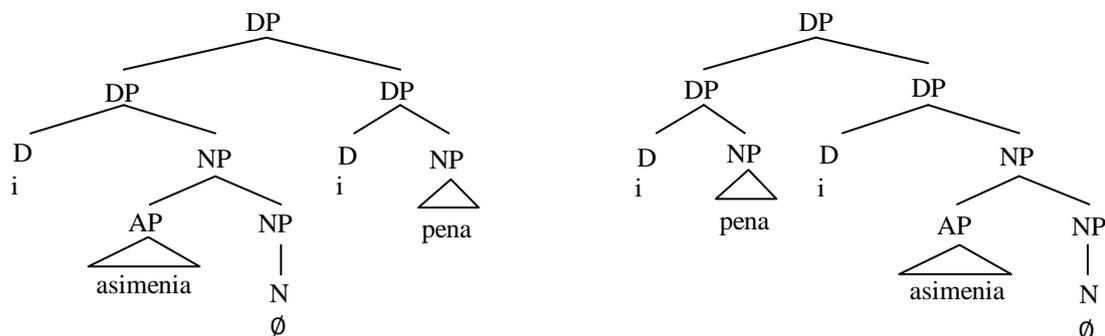


It is crucial to note that the adjunction analysis in (53) is given to Greek polydefiniteness as well as Greek appositions (Lekakou & Szendrői, 2011). Greek polydefinites are different from Greek appositions in that they involve a noun and an adjective which are both definite, and which can switch positions as shown in (54).

(54) a. i asimenia                      i                      pena  
 the.NOM                      silver                      the.NOM                      pen  
 b. i                      pena                      i asimenia  
 the.NOM                      pen                      the.NOM                      silver  
 ‘the silver pen’ (Lekakou & Szendrői, 2011, p. 108: ex. 1)

Lekakou and Szendrői (2011) propose that the two units in (54) are two adjuncts-DPs, but “an elliptical noun is contained inside the ‘adjectival’ DP” (p. 120). In other words, the examples in (54a,b) can be represented as in (55a,b), where the adjectival DP *i asimenia* ‘the sliver’ involves a noun ellipsis.

(55) a. Representation of (54a)                      b. Representation of (54b)



Based on these observations, one might extend the analysis given to Greek polydefinites to Arabic Type II appositions. This move can be justified following the fact that Greek polydefiniteness have a ‘characterization’ semantic class where the second noun modifies the first one (Lekakou & Szendrői, 2011), and Arabic Type II appositions have the same semantic class, i.e. characterization as discussed in section (E), where the appositive noun modifies the anchor. Although the adjunction analysis will be desirable for minimalist purposes and it will account for both Type I and II appositions in MSA, two problems arise. First, as shown in (54), the two units of Greek polydefinites can exchange positions. However, this free ordering is not allowed in Type II appositions as exemplified in (56). In (56), the first noun *ʔadduwalu* ‘the states’ must come first, and the reverse is not allowed, irrespective of the subject-verb agreement.

(56) a. (qarrar-ati)                      d-duwal-u                      l-ʔaʕdʕa:ʔ-u                      ...  
 (decided-3.F)                      the-states-NOM                      the-members-NOM                      ...

- ‘The states, the members (decided that ....)’  
 b. (qarrar-a/ati) \**l-ʔaʕdʕa:ʔ-u* d-duwal-u ...  
 (decided-3.M/3.F) the-members-NOM the-states-NOM ...  
 ‘The members, the states (decided that ....)’

Second, Lekakou and Szendrői (2011, p. 121) show that more adjectives can be added to Greek polydefinites. Being adjuncts, these multiplied adjectives can be freely ordered as shown in (57).

- (57) a. i pena i asimenia i kenurja  
 the pen the silver the new  
 b. i pena i kenurja i asimenia  
 c. i asimenia i pena i kenurja  
 d. i asimenia i kenurja i pena  
 e. i kenurja i asimenia i pena  
 f. i kenurja i pena i asimenia

‘the new silver pen’. (Lekakou & Szendrői, 2011, p. 121, ex. 21)

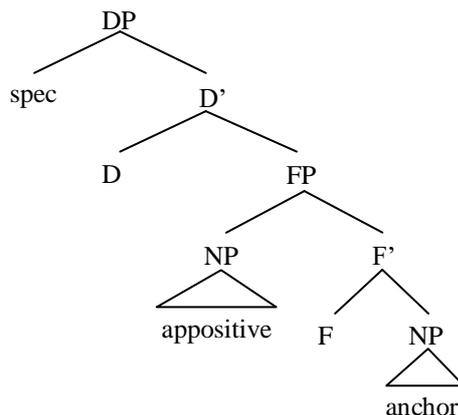
In contrast, the free ordering of the modifying elements after the anchor in Arabic Type II appositions is not allowed. If we add an adjective to the Arabic Type II apposition as shown in (58), there is a relatively strict order between the modifying elements.

- (58) a. qarrar-ati d-duwal-u *l-ʔaʕdʕa:ʔ-u* *l-kubra* ...  
 decide.PERF-3.F the-states-NOM the-members-NOM the-big.NOM ...  
 ‘The major member-states decided to ...’  
 b. ?qarrar-ati d-duwal-u *l-kubra* *l-ʔaʕdʕa:ʔ-u*  
 decide.PERF-3.F the-states-NOM the-big.NOM the-members-NOM ...  
 ‘The major member-states decided to ....’

In (58a), the adjective *alkubra* ‘the big’ must follow the modifying noun *alʔaʕdʕa:ʔu* ‘the members’. Otherwise, the sentence will be marginal as indicated by (?) in (58b). In light of these distinctions, i.e. the rigid word order of the two units and the modifiers, we conclude that Type II appositions cannot adopt an adjunction structure.

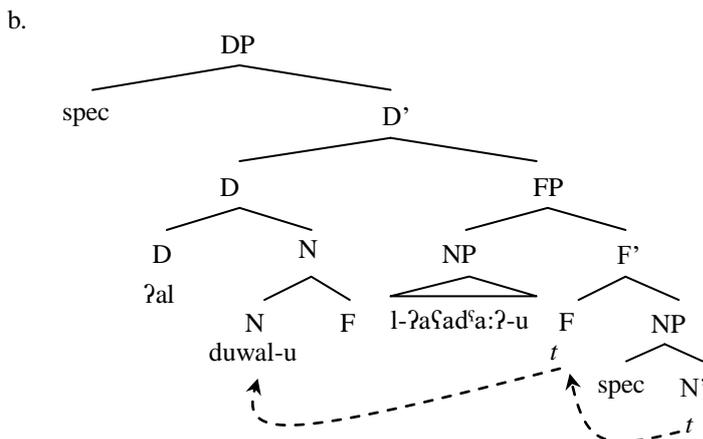
For Type II appositions, we need a structure that places the anchor in a strict order with the appositive which in turns appears in a relatively strict order with other modifiers. Given that the relationship between the two elements in Type II appositions is modificational, we propose structure (59) below for Type II appositions. In fact, structure (59) is the same structure proposed for noun-adjective constructions in many studies (see e.g. Cinque, 1999; Julien, 2002; Laenzlinger, 2005 among others).

(59)



By this account, we follow the generative scholars who propose that an attributive element, be it an adjective or a noun, can occupy one of the left-branching specifiers of the multiple functional projections (FP), sandwiched between the highest functional DP and the lowest lexical NP (Cinque, 1999; Julien, 2002; Laenzlinger, 2005). Since the appositive is structurally higher than the anchor in structure (59), we now have an illicit word order (appositive+anchor), which is ungrammatical as shown in examples (56) where the anchor must precede the appositive. Therefore, and to capture this strict word order in Type II appositions, we propose that the head N undergoes a successive head-to-head movement through the functional heads until it lands on the head D as sketched in (60b) representing the Type II apposition in (60a).

- (60) a. qarrar-ati d-duwal-u *l-ʔaʕdʕa:ʔ-u* l-muʔa:darat-a  
 decide.PERF-3.F the-states.F-NOM the-members.M-NOM the-departure-ACC  
 ‘The states, the members, decided to leave.’ (Type II)



In fact, the N-to-D movement is a very common operation in MSA and many other languages (see e.g. Fassi Fehri, 1999; Sichel, 2000; Alexiadou, 2001; Longobardi, 2001; Shlonsky, 2004) and it captures the rigid word order where nouns always precede typical adjectives. According to the Case Filter, the N-to-D movement can be motivated by the requirement of the noun to receive Case (Chomsky, 2015) and by the requirement of the noun to be morphologically attached to the definite article *?al* ‘the’ on the D, which is pronounced as *d-* at the PF branch. Given that the anchor in (60b) now appears higher in the structure (i.e. first in linear ordering), the appositive remains in a fixed specifier position, appearing postnominally. In light of this discussion, we conclude that the spec-head structure can account for the first property of Type II appositions, i.e. the rigid word order of the two units.

Note that the appositive-NP in (60a) above behaves like the typical adjectival modifier in (61) below, in that they both follow the head noun.

(61) qarrar-ati	<b>d-dawlat-u</b>	<i>l-faqi:r-at-u</i>	l-mu?a:darat-a
decide.PERF-3.F	the-state-F-NOM	the-poor-F-NOM	the-departure-ACC
‘The poor state decided to leave.’			

Like the adjective *alfaq:iratu* ‘the poor’ in (61) which agrees in case, gender, number and definiteness with the preceding noun *addawlatu* ‘the state’, the appositive-NP *al?a?ad?a:?u* ‘the members’ can also agree in case, number and definiteness with the anchor *adduwalu* ‘the states’ in Type II appositions in (60a). However, as a noun, the appositive *al?a?ad?a:?u* ‘the members’ in (60a) maintains its lexical gender, namely masculine.

Because agreement is assumed to take place in a spec-head relation (Fassi Fehri, 1999; Julien, 2002; Laenzlinger, 2005), structure (60b) now becomes more advantageous in that it can account for the definiteness, case, and number agreement between the two units of Type II appositions. In this paper, we assume that the agreement established between the two units of Type II appositions is no different from the noun-adjective concord heavily discussed in the literature (see e.g. Albarrag, 2013; Alqarni, 2015; Alanazi, 2019). In other words, we argue that what applies to adjective-noun constructions in terms of agreement can be easily carried over to Type II appositions given that they both take the same structure. Thus, following Pesetsky and Torrego’s (2007) view of Agree as a feature sharing, we propose that the anchor first links its [uCase] feature with that of the appositive. Being higher in the structure, the anchor becomes the only element that can receive the nominative from the head T. After the anchor receives the nominative, it immediately passes it to the appositive. The same feature sharing applies to definiteness and number, excluding gender which is inherent on both units. In sum, agreement provides further evidence that structure (59) is more plausible for Type II appositions.

As a third advantage, structure (59) can also explain an important behavior in Type II appositions, where the verb only agrees in gender with the anchor, but not with the gender of the modifying appositive as shown in (62).

(62) a. qarrar-ati	d-duwal-u	l-?a?ad?a:?u	....
decide.PERF-3.F	the-states.F-NOM	the-members.M-NOM	....
‘The states, the members, decided to .....’			
b. *qarrara	d-duwal-u	l-?a?ad?a:?u	....
decide.PERF.3.M	the-states.F-NOM	the-members.M-NOM	....
‘The states, the members, decided to ....’			

(Type II)

In (62a), the verb agrees in feminine gender with the anchor (i.e. the singular form is *dawlah* ‘a state’, feminine) but not with the masculine gender of the appositive-NP (i.e. the singular form is *?ud?u* ‘member’, masculine). We assume that this is the case because the anchor is the only element on D, which is the closest head to the verb. However, the appositive being buried in the structure is not accessible to the verb, yielding the ill-formed sentence (62b). If the appositive-NP is treated as an adjunct-DP as proposed early in this section, such a masculine gender agreement with the



appositive becomes optional in accordance with the optionality of FPs themselves. In a spec-head relation, the appositive, like other adjectives, can agree with the head noun in number, case and definiteness but not in gender, because each unit in Type II appositions is a noun, having an inherent gender.

### C. The Syntax of Type III Appositions

Type III appositions, like the one reproduced in (64), consist of a pronoun followed by a common noun. As discussed in section (II), the pronoun (i.e. the anchor) is obligatory, but the common noun (i.e. the appositive) is optional, e.g. (27). The common noun cannot precede the pronoun as in (21). As for case, there is no case agreement between the two units as apparent from (64) below. The pronoun in a subject position is marked with the nominative whereas the appositive takes the accusative.

- (64) naḥnu                      *l-ṣarab-a*                      naqu:lu                      ḥa:lika  
 We.NOM                      the-arab.PL-ACC                      say.IMPERF.1.PL                      that  
 ‘We, the Arabs, say that.’

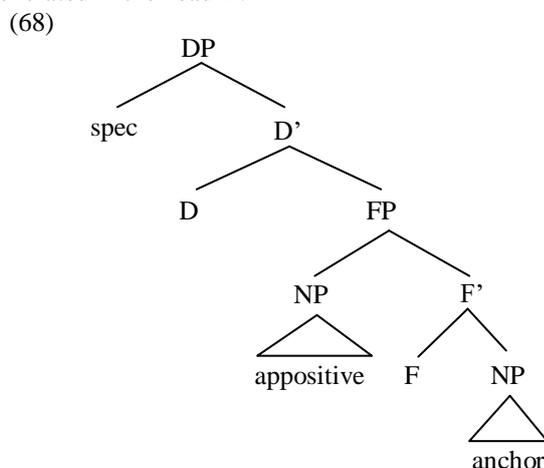
In this section, we will show that Type III appositions require a separate analysis. In other words, the above-mentioned adjunction and specifier-head structures cannot be motivated for these appositions. Let us start with the problems arising from the adjunction analysis proposed for Type I appositions. Unlike Type I appositions that allow the two units to be freely ordered, thus requiring an adjunction structure, the two units of Type III appositions follow a strict order as in (65) below. The pronoun must always come first as in (65a), and cannot follow the common noun as in (65b), regardless of the case marker the common noun takes: the nominative or the accusative.

- (65) a. naḥnu                      *l-ṣarab-a*  
 We.NOM                      the-arab.PL-ACC  
 ‘We, the Arabs’  
 b. \**ṣal-ṣarab-u/a*                      naḥnu  
 the-arab.PL-NOM/ACC                      we.NOM  
 ‘The Arabs, we’

Second, being an adjunct, the appositive in Type I appositions can iterate as in (66) below. However, the appositive in Type III appositions cannot iterate as shown in (67). Only one appositive is allowed as already shown in (64) above.

- (66) dʒa:ʔa                      n-nabiyy-u,                      *l-muṣallim-u*,                      *l-ha:di*,                      *Muḥammad-un*  
 come.PERF.3.M                      the-prophet-NOM                      the-educator-NOM                      the-guide.NOM                      Muhammad-NOM  
 ‘The prophet, the educator, the guide, Muhammad, came.’  
 (67) \*naḥnu                      *l-ṣarab-a*,                      *t<sup>ε</sup>-t<sup>ε</sup>ulla:b-a*,                      naqu:lu ...  
 We.NOM                      the-arab.PL-ACC                      the-students-ACC                      say.IMPERF.1.PL ...  
 ‘We, the Arabs, the students, say ...’

For these two reasons, we argue that the adjunction account is not appropriate for Type III appositions. The spec-head structure proposed for Type II appositions in (68) below is also problematic for Type III appositions for two reasons. First, pronouns, i.e. anchors, are unlikely to occupy the head of the lexical NP in (68) because they are functional categories, i.e. determiners. Following Abney’s (1987) DP-hypothesis, pronouns should be directly base-generated in the head D.



Second, the appositive in Type II appositions in (68) behaves as a modifier, thus agreeing in case with the anchor as shown in (69) below. However, case agreement is not attested in the Type III apposition in (70), where the appositive always takes the accusative.

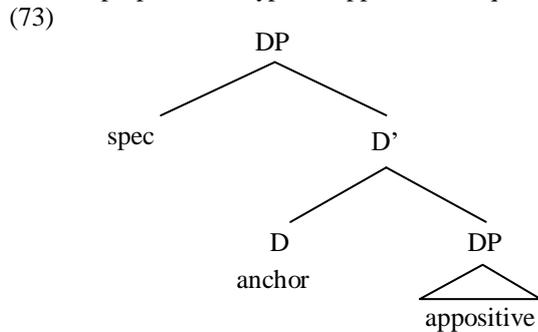
- (69) qarrar-ati                      d-duwal-u                      *l-ṣaḥd<sup>ε</sup>a:ʔ-u*                      l-muṣa:darat-a  
 decide.PERF-3.F                      the-states-NOM                      the-members-NOM                      the-departure-ACC  
 ‘The states, the members, decided to leave.’  
 (70) naḥnu                      *l-ṣarab-a/\*u*                      naqu:lu                      ḥa:lika  
 (Type II)

We.NOM                    the-arab.PL-ACC/\*NOM                    say.IMPERF.1.PL                    that                    (Type III)  
 ‘We, the Arabs, say that.’

The case disagreement in Type III appositions is predictable because pronouns cannot be modified by adjectives in the first place as in (71) from English (cf. Abney, 1987, p. 178). The same applies to Arabic in the ungrammatical example in (72), where *alʔafdʕalu* ‘the best’ undesirably behaves as an adjective agreeing in case with the pronoun. Example (72) can be rescued only if we assume that there is an elliptical NP with which the adjective *alʔafdʕalu* ‘the best’ agrees.

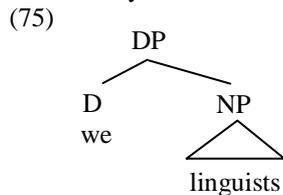
- (71) \*dependable them are hard to find.                    (Abney, 1987, p. 178, ex. 304).  
 (72) \*ʔana                    l-ʔafdʕal-u                    ʔaʕtarif-u                    ʔanna ...  
       I.NOM                    the-best-NOM                    acknowledged.IMPERF.1.M                    that ...  
 ‘I, the best, acknowledge that...’

For these two reasons, we should not consider the spec-head structure for Type III appositions either. Alternatively, we should propose that Type III appositions require a head-complement structure as the one in (73).



It is worth noting that the structure in (73) is relatively similar to the structure in (75) proposed by Abney (1987, p. 180, ex. 307a) for English Pronoun-Noun-Constructions (PNCs) in (74) where the pronoun is followed by NP.

- (74) a. I Claudius/\*idiot  
       b. we linguists/\*idiots  
       c. you \*sailor/idiot  
       d. you idiots/sailors  
       e. \*he tradesman/idiot  
       f. \*they sailors/idiots                    (cf. Postal, 1966)



Obviously, structure (75) is different from our structure in (73) in that the head D in the former structure selects NP rather than DP. We assume that this is the case because English PNCs differ from Arabic Type III appositions in a few respects. First, unlike the English PNCs where the second noun can be indefinite (see e.g. 74b), the second unit of Type III appositions must always be definite, thus bearing the definite article (*ʔa*)l ‘the’ as in (76a). Indefinite appositives are not allowed in Type III appositions as in (76b).

- (76) a. naħnu                    l-ʕarab-a                    naqu:lu                    ʕa:lika  
       We.NOM                    the-arab.PL-ACC                    say.IMPERF.1.PL                    that  
       ‘We, the Arabs, say that.’  
       b. \*naħnu                    ʕarab-a-n                    naqu:lu                    ʕa:lika  
       We.NOM                    arab.PL-ACC-INDEF                    say.IMPERF.1.PL                    that  
       ‘We, Arabs, say that.’

In other words, the head D in Type III appositions must select another full DP as proposed in (73). Given that the appositive in Type III appositions is DP, we predict that the appositive can be modified by an adjective. This prediction is borne out as shown in (77).

- (77) naħnu                    l-ʕarab-a                    l-muha:dʒir-i:na                    naqu:lu ...  
       We.NOM                    the-arab.PL-ACC                    the-immigrant-PL.ACC                    say.IMPERF.1.PL ...  
       ‘We, the immigrant Arabs, say ...’

Furthermore, given that Type I and II appositions are DPs in themselves, we predict that they can also appear after the pronoun in Type III appositions. This prediction is borne out in (78) for Type I appositions and (79) for Type II ones.

- (78) ʔaʕtarifu                    ʔana,                    l-muwa:tʕin-a                    ʕaliy-an,                    ʔanna ....  
       acknowledge.IMPERF.1.M                    I.NOM,                    the-citizen-ACC                    Ali-ACC                    that ....

‘I, the citizen Ali, acknowledge that ...’ (Type I inside Type III)  
 (79) *naštarifu*                      *naħnu*,                      *d-duwal-a*                      *l-ʔaʕdʕa:ʔ-a*,                      *ʔanna* ....  
 acknowledge.IMPERF.1.M      we.NOM,                      the-states-ACC                      the-member-ACC      that      ....  
 ‘We, the member states, acknowledge that ...’ (Type II inside Type III)

As shown in (74) above, English PNCs follow certain restrictions, one of which is that they disallow the use of third person pronouns in their constructions, see e.g. (74e,f). However, all the pronouns, regardless of their person (first, second or third), are allowed in Arabic Type III appositions as shown below.

(80) a. *ħumu*                      *l-fuqara:ʔ-a*                      *yaħta:dzu:na*      ...  
 they.NOM                      the-poor.PL-ACC                      need.IMPERF.3.PL      ...  
 ‘They, the poor, need ...’ (Third Person)  
 b. *ʔanta*                      *l-muʕallim-a*                      *taqu:lu*                      *ħa:lik*  
 you.NOM                      the-teacher-ACC                      say.IMPERF.2.M      that  
 ‘You, the teacher, say that.’ (Second Person)  
 c. *naħnu*                      *l-ʕarab-a*                      *naqu:lu*                      *ħa:lika*  
 We.NOM                      the-arab.PL-ACC                      say.IMPERF.1.PL      that  
 ‘We, the Arabs, say that.’ (First Person)

For the above reasons, we argue that structure (73) is more appropriate for Arabic Type III appositions than the structure proposed for English PNCs in (75).

One might argue that Type III appositions should, however, be similar to Greek PNCs in (81) because the second element in Greek PNCs must be definite (Choi, 2014).

(81) (Emis)                      \*(i)                      *glossologi*                      *imaste*                      *exypni*  
 we                      the                      linguists                      be.1PL.PRES                      smart  
 ‘We linguists are smart.’ (Choi 2014, p. 21, ex. 6)

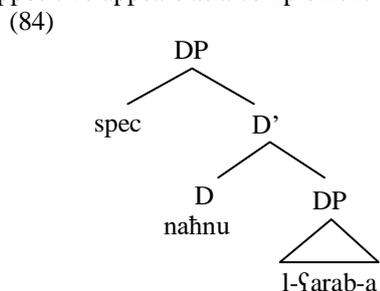
Several proposals have been put forward to account for Greek PNCs in (81), and they are too complex to be addressed here (see Choi, 2014; Hahn, 2017 for a detailed discussion). What is important to us here is that neither of these analyses can immediately relate to our proposed structure in (73). In fact, there are basic differences between Type III appositions and Greek PNCs. First, Greek PNCs allow the deletion of the pronoun as shown in (81). After the deletion of the pronoun in (81), the verb can still show person agreement with the deleted pronoun.

(82) ~~(Emis)~~                      \*(i)                      *glossologi*                      ***imaste***                      *exypni*  
~~We~~                      the                      linguists                      be.1PL.PRES                      smart  
 ‘We linguists are smart.’

By contrast, Type III appositions do not allow the deletion of the pronoun as shown in (83) below. The verb agreement with the deleted pronoun in person is not enough for the sentence to be grammatical, either.

(83) \*(*naħnu*)                      *l-ʕarab-a*                      *naqu:lu*                      *ħa:lika*  
 We.NOM                      the-arab.PL-ACC                      say.IMPERF.1.PL                      that  
 ‘We, the Arabs, say that.’

In light of these dissimilarities, we consider (73) the best structure to account for all the variations in Type III appositions. As demonstrated in (84), the pronominal anchor, like other pronouns, will occupy the head D whereas the appositive appears as a complement to it.



The head-complement structure in (84) is favorable because it accounts for many aspects of Type III appositions. For example, it explains why the anchor takes the nominative whereas the appositive takes the accusative. The anchor, being higher in the structure, is the closest head to the head T which checks the nominative against it. The appositive, being a buried complement, cannot be accessed by the verb. Thus, the head D in turn assigns the accusative to it (see a discussion of case assignment for these appositions below).

Second, the structural positions of the anchor and the appositive in (84) can also explain why the verb only agrees in person with the anchor rather than the appositive in (85). It is because the verb cannot access the third person feature found on the buried complement, i.e. *alʕaraba* ‘the Arabs’. As an intervening head category, the head D blocks the verb-appositive agreement.

(85) *naħnu*                      *l-ʕarab-a*                      *naqu:lu/\*yaqu:lu:na*                      *ħa:lika*  
 We.1.NOM                      the-arab.3.PL-ACC                      say.IMPERF.1.PL/say.IMPERF.3.PL                      that  
 ‘We, the Arabs, say that.’

Structure (84) also accounts for the disallowance of multiple appositives in Type III apposition. As discussed above, only one appositive is allowed in Type III appositions, see (86a). Two appositives are not allowed as in (86b).

- (86) a. naħnu                    *l-ʕarab-a*                    naqu:lu                    ʕa:lika  
 We.NOM                    the-arab.PL-ACC                    say.IMPERF.1.PL                    that  
 ‘We, the Arabs, say that.’
- b. \*naħnu                    *l-ʕarab-a*                    *t<sup>ʕ</sup>-t<sup>ʕ</sup>ulla:b-a*                    naqu:lu                    ...  
 We.NOM                    the-arab.PL-ACC                    the-students-ACC                    say.IMPERF.1.PL                    ...  
 ‘We, the Arabs, the students, say that...’

We argue that the appositive in (86a) cannot iterate, simply because it is a complement, which does not have the iterative property of specifiers or adjuncts. Given that the head D is monotransitive and can take only one complement in line with *Single Complement Hypothesis* (Abney, 1987; Svenonius, 1994; Pyze, 2006), Type III appositions are restricted to one appositive (see also Sadler & Arnold, 1994 where pre-nominal adjectival heads behave similarly like pronouns in taking only one complement).

As a fourth advantage, structure (84) also explains why the appositive can be obligatory or optional. We argue that the optionality of the appositive boils down to the selectional properties of the pronominal head. Sometimes, the pronoun selects DP as a complement, and sometimes not. Furthermore, structure (84) also explains why the pronoun is non-removable. This is because it occupies the head of the whole DP. In light of these advantages, the head-complement structure in (84) is the most plausible analysis as it captures all of the attested properties of Type III appositions such as case disparity, word order restrictions, subject-verb agreement in person, the non-iterativity of the appositive and the non-removability of the anchor.

Let us now turn to the accusative case that appears on the appositive. Although we do not have a preferable answer to this behavior, we will put forward two plausible proposals that explain why the appositive takes the accusative. The first proposal argues that the pronoun directly assigns the accusative to the complement. This is not uncommon in MSA because we find that other heads (like Arabic pre-nominal adjectives, numerals, and wh-words) also assign the accusative to their complements as in (87).

- (87) a. Muħammad-un                    ʔakθar-u                    fahm-a-n  
 Muhammad-NOM                    more-NOM                    understanding-ACC-INDEF  
 ‘Muhammad is the best in understanding.’
- b. wasʕala                    θala:θ-una                    kita:b-a-n  
 arrived.PERF.3.M                    thirty-NOM                    book-ACC-INDEF  
 ‘Thirty books arrived.’
- c. kam                    radʒul-a-n                    hadʕra                    l-ħaflat-a  
 how-many.NOM                    man-ACC-INDEF                    attend.PERF.3.M                    the-party-ACC  
 ‘How many men did they attend the party?’

In all the examples above, adjectives, numerals, and wh-words head-govern their complements and assign the accusative to them. We argue that pronouns are not an exception, and can also head-govern their complements.

The second proposal suggests that pronouns (plus adjectives, numerals and wh- words) do not have the ability to assign case. Given that pronouns (and other categories) occupy a head position, they preclude the nominative from reaching the embedded complements. Thus, the complement as NP (requiring Case) retreats to take the accusative as the default case (see Schütze, 2001 for more discussion of the default case). This proposal might, however, be problematic because Mohammad (2000), Soltan (2007) and Al-Balushi (2011) among many others assume that the nominative is the default case in Arabic. For example, the nominative is assigned to the NP found in the Aʔ-periphery as in the clitic left dislocation constructions in (88a) or the focus construction in (88b). Note that the difference between clitic left dislocation and focus structures follows from the fact that the former requires a pronominal clitic associated with the initial nominative NP whereas the latter does not.

- (88) a. ʔal-madʒallat-u<sub>i</sub>                    qaraʔa-ħa<sub>i</sub>                    l-mudi:r-u  
 the-magazine-NOM                    read.IMPERF.3.M                    the-manager-NOM  
 ‘The magazine, the manager read it.’                    (Clitic Left Dislocation)
- b. ʔal-madʒallat-u                    qaraʔa                    l-mudi:r-u  
 the-magazine-NOM                    read.IMPERF.3.M                    the-manager-NOM  
 ‘The magazine, the manager read’                    (Focus)

Although this is true, the proposal put forward by Mohammad (2000), Soltan (2007) and Al-Balushi (2011) is not problem-free because the nominative cannot appear as the default case on the complements of adjectives, numerals, wh-word, and pronouns as shown in (87) repeated below.

- (89) a. Muħammad-un                    ʔakθar-u                    fahm-a/\*u-n  
 Muhammad-NOM                    more-NOM                    understanding- ACC /\*NOM-INDEF  
 ‘Muhammad is the best in understanding.’
- b. wasʕala                    θala:θ-una                    kita:b-a/\*u-n  
 arrived.PERF.3.M                    thirty-NOM                    book- ACC /\*NOM-INDEF  
 ‘Thirty books arrived.’

c. <u>kam</u>	<u>radzul-a/*u -n</u>	hadʕra	l-ḥaflat-a
how-many.NOM	man-ACC/*NOM-INDEF	attend.PERF.3.M	the-party-ACC
‘How many men did they attend the party?’			
d. <u>nahnu</u>	<u>l-ʕarab-a/*u</u>	naqu:lu	ḥa:lika
We.NOM	the-arab.PL-ACC/*NOM	say.IMPERF.1.PL	that
‘We, the Arabs, say that.’			

Note from the examples above that the nominative is not allowed. Given that the nominative is the default case in the clausal domain (for clitic left dislocation and focus), and given that all the examples in (89) are nominal constructions, we can simply assume that the accusative is the default case in the nominal domain.

In short, we consider the two proposals above as plausible accounts for the accusative marking on the appositive in Type III appositions. Given that there is no clear indication to favor one over the other, both proposals should be studied in a more comprehensive work on Case in MSA. The main contribution of this section is that Type III appositions are better treated within a head-complement structure.

#### IV. CONCLUSION

In this article, we explore the phenomenon of nominal appositions in MSA. Although nominal appositions include phrases that involve two nominal elements that refer to the same individuals or entities, they show several properties in terms of the nominal categories of their two units, the deletion of the NP, word order, case agreement, semantic relation as well as. We argue that these distinctions suggest that nominal appositions in MSA cannot receive a uniform syntactic account. Rather, Arabic nominal appositions appear in different types, each of which requires a special structural position within the nominal hierarchy. Type I appositions (which involve a common noun followed by a proper name) should be handled by an adjunction analysis, whereas Type II appositions (which involve two common nouns) should appear in a spec-head relation. As far as Type III appositions are concerned, they consist of a pronoun followed by a common noun and they better take a head-complement structure.

The treatment of the appositive in this study as an adjunct, a specifier or a complement supports the mainstream proposals in the literature that apposition is a gradable phenomenon sharing properties with other constructions in a given language (Quirk et al., 1985; Acuñá-Fariñá, 2006). Because nominal appositions in MSA require different structures, we predict that no uniform analysis is warranted for all appositions across the world languages.

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#### REFERENCES

- [1] Alanazi, M. (2019). *The Use of Computer-Assisted Translation Tools for Arabic Translation: User Evaluation, Issues and Improvement* [Unpublished doctoral dissertation]. Kent State University.
- [2] Al-Balushi, R. (2011). *Case in Standard Arabic: The Untraveled Paths* [Unpublished doctoral dissertation]. University of Toronto.
- [3] Acuñá-Fariñá, J. (1996). *The Puzzle of Apposition: On So-Called Appositive Structures in English*. Universidade de Santiago de Compostela.
- [4] Acuñá-Fariñá, J. (2006). A constructional network in appositive space. *Cognitive Linguistics*, 17(1), 1–37.
- [5] Albarrag, T. (2013). *Noun Phrases in Urban Hijazi Arabic: A Distributed Morphology Approach* [Unpublished doctoral dissertation]. University of Queensland.
- [6] Alexiadou, A. (2001). Adjective syntax and noun raising: Word order asymmetries in the DP as the result of adjective distribution. *Studia Linguistica*, 55(3), 217–248.
- [7] Ali, H. (2012). English and Arabic appositions: A contrastive study. *Journal of Basic Education College*, 9(1), 439–450.
- [8] Alqarni, M. (2015). *The Morphosyntax of Numeral-Noun Constructions in Modern Standard Arabic* [Unpublished doctoral dissertation]. University of Florida.
- [9] Aoun, J., Benmamoun E., & Choueiri L. (2010). *The syntax of Arabic*. Cambridge University Press.
- [10] Bresnan, J. (1982). *The Mental Representation of Grammatical Relations*. MIT Press.
- [11] Burton-Roberts, N. (1975). Nominal apposition. *Foundations of Language*, 13(3), 391–419.
- [12] Cardoso, A., & de Vries, M. (2010). *Internal and external heads in appositive constructions*. University of Lisbon and University of Groningen.
- [13] Chomsky, N. (2015). *The Minimalist program*. MIT Press.
- [14] Cinque, G. (1999). *Adverbs and functional heads: A Cross-linguistic perspective*. Oxford University Press.
- [15] Choi, J. (2014). *Pronoun-noun constructions and the syntax of DP* [Unpublished doctoral dissertation]. University of Arizona.
- [16] Dalrymple, M. (2001). *Lexical functional grammar*. Academic Press.
- [17] De Vries, M. (2006). The syntax of appositive relativization: On specifying coordination, false free relatives, and promotion. *Linguistic Inquiry*, 37(2), 229–270.
- [18] Del Gobbo, F. (2003). *Appositives at the interface* [Unpublished doctoral dissertation]. University of California.

- [19] Rubio, D. (2003). *An analysis of English discourse markers of reformulation* [Unpublished doctoral dissertation]. Universidad de Valencia.
- [20] Doron, E. (1994). The discourse function of appositives. In R. Buchalla, & A. Mittwoch (Eds.), *Proceedings of the ninth annual conference and the workshop on discourse of the Israel association for theoretical linguistics*, (pp. 53-65). Academon.
- [21] Ernst, T. (2002). *The Syntax of adjuncts*. Cambridge University Press.
- [22] Fassi Fehri, A. (1999). Arabic modifying adjectives and DP structures. *Studia Linguistica*, 53(2), 105–154.
- [23] Fischer, W. (2002). *A grammar of classical Arabic*. Yale University Press.
- [24] Francis, N W. (1958). *The structure of American English*. Ronald Press.
- [25] Fries, C. (1952). *The structure of English*. Harcourt.
- [26] Grosu, A. (2000). Type-resolution in relative constructions. In A. Alexiadou, P. Law, A. Meinunger, & C. Wilder (eds.), *The syntax of relative clauses* (pp. 83-119). John Benjamins Publishing Company.
- [27] Hannay, M., & Keizer, E. (2005). A discourse treatment of English non-restrictive nominal appositions in functional discourse grammar. In J. Mackenzie, & M. Á. Gómez-González (Eds.), *Studies in functional discourse grammar* (pp. 159-194). Peter Lang.
- [28] Heringa, H. (2007). Appositional constructions: coordination and predication. In M. Kluck, & E. Smits (Eds.), *Proceedings of the fifth semantics in the Netherlands day* (pp. 67-82). University of Groningen.
- [29] Heringa, H. (2011). *Appositional constructions*. LOT Publication.
- [30] Howell, M. (1986). *A grammar of the Classical Arabic language*. Gian Publishing.
- [31] Hühn, G. (2017). *Non-possessive person in the nominal domain* [Unpublished doctoral dissertation]. University of Cambridge.
- [32] Huddleston, R., & Pullum, G. (2002). *The Cambridge grammar of the English language*. Cambridge University Press.
- [33] Jasinskaja, E. (2007). Nominal restatement. In E. Puig-Waldmüller (Ed.), *Proceedings of sinn und bedeutung 11* (pp. 346-360). Universität Pompeu Fabra.
- [34] Julien, M. (2002). Determiners and word order in Scandinavian DPs. *Studia Linguistica*, 56(3), 265–315.
- [35] Klein, M. (1977). *Appositionele constructies in het Nederlands* [Appositional constructions in Dutch] [Unpublished doctoral dissertation]. University of Nijmegen.
- [36] Koktová E. (1986). *Apposition as a pragmatic phenomenon in a functional description*. Linguistic Agency.
- [37] Laenzlinger, C. (2005). French adjective ordering: Perspectives on DP-internal movement types. *Lingua*, 115(5), 645–689.
- [38] Lehmann, C. (1984). Der relativsatz [The relative clauses]. Gunter Narr Verlag.
- [39] Lekakou, M. & Szendrői, K. (2011). Polydefinites in Greek: Ellipsis, close apposition and expletive determiners. *Journal of Linguistics*, 48(1), 107–149.
- [40] Longobardi, G. (2001). The structure of DPs: Some principles, parameters, and problems. In M. Baltin, & C. Collins (Eds.), *Handbook of contemporary syntactic theory* (pp. 562–603). Blackwell.
- [41] McCawley, J. (1998). *The syntactic phenomena of English*. University of Chicago Press.
- [42] Meyer, C. (1992). *Apposition in contemporary English*. Cambridge University Press.
- [43] Mohammad, M. (2000). Word order, agreement, and pronominalization in standard and Palestinian Arabic. John Benjamins Publishing Company.
- [44] Molitor, F. (1979). *Zur apposition im heutigen Deutsch: Eine Vorstudie* [To apposition in today's German: A preliminary study] [Unpublished doctoral dissertation]. University of Cologne.
- [45] O'Connor, K. (2008). Aspects de la syntaxe et de l'interprétation de l'apposition à antécédent nominal [Aspects of syntax and interpretation of affixing with nominal antecedent] [Unpublished doctoral dissertation]. Université Charles de Gaulle, France.
- [46] Ortner, H. (1985). Hervorgehobene korrektur- und bestätigungssignale in texten geschriebener sprache [Highlighted correction and acknowledgment signals in texts of written language]. In E. Koller, & H. Moser (Eds.), *Studien zur deutschen grammatik. Festschrift Fur Johannes Erben zum 65 geburtstag* [Studies on german grammar: Festschrift for Johannes Erben on the occasion of his 65<sup>th</sup> birthday] (pp. 239-254). Institut für Germanistik.
- [47] Pesetsky, D., & Torrego, E. (2007). The syntax of valuation and the interpretability of features. In S. Karimi, V. Samiian, & W. K. Wilkins (Eds.), *Phrasal and clausal architecture* (pp. 262-294). John Benjamins Publishing Company.
- [48] Postal, P. (1969). On so-called 'pronouns' in English. In D. Reibel & S. Schane (Eds.), *Modern studies in English: Readings in transformational grammar* (pp. 125-154). Prentice Hall.
- [49] Potts, C. 2005. *The Logic of conventional implicatures*. Oxford University Press.
- [50] Pyse, A. (2006). The structural location of adnominal adjectives: Prospects for Old English. *SKASE Journal of Theoretical Linguistics*, 3(3), 59–85.
- [51] Quirk, R., Greenbaum, S., Leech, G., & Svartvik, J. (1985). *A comprehensive grammar of the English language*. Longman.
- [52] Rath, R. (1995). Korrektur und anakoluth im gesprochenen Deutsch [Correction and anacoluth in spoken German]. *Linguistische Berichte*, 37(1), 1–12.
- [53] Ryding, K. (2005). *A reference grammar of modern standard Arabic*. Cambridge University Press.
- [54] Sadler, L., & Arnold, D. (1994). Prenominal adjectives and the phrasal/lexical distinction. *Journal of Linguistics*, 30(1), 187–226.
- [55] Sadler, L., & Nordlinger, R. (2006). Apposition as coordination: evidence from Australian languages. In: M. Butt, & T. King (Eds.), *Proceedings of the lexical functional grammar 2006 conference* (pp. 437-454). CSLI Publications.
- [56] Sawaie, M. (2014). *Fundamentals of Arabic grammar*. Routledge.
- [57] Schindler, W. (1990). *Untersuchungen zur Grammatik appositionsverdächtiger Einheiten im Deutschen* [Studies on the grammar of apposition suspicious units in German]. Niemeyer.
- [58] Shlonsky, U. (2004). The form of Semitic noun phrases. *Lingua*, 114(12), 1465–1526.
- [59] Sichel, I. (2000). Evidence for DP-internal remnant movement. In: M. Hirotani, A. Coetzee, N. Hall, & J. Kim (Eds.), *Proceedings of the north east linguistic society 30* (pp. 568-581). Rutgers University.
- [60] Soltan, U. (2007). *On formal feature licensing in minimalism: Aspects of Standard Arabic morphosyntax* [Unpublished doctoral dissertation]. University of Maryland.

- [61] Sopher, H. (1971). Apposition. *English Studies*, 52(1-6), 401–412.
- [62] Stroik, T., & Putnam, M. (2013). *The structural design of language*. Cambridge: Cambridge University Press.
- [63] Sturm, A. (1986). *Primaire syntactische structuren in het Nederlands* [Primary syntactic structures in Dutch] [Unpublished doctoral dissertation]. University of Nijmegen.
- [64] Suleiman, Y. (1999). *Arabic grammar and linguistics*. Curzon.
- [65] Svenonius, P. (1994). The structural location of the attributive adjective. In: E. Duncan, D. Farkas, & P. Spaelti (Eds.), *The proceeding of the twelfth west coast conference on formal linguistics* (pp. 439-454). CSLI Publications.
- [66] Travis, L. (1988). The syntax of adverbs. In T. Gräter, & T. Takehisa (Eds.), *McGill working papers in linguistics, proceedings of the IVth workshop on comparative germanic syntax* (pp. 280-310). McGill University.
- [67] Wright, W. (1967). *A grammar of the Arabic language*. Cambridge University Press.

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# Conditional Markers of Legal Texts: A Comparative Study of *Civil Code* and Its English Version\*

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**Abstract**—Conditionals have always been hot topics in linguistics. Biber (1995) analyzes the logical cohesion of 22 Korean registers, Yao (2017) analyzes the differences in the use of 22 conditional markers in Chinese from 8 registers, and they find that legal texts use the least connectives. However, their researches only focus on the comparison of registers from the same language, and do not carry out the comparison of the same register from different languages. From a cross-linguistic perspective, taking *Civil Code of the People's Republic of China* ('CC') and its English version ('ECC') as an example, this paper makes study of the conditional markers of legal texts, and finds that: First, the preconditions in CC are always expressed by *de* constructions, and the Chinese character *de* is the conditional marker. Second, the postconditions in CC are always expressed by *danshu*, and the words *danshi* (but/however) are the conditional markers. Third, the conditions in ECC are expressed by conditional clauses (i.e. initiated by *where/if*), relative clauses (initiated by *who, that, whose*, etc.) and other phrases etc., and they function as the conditional markers thereof. Fourth, the provisos in ECC are always introduced by *unless, provided that, except*, etc., which are the conditional markers thereof. Fifth, as for the use of conditional markers in legislative texts, Chinese is more stylized and rigid compared to those of English, which may have been influenced by the Plain English Movement.

**Index Terms**—legal texts, conditionals, conditional markers, *Civil Code of the People's Republic of China* ('CC'), English version of *Civil Code* ('ECC')

## I. INTRODUCTION

Conditionals exist in many languages. The connectives indicating conditional relations between clauses are called conditional markers. As early as 1986, Traugott et al. published *On Conditionals*, and then Athansiadou and Dirven published *On Conditionals Again* in 1997. In China, Xing (2001) discusses sentence patterns of Chinese conditionals, and there are many other papers on conditionals as well. The above-mentioned researches have made in-depth studies on the syntax, semantics and pragmatics of conditional sentences from different perspectives, but do not analyze the differences of conditionals across registers.

From the perspective of register, Biber (1995, p.187-193) analyzes 22 registers of Korean and finds that the frequency of logical markers of different registers from high to low is: folk tales > private conversations > public speeches (unscripted) > novels > college textbooks > legal and official documents ('>' indicating *more than*, the same below). Yao (2017, p.247-260) analyzes the differences in the use of 22 conditional markers in Chinese from 8 registers and finds that the frequency from high to low is: formal conversations > lines of Spring Festival Gala > courtroom conversations > novels > Science and technology texts > poetry > folk stories > legal texts. They both find that legal texts use the least connectives. However, their researches only focus on the comparison of registers from the same language, i.e. Korean and Chinese respectively, and do not carry out a cross-linguistic comparison of the same register. From a cross-linguistic perspective, this paper takes *Civil Code of the People's Republic of China* ('CC') and its English version ('ECC') as an example to systematically investigate the use of conditional markers in legal texts.

## II. LITERATURE VIEW

### A. Classification of Conditionals

The classification of conditionals varies greatly due to different linguistic views. First, conditional sentences are classified according to the relationship between the clauses, such as Quirk et al. (1985), Biber et al. (1999), Declerck and Reed (2001), and Leech and Svartvik (2003). Second, conditionals are classified according to the tense-aspect form, logical relationship or hypothetical degree of verbs (Comrie, 1986, p.77-99). Third, conditionals are classified based on the cognitive domain referred to, such as Sweetser (2002). Fourth, conditionals are classified according to the

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relationship between the clauses and the preceding text, such as Ford and Thompson (1986). It can be seen that the classification of conditionals is mostly carried out from the perspective of semantic relationship and syntactic structure, but the form and meaning does not correspond one by one, so it is inevitable that different classification standards overlap.

In China, most researches in this field focus on the classification of conditionals, such as Feng (1999), Xu (2003, 2005), and Xu (2004). Yao (2011), based on Brown corpus and Modern Chinese corpus, compares the similarities and differences in English and Chinese conditionals.

### B. Register-Based Researches on Conditionals

There are high levels of genre-dependence in the frequencies of classes of conditionals (Dancygier & Sweetser, 2005, p.139). Tao (1999, p.23) also points out that grammatical description with register as its core should be the starting point for language researches in the future. Therefore, it will be of great significance to study the differences between the syntactic forms and semantic attributes of conditionals (Yu, 2015).

#### (a). Researches on Conditionals From Single Register

There are many researches of English conditionals from single register, such as *if*-conditionals from English textbooks (Gabrielatos, 2006), medical texts (Ferguson, 2001; Carter-Thomas & Rowley-Jolivet, 2008), academic texts (Declerck & Reed, 2001), economic texts (Mead & Henderson 1983), and so on.

Such studies focus on the use of *if*-conditionals from a specific register, and analyze the frequency and use of conditionals in the spoken and written mode of a certain register, but do not study the differences between registers (Yu, 2015).

#### (b). Researches on Conditionals From Several Registers

Some other researches focus on the differences of conditionals from different registers. For example, Athanasiadou and Dirven (1997) studies the distribution of three *if*-conditionals in the corpus. Ford and Thompson (1986) and Nall and Nall (2010) study the stylistic differences in the position of *if* clauses. These researches attach importance to the stylistic factors, but they mainly focus on the frequency of conditional forms and ignore their semantic attributes. Condition is a relatively common semantic category for circumstance clauses in all registers, and it is thus not surprising that the subordinator *if* is common in all four registers (Biber et al., 1999, p.845), namely conversation, fiction, news, and academic prose (Biber et al., 1999, p.15).

However, they discuss conditionals under the category of adverbial clauses, and only involve frequency differences (Yu, 2015).

#### (c). Researches on Conditional Markers

According to functionalism, different forms of expression with the same meaning coexist in the synchronic system and they must have their functional values (Zhang & Fang, 2014). Qi and Peng (2017) studies the conditional attributes of the typical conditional markers in Chinese *zhiyao* (if), *zhiyou* (only if), *buguan* (whatever), and finds that the conditional attribute of *zhiyao* (if) is [+uniqueness], *zhiyou* (only if) is [+necessity], and *buguan* (whatever) is [+exclusivity] respectively. The hierarchical sequence of condition intensity is: *zhiyao* (if) > *zhiyou* (only if) > *buguan* (whatever). The use or absence of typical conditional markers will affect the expression of conditional intensity or the cohesion of the text, and the use or absence of adverbs collocated with conditional markers will have the same effect.

## III. METHODOLOGY

### A. Research Questions

1. Are there conditional markers in Chinese legal texts?
2. What are the main conditional markers in Chinese legal texts?
3. Are there conditional markers in English legal texts?
4. What are the main conditional markers in English legal texts?
5. Are there similarities and differences in the use of conditional markers between Chinese legal texts and English legal texts?

### B. Research Design

The notion of linguistic cooccurrence is central to linguistic analyses of style or register, because cooccurrence reflects shared function, the resulting types are coherent in their linguistic form and communicative functions (Biber, 1989, p.6). There have been a number of text typologies proposed within linguistics and related fields, and this paper does not differentiate the definitions among genres, registers and text types. Legal texts are chosen as research object. The steps of this research are as follow: First, picking out all the conditionals from CC and ECC. Second, labeling all the linguistic expressions of conditionals in CC and ECC respectively. Third, counting up the numbers of different linguistic expressions. Fourth, analysis and explanation will be developed based on the said statistics.

### C. Mini-Corpus of Legal Texts

CC was adopted at the third session of the Thirteenth National People's Congress on May 28, 2020, which consists of 1260 articles, totally 106984 Chinese characters, and ECC was provided by a group of Chinese top experts in the language of law and translation, and it has 41370 English words. A mini-corpus has been built based on CC and ECC.

#### D. Labeling

In George Coode's paper 'On Legislative Expression', he explained four elements of legislative expression, namely *the legal Subject, the legal Action, the Case, and the Conditions* (cited in Doonan & Foster, 2001, p.143). The *legal Subject* is the person on whom a right, privilege or power is conferred or a liability or obligation is imposed; the *legal Action* is a statement of the right, privilege or power or the obligation or liability conferred or imposed on the legal subject; the *Case* is a statement of the circumstances in which a provision is to operate; and the *Condition* is a statement of any conditions or restrictions which must be satisfied before a provision applies (Doonan & Foster, 2001, p.143-149). According to Li (2008, p.71), there is not much difference between the *Case* and the *Condition*, therefore, in this paper, these two elements are considered to be *the CONDITION* in a broader sense.

Crystal and Davy (1969) claims that most legal sentences have one of the following forms:

If X, then Y shall do Z,

or

If X, then Y shall be Z,

where 'If X' stands for the description of case(s) to which the rule of law applies, 'Y' is meant to be the legal subject and 'Z' indicates the legal action (cited in Bhatia, 1993, p.206).

There are two kinds of conditions in both Chinese legal texts and English legal texts, and they may be called 'preconditions' and 'postconditions' respectively according to their position in the sentences. The preconditions refer to those before the main clauses, and the postconditions refer to those behind the main clauses. In Chinese legal texts, the preconditions mainly refer to *de* constructions, and the postconditions refer to the *danshus* (provisos). In English legal texts, the preconditions mainly refer to the conditional clauses before the main clauses, and the postconditions refer to the provisos in the articles.

## IV. RESULTS AND DISCUSSION

### A. Conjunctive Words or Phrases of CC

#### (a). *De* Constructions in CC

There are 1260 *de* constructions in CC, among which 46 *de* constructions are used in clauses marked with the words *xialie*[the following].

Based on Chinese legislative provisions, Pan (2017, p.189-190) proposed two logical structures of Chinese legislative sentences: 1) *condition + legal subject + legal action*; 2) *condition + subject + action + sanction*. The former is applicable to the compulsory and authorization norms, where the *condition* corresponds to *the assumption* of legal norms. The latter is the format of prohibitory norms. Comparing the two structural patterns, it can be found that they both consist of *condition, legal subject and legal action*, and *sanctions* only in the second logical structure. Therefore, this study integrates the two logical structure patterns of Professor Pan into one structural model, and takes *sanctions* as the option, that is, the logical structure of legislative sentences is: *Condition + Subject + Action + (Sanction)* (Hu & Jiang, 2021, p.397).

In Chinese legislative texts, the element *CONDITION* (including *the Case* and *the Condition* in George Coode's terms) is always expressed by *de* constructions. *De* constructions can be used as self-designation and transferred-designation respectively (Zhu, 1983, p.23-25). *De* constructions refer to various cases, conditions, and behaviors etc. in the sense of self-designation, and refer to legal subjects in the sense of transferred-designation (Hu & Jiang, 2016, p.45).

In Chinese legislative texts, *Condition* is always in the conditional clauses, and it is always expressed by *de* construction. They may refer to the *cases, circumstances or conditions* of the article directly. There are 1211 *de* constructions in CC are used in this way. For example:

(1a)其他法律对民事关系有特别规定的, 依照其规定。(Article 11 of CC)

qí tā fǎ lǜ duì mǐn shì guān xì yǒu tè bié guī dìng de, yī zhào qí guī dìng

(1b)Where there are other laws providing special provisions regulating civil-law relations, such provisions shall be followed. (Article 11 of ECC)

In (1a), *de* construction states the *case* that other laws provide special provisions regulating civil-law relations, and it functions as self-designation. The content of *de* construction is complete, so its English version takes the word 'Where' as conditional marker in the clause.

While in other clauses in CC, the *de* construction just states the action or behavior of somebody, and in fact it refers to the person who carries out the action or behavior. In this case, *de* construction functions as transferred-designation, and there are 17 *de* constructions in CC are used in this way. For example:

(2a) 从事高度危险作业造成他人损害的, 应当承担侵权责任。(Article 1236 of CC)

cóng shì gāo dù wēi xiǎn zuò yè zào chéng tā rén sǔn hài de, yīng dāng chéng dān qīn quán zé rèn.

(2b) **A person who** engages in ultra-hazardous operations and thus causes damage to another person shall bear tort liability. (Article 1236 of ECC)

In (2a), *de* construction includes two actions, namely engaging in ultra-hazardous operations and causing damage to another person. In fact, *de* construction takes the position of *condition* in this Article, and the main clause is the *sanction* of this action. It is not the action but the person who performs these two actions shall bear tort liability. Therefore, in (2a), *de* construction functions as transferred-designation, in other words, it refers to the person who performs the action. So, its English version of this Article adds the words ‘A person who’, makes it more intelligible to English readers.

In the logical structure of legislative sentences: *Condition + Subject + Action + (Sanction)*, the *Condition* is always put at the beginning of a legal sentence, which states the general provisions for the application of the article. Besides the *Condition*, *danshu* (proviso) also supplies a *condition*, *exception*, or *addition* in drafting (Garner, 2019, p.1481).

#### (b). *Danshus (Provisos) in CC*

In Chinese laws, a proviso begins with the words *dan* (but) or *danshi* (but/however), so it is called *danshu* (provisos) in Chinese. The *danshu* in CC are all marked with the words *danshi*, and they can be classified into four categories, namely Exclusionary *danshu*, Obligatory *danshu*, Authorization *danshu*, and Compound *danshu*. (Hu & Jiang, 2021, p.399) Among the 1260 articles of CC, there are 223 clauses marked with the words *danshi*, among which 218 are *danshu*, and the other five are not. There are 153 Exclusionary *danshus*, 40 Obligatory *danshus*, and 25 Authorization *danshus* respectively in CC. Taking Exclusionary *danshus* as an example:

(3a) 民事法律行为自成立时生效，**但是**法律另有规定或者当事人另有约定的**除外**。(Paragraph 1 of Article 136, CC)

mín shì fǎ lǜ háng wéi zì chéng lì shí shēng xiào, dàn shì fǎ lǜ líng yǒu guī dìng huò zhě dāng shì rén líng yǒu yuē dèng de chū wǎi.

(3b) **Unless** otherwise provided by law or agreed by the parties, a civil juristic act takes effect at the time it is accomplished. (Paragraph 1 of Article 136, ECC)

In (3a), the main clause states that a civil juristic act takes effect at the time it is accomplished, but the *danshu* excludes two cases or circumstances, namely if the time of taking effect has been provided by law or agreed by the parties.

#### B. *Conjunctive Words or Phrases of ECC*

There are various expressions for the conditionals in ECC, including conditional clauses, attributive clause, phrases, -ING participle, and -ED participle, infinitive, etc.

##### (a). *Conditional Clauses Initiated by Where/If*

Legislative statements typically begin with fairly long initial case descriptions, and the legal subject is conventionally delayed by the introduction of a long case description in the form of an adverbial clause beginning with ‘where’, ‘if’ or sometimes ‘when’ (Bhatia, 1993, p.200). There are 970 conditional clauses are initiated by *where*, for example (1b) above.

At the same time, there are 205 conditional clauses initiated by *if*. For example (4b) below:

(4a) 自然人以户籍登记或者其他有效身份登记记载的居所为住所；经常居所与住所不一致**的**，经常居所视为住所。(Article 25 of CC)

zì rán rén yǐ hù jí dēng jì huò zhě qí tā yǒu xiào shēn fèn dēng jì jì zǎi de jū suǒ wéi zhù suǒ; jīng cháng jū suǒ yǔ zhù suǒ bú yī zhì **de**, jīng cháng jū suǒ shì wéi zhù suǒ.

(4b) The domicile of a natural person is the residence recorded in the household or other valid identification registration system; **if** a natural person’s habitual residence is different from his domicile, the habitual residence is deemed as his domicile. (Article 25 of ECC)

As for the similarities and differences between the uses of *where* and *if* in legal texts, Li (2008, 2013) and Li and Wang (2013) have concluded some points as follow:

First, in simple legal provisions, both *where* and *if* can be used as introducing words for conditional clauses, and they share the same function. Second, *where* introduces *cases*, *circumstances* and *situations* with a macro nature, and they are self sufficient, and context independent; while *if* introduces *conditions*, *qualification* or *restrictions* in a narrow sense, and they are more content dependent. Third, *where* introduces complex conditionals, which may consist of several sub-conditionals initiated by *if*. Fourth, *where* is more formal than *if* in stylistics.

##### (b). *Relative Clauses Initiated by Relative Words Who and Others*

There are 89 relative clauses in ECC, among which 75 clauses are initiated by *who*, 9 clauses by *that*, 3 clauses by *whose*, 2 clauses by *which*. For example:

(2b) A person **who** engages in ultra-hazardous operations and thus causes damage to another person shall bear tort liability. (Article 1236 of ECC)

In (2b) above, the relative word ‘who’ introduces the relative clause, and it restricts the legal subject ‘a person’.

Other relative words are also used sometimes, for example:

(5a) 自然人的个人信息受法律保护。任何组织或者个人需要获取他人个人信息的, 应当依法取得并确保信息安全, 不得非法收集、使用、加工、传输他人个人信息, 不得非法买卖、提供或者公开他人个人信息。(Article 111 of CC)

zì rán rén de gè rén xìn xī shòu fǎ lǜ bǎo hù。rèn hé zǔ zhī huò zhě gè rén xū yào huò qǔ tā rén gè rén xìn xī *de*, yīng dāng yī fǎ qǔ dé bìng què bǎo xìn xī ān quán, bú dé fēi fǎ shōu jí、shǐ yòng、jiā gōng、chuán shū tā rén gè rén xìn xī, bú dé fēi fǎ mǎi mài、tí gòng huò zhě gōng kāi tā rén gè rén xìn xī。

(5b) A natural person’s personal information is protected by law. Any organization or individual **that** needs to access other’s personal information must do so in accordance with law and guarantee the safety of such information, and may not illegally collect, use, process, or transmit other’s personal information, or illegally trade, provide, or publicize such information.( Article 111 of ECC)

In (5b), the antecedents consist of ‘organization’ and ‘individual’, so the relative word is ‘that’.

(6a) 法人的实际情况与登记的事项不一致的, 不得对抗善意相对人。(Article 65 of CC)

fǎ rén de shí jì qíng kuàng yǔ dēng jì de shì xiàng bú yī zhì *de*, bú dé duì àn yì shàn yì xiāng duì rén。

(6b) The actual situation of a legal person, **which** is inconsistent with what is recorded upon registration, shall not be asserted against a bona fide third person. (Article 65 of ECC)

Relative clauses may be restrictive or non-restrictive. The relative clauses in (2b) and (5b) above are restrictive, while the relative clause in (6b) is non-restrictive, so its relative word is ‘which’.

#### (c). Various Forms as Conditionals

There are 47 conditionals initiated by various forms, namely, 24 noun phrases, 9 –ING participles, 8 –ED participles, 3 to-infinitives, 2 adjective phrases and 1 adverbial phrases respectively. For example in (7b) below, the noun phrase ‘any provisions of’ and prep phrase ‘in the absence of’ are used to express the conditions in this article.

(7a) 法律对仲裁时效有规定的, 依照其规定; 没有规定的, 适用诉讼时效的规定。(Article 198 of CC)

fǎ lǜ duì zhòng cái shí xiào yǒu guī dìng *de*, yī zhào qí guī dìng; méi yǒu guī dìng *de*, shì yòng sù sòng shí xiào de guī dìng。

(7b) **Any provisions of** law regulating the limitation period for arbitration shall be followed; **in the absence of** such provisions, the provisions on limitation period for litigation provided herein shall be applied mutatis mutandis. (Article 198 of ECC)

#### (d). Expressions of Danshus (Provisos)

In English legal documents, proviso is often emphasized in capitals and may come in the form PROVIDED THAT; or PROVIDED ALWAYS THAT; or PROVIDED FURTHER THAT; or PROVIDED NEVERTHELESS THAT (Doonan & Foster, 2001, p.159). In ECC, the *danshus* (provisos) are marked with various words, i.e. 121 clauses introduced by *unless*, 37 *provided that*, 22 *except*, 8 *but*, 8 *however*, and 2 *other than* respectively. For example:

(8a) 民事主体可以将自己的姓名、名称、肖像等许可他人使用, **但是**依照法律规定或者根据其性质不得许可的**除外**。(Article 993 of CC)

mín shì zhǔ tǐ kě yǐ jiāng zì jǐ de xìng míng、míng chēng、xiào xiàng děng xǔ kě tā rén shǐ yòng, **dàn shì** yī zhào fǎ lǜ zhào fǎ lǜ guī dìng huò zhě gēn jù qí xìng zhì bú dé xǔ kě de **chú wài**。

(8b) The name, entity name, likeness, or the like, of a person of the civil law may be used by others upon authorization, **unless** the authorization thereof is not allowed by law or based on the nature of the right.( Article 993 of ECC)

The *danshu* in (8b) falls into the Exclusionary *danshu*, which excludes certain cases as exception to the general rule provided in the main clause. The main clause provides that a person of the civil law may authorize another to use his name, likeness or the like, and the *danshu* restricts this right by excluding certain cases. This *danshu* is introduced by the word ‘unless’, and there are 121 *danshus* introduced by ‘unless’ in ECC.

(9a) 当事人对储存期限没有约定或者约定不明确的, 存货人或者仓单持有人可以随时提取仓储物, 保管人也可以随时请求存货人或者仓单持有人提取仓储物, **但是应当**给予必要的准备时间。(Article 914 of CC)

dāng shì rén duì chǔ cún qī xiàn méi yǒu yuē dìng huò zhě yuē dìng bú míng què de, cún huò rén huò zhě cāng dān chí yǒu rén kě yǐ suí shí tí qǔ cāng chǔ wù, bǎo guǎn rén yě kě yǐ suí shí qǐng qǔ cún huò rén huò zhě cāng dān chí yǒu rén tí qǔ cāng chǔ wù, **dàn shì** yī yīng dāng gěi yǔ bì yào de zhǔn bèi shí jiān。

(9b) Where there is no agreement between the parties on the warehousing period or the agreement is unclear, the depositor or the holder of the warehouse receipt may collect the stored goods at any time, and the warehouseman may, at any time, request the depositor to collect the stored goods, **provided that** a reasonable period of time necessary for preparations **shall** be given. (Article 914 of ECC)

The *danshu* in (9b) falls into the category of Obligatory *danshu*, which adds certain obligation to the legal subject. In this article, it imposes obligations to the depositor, the holder of the warehouse receipt, or the warehouseman as one party as apposed to another party. The words ‘provided that’ were employed here, compared to the view of Doonan and

Foster (2001, p.159) above, the English version does not use *provided that* in Capitalized form or add any adverbial (i.e. always, further, nevertheless). There are 37 *danshus* introduced by ‘provided that’ in ECC.

(10a) 承运人对运输过程中货物的毁损、灭失承担赔偿责任。但是，承运人证明货物的毁损、灭失是因不可抗力、货物本身的自然性质或者合理损耗以及托运人、收货人的过错造成的，不承担赔偿责任。(Article 832 of CC)

chéng yùn rén duì yùn shū guò chéng zhōng huò wù de huǐ sǔn、miè shī chéng dān péi cháng zé rèn。dàn shì bù chéng dān péi cháng zé rèn。dàn shì yùn rén zhèng míng huò wù de huǐ sǔn、miè shī shì yīn bú kě kàng lì、huò wù běn shēn de zì rán xìng zhì huò zhě hé lǐ sǔn hào yǐ jí tuō yùn rén、shōu huò rén de guò cuò zào chéng de，bù chéng dān péi cháng zé rèn。

(10b) A carrier shall bear the liability for compensation for any destruction, damage, or loss of the goods occurring in the course of transport, *except that* the carrier *shall not* bear the liability for compensation if the carrier proves that the destruction, damage, or loss of the goods is caused by force majeure, the inherent nature of the goods, or reasonable wear and tear, or is caused by the negligence of the consignor or the consignee. (Article 832 of ECC)

The *danshu* in (10b) falls into the category of Authorization *danshu*, which grants certain rights or freedom to the legal subject. In this article, the main clause provides that the carrier shall bear the liability for compensation for any destruction, damage, or loss of the goods occurring in the course of transport as a general principle, and the *danshu* exempts the carrier from this liability if such destruction, damage or loss of the goods can be attributed to other causes other than the carrier’s fault. This *danshu* was introduced by the words *except that*. There are 22 *danshus* introduced by ‘except...’ in ECC.

Yao (2017) analyzes 22 conditional markers in Chinese from 8 registers, and finds that legal texts use the least connectives. If we check the 22 conditional markers carefully, we can find that they are all sentence initial except *de hua*, and the connectives in his study mainly refer to the sentence initial ones. Conditional clauses functioning as preconditions in Chinese legal texts prefer *de* constructions to sentence initial connectives *ru*, *ruguo*, *ruo*, etc. due to the features of register or genre. Chinese legal texts tend to express precondition with *de* construction, which is sentence end positioned, and postcondition with *danshu* which is in the middle of a sentence. So, we can conclude that the word *de* is the conditional marker of precondition, and the words *dan* or *danshi* are the conditional markers of postcondition in Chinese legal texts.

## V. CONCLUSION

Through the analysis and comparison of CC and ECC, the conclusions are as follow: First, the preconditions in CC are always expressed by *de* constructions, and the Chinese character *de* is the conditional marker of preconditions of Chinese legal texts. Second, the *danshus* in CC are always expressed by the words *danshi*, which are the conditional markers of postconditions of Chinese legal texts. Third, the conditions in ECC are expressed by conditional clauses (i.e. initiated by where/if), relative clauses (initiated by who, that, whose, etc.) and other phrases etc., and they function as the conditional markers of English legal texts. Fourth, the provisos in ECC are always introduced by *unless*, *provided that*, *except*, etc., and the said words are the conditional markers of English legal texts. Fifth, as for the use of conditional markers in legislative texts, Chinese is more stylized and rigid compared to those of English, which may have been influenced by the Plain English Movement.

## REFERENCES

- [1] Athansiadou, A. & Dirven, R. (1997). *On Conditionals Again*. John Benjamins Publishing Company.
- [2] Biber, D. (1989). A typology of English texts. *Linguistics*, (27), 3-43.
- [3] Bhatia V. K. (1993). *Analyzing Genre: Language Use in Professional Settings*. Routledge.
- [4] Biber, D. (1995). *Dimensions of Register Variation: A Cross-Linguistic Comparison*. Cambridge University Press.
- [5] Biber, D., S. Johansson, G. Leech, S. Conrad & E. Finegan. (1999). *Longman Grammar of Spoken and Written English*. Pearson.
- [6] Carter-Thomas, S. & E. Rowley-Jolivet. (2008). If-clauses in medical discourse: From theory to disciplinary practice. *Journal of English for Academic Purposes*, 7(3), 191-205.
- [7] Comrie, B. (1986). Conditionals: A typology. In E. Traugott, A. Meulen, J. Reilly & C. Ferguson (eds.). *On Conditionals*. Cambridge University Press, 77-99.
- [8] Dancygier, B. and E. Sweetser. (2005). *Mental Spaces in Grammar*. Cambridge: CUP.
- [9] Declerck, R. & S. Reed. (2001). *Conditionals: A Comprehensive Empirical Analysis*. Mouton de Gruyter.
- [10] Doonan, E. & Foster, D. (2001). *Drafting* (2<sup>nd</sup> edition). Cavendish Publishing Limited.
- [11] Ferguson, G. 2001. If you pop over there: A corpus-based study of conditionals in medical discourse. *English for Specific Purposes*, 20 (1), 61-82.
- [12] Feng, C. C. (1999). On the Type and Use of English If-conditionals. *Journal of Foreign Languages*, (4), 12-18.
- [13] Ford, C. & S. Thompson. (1986). Conditionals in discourse: A text-based study from English. In E. Traugott, A. Meulen, J. Reilly & C. Ferguson (eds.). *On Conditionals*. Cambridge University Press, 353-373.
- [14] Gabrielatos, C. (2006). *Corpus-based evaluation of pedagogical materials: If-conditionals in ELT course books and the BNC*. Presented at the 7th Teaching and Language Corpora Conference. Paris.
- [15] Garner, B. A. (2019). *Black’s Law Dictionary* (11<sup>th</sup> edition). Thomson Reuters, 1481.
- [16] Hu, D. H., & Jiang, C. G. (2016). *zi zhǐ yǔ zhuǎn zhǐ shì jiāo xià lì fǎ tiáo wén de zì jié gòu de fān yì [Translation of De*

- Constructions from Legal Sentences under the Guidance of Self-Designation and Transferred-Designation*],(3),45-52.
- [17] Hu, D. H., & Jiang, C. G. (2021). The Linguistic Expressions of danshu (Provisos) in Chinese Laws. *Open Journal of Modern Linguistics*, 11, 395-414. <https://doi.org/10.4236/ojml.2021.113030>.
- [18] Leech, G. & J. Svartvik. (2003). *A Communicative Grammar of English*. Routledge.
- [19] Li, K. X. (2008). fǎ lǚ yīng yǔ tiáo jiàn jù de xiě zuò hé fān yì [Composing and Translating Conditional Clauses in Legal Texts]. *zhōng guó fān yì*, (4), 71-77.
- [20] Mead, R. & W. Henderson. (1983). Conditional form and meaning in economics text. *The ESP Journal*, (2), 139-160.
- [21] Nall, P. & M. Nall. 2010. English 'if-clauses': A corpus-based genre analysis of their incidence, ordering and pragmatic effects. *Journal of Applied Linguistics and Professional Practice*, 7(2), 205-227.
- [22] Pan, Q. Y. (2017). fǎ lǚ yǔ yán xué [Forensic Linguistics]. China University of Political Science and Law Press.
- [23] Qi, Y. H., & Peng, S. (2017). On Conditional Intensity and Other Issues of Typical Condition Mark. *dōng běi shī fàn dà xué xué bào(zhè xué hé shè huì kē xué bǎn)*, (1), 135-139.
- [24] Quirk, R., S. Greenbaum, G. Leech & J. Svartvik. (1985). *A Comprehensive Grammar of the English Language*. Longman.
- [25] Sweetser, E. (2002). *From Etymology to Pragmatics: Metaphorical and Cultural Aspects of Semantic Structure*. Peking University Press.
- [26] Tao, H. Y. (1999). shì lùn yǔ tǐ fēn lèi de yǔ fǎ xué yì yì [Discourse Taxonomies and Their Grammatico-Theoretical Implications]. *dāng dài yǔ yán xué*, Vol. 1, (3), 15-24,+61.
- [27] Traugott E. C. et al. (1986). *On Conditionals*. Cambridge University Press.
- [28] Xing, F. Y. (2001). hàn yǔ fù jù yán jiū [Complex Sentences in Mandarin]. The Commercial Press.
- [29] Xu, L. J. (2003). lùn if zhēn shí tiáo jiàn jù de tiáo jiàn [On the 'Conditions' of Real Conditionals]. *dāng dài wài yǔ(jì kān)*,26 (2), 135-142.
- [30] Xu, L. J. (2005). if tiáo jiàn jù fēn lèi zài yán jiū [Classification of If-conditionals Revisited], *sì chuān wài yǔ xué yuàn xué bào*,21 (2), 64-69.
- [31] Xu, S. H. (2004). luó jí yǔ shí jù——yīng yǔ IF tiáo jiàn jù yán jiū de yī zhǒng lǐ lùn kuàng jià [Logic and Evidence: A Cognitive-Pragmatic Approach to If-Conditionals]. *dāng dài wài yǔ(jì kān)*,27 (4),331-339+436.
- [32] Yao, S. Y. (2017). guān lián biāo jì de yǔ tǐ chà yì xíng yán jiū [Discourse-type Based Studies on Chinese Conjunction]. World Book Inc.
- [33] Yao, S. Y. (2011). yīng yǔ ifjǔ yǔ hàn yǔ rú guō jù yòng fǎ zhī yì tóng--jī yǔ yǔ liào kù de bǐ jiào yán jiū [A Corpus-based Comparison Study between English 'If sentence' and Chinese 'Ruguo sentence']. *wǔ hàn lǐ gōng dà xué xué bào(shè huì kē xué bǎn)*, 24 (6), 933-938.
- [34] Yu, T. (2015). If tiáo jiàn jù jù fǎ yǔ yì tè zhēng de yǔ tǐ qīng xiàng xíng yán jiū [Syntactic and Semantic Features of If-Conditionals and its Genre Tendency]. *yǔ liào kù yǔ yán xué*, (1),32-44,+115.
- [35] Zhang, B. J., & Fang, M. (2014). hàn yǔ gōng néng yǔ fǎ yán jiū[Functional Studies of Chinese Grammar].The Commercial Press.
- [36] Zhu, D. X. (1983). zì zhǐ hé zhuǎn zhǐ--hàn yǔ míng cí huà biāo jì “de、zhě、suǒ、zhī”de yǔ fǎ gōng néng hé yǔ yì gōng néng [Self-Designation and Transferred-Designation: Grammatical and Semantic Functions of Chinese Nominalization Markers *de*, *zhe*, *suo*, and *zhi*].*fāng yán*, (1), 16-31.



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# Gabriel Garcia Márquez's *Chronicle of a Death Foretold*: A Critical Reading According to Mikhail Bakhtin's Concept of "Polyphony"

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**Abstract**—This paper aims at reading Gabriel Garcia Márquez's *Chronicle of a Death Foretold* (1981) in the light of Mikhail Bakhtin's theory of voice, especially the concept of "Polyphony". The main argument is that polyphony is an important key concept to take into consideration to better comprehend the interrelationships of voices between the narrator and the other characters in this novel. In order to prove this argument, the researchers emphasize language and speech diversity in order to shed light on "Heteroglossia", which is another related concept coined by Bakhtin. The researchers will also examine the characteristics of the double-voicedness and the manifestations of polyphony in the novel. The results show that Gabriel Garcia Márquez's *Chronicle of a Death Foretold* can be described as a polyphonic novel because of the variety of consciousnesses and independent voices of its various characters. Eventually, the paper shows how the novel demonstrates heteroglot features because of the different characters who are coming from different social groups, which will help the reader to better realize the different layers of social voices.

**Index Terms**—Mikhail Bakhtin, Gabriel Garcia Márquez, polyphony, heteroglossia, *Chronicle of a Death Foretold*

## I. INTRODUCTION

The main aim of this paper is to read Gabriel Garcia Márquez's *Chronicle of a Death Foretold* (1981) in the light of Mikhail Bakhtin's theory of voice, especially the concept of Polyphony, a term he introduced in 1963 in his book *Problems of Dostoevsky's Poetics*. Polyphony simply means 'many-voicedness', it refers to "the construction of the voices of characters and narrator in the novel" (Vice, 1997, p. 112). This paper attempts to apply this concept on Márquez's novel in order to examine the significance of the narrative voice and the voice of the other characters.

In his theory of voice, Bakhtin is very much influenced by Fyodor Dostoevsky's novels. He observes the distinctiveness of Dostoevsky's characters and their voice within the novel. According to Bakhtin, these characters are treated as ideologically authoritative and independent, they are not dominated by the author's ideology (1984). Simon Dentith argues that they are granted as much power as the narrator's voice, "which indeed engages in active dialogue with the characters' voices" (2005, p. 39). Thus, because of the diversity of voices in the novel, that of the narrator and of the characters, the novel can be considered to be polyphonic, that is; it has a plurality of unmerged voices and consciousnesses. One can argue that this feature is one of the most important features that distinguish the novel as a genre from all other fictional genres. It is a feature that can be seen in all novels, but it is more prominent in certain novels like Dostoevsky's novels and the novel addressed by this paper, Márquez's *Chronicle of a Death*.

Bakhtin (1984) emphasizes in particular the significance of language diversity and speech characterization in a polyphonic novel. However, it is not possible to consider every novel that has linguistic diversity to be a polyphonic novel, he argues that "what matters is the dialogic angle at which these styles and dialects are juxtaposed or counterposed in the work" (p. 182). Therefore, multiple voices as well as the various linguistic features that correlate with each other in a dialogue are "fundamental compositional unities with whose help heteroglossia can enter the novel; each of them permits a multiplicity of social voices and a wide variety of their links and interrelationships" (Bakhtin, 1981, p. 263).

Márquez's *Chronicle of a Death Foretold* has a remarkable narrative framework which outlines a description of the same incident from various views and makes it possible to observe the different perspectives, voices and the complicated interrelationships between the different characters. It manifests a diversity of social speech types and a multiplicity of voices. Simultaneously, it has characteristics of a heteroglot novel which encompasses a variety of social environments; languages of social groups, of professional groups, and so on. Therefore, both heteroglossia and polyphony can be clearly observed in this novel. Nevertheless, this paper focuses on the hidden and embedded features of polyphony only, leaving heteroglossia for another related paper.

It is possible to read Márquez's *Chronicle of a Death Foretold* as a detective-fiction novel. It is mainly about the murder of Santiago Nasar who is thought to have taken the virginity of Angela Vicario. Moreover, the narrator "function(s) like a murder detective, reconstructs the crime bit by bit" in a way far from what the title indicates, with reference to the other characters' insights of the murder (Mambrol, 2020, para. 4).

According to Williams (1985), Márquez is "a writer vastly more experienced in journalistic and fictional writing" (p. 117). Almost all Márquez's works have a distinguished journalistic style of narration. Many of Márquez's narrative techniques, such as mentioning the exact time of the events, says Raymond Williams, derive from his experience in journalism (1985, 131). Such experience has also influenced the style of writing some of his novels like *Chronicle of a Death Foretold*. Aghaei and Hayati (2014) argue that the origin of such novels "emphasizes on the dual forces of journalism and fiction" (p. 12). *Chronicle of a Death Foretold* is a distinguished work by Márquez due to its narrative which is "based on both 'journalistic' and 'fictitious'" features (p. 12).

In addition, Márquez is fascinated by detective fiction from an early age of his life, which has been a major factor in his career as a journalist and a writer (Williams, 1985, p. 118). Williams (1985) adds that Márquez "has been constantly preoccupied with such themes as death, the rational and the non-rational, the effects of modern science and technology, the common man, and insanity" (p. 121). He is considered to be a humanist whose works are largely concerned with the cause of the common man, "an interest," states Williams (1985), "which this Colombian shares with many writers who have won the Nobel Prize" (p. 131).

## II. REVIEW OF THE RELATED LITERATURE

Several studies have discussed and analyzed Márquez's *Chronicle of a Death Foretold* from different angles; however, no study has applied Bakhtin's concept of Polyphony to analyze the difference between the narrative voice and the voices of the other characters. So, this paper attempts to bridge the gap in the related literature by studying the diversified voices of the narrator of the events, and of the other characters whose testimonies are intertwined and layered within the narrative discourse. The paper will also refer to the related concept of 'Heteroglossia' and provide some examples on how it is used in the novel.

In his essay entitled "The Hidden Depths of García Márquez's *Chronicle of a Death Foretold*," Zaidi (2011) explores the symbolic imagery and the acts of concealment that characterize the narrative of Márquez's novel. He argues, "Ostensibly a quest for truth and an attempt to decipher a recurring and eternal present, the narrative conveys a terrible self-knowledge through a tragicomic language of dreams" (2011, p. 107). For Zaidi, the whole novel is built on a symbolic imagery that describes every event in details.

Popescu (2020), on the other hand, discusses Márquez's novel and emphasizes many aspects, especially the one related to the medieval form of the chronicle. She suggests that the Márquez's main intention is "to parody the imperatives of historiography" of the nineteenth and twentieth century (para. 9).

In a study of *Chronicle*, McGuirk (1987) depends on some of the speculations applied by Derrida on Freud's *Beyond the Pleasure Principle* in order to mark the intersections with the novel in a form of a series of overlapping speculations. He emphasizes the opening of the novel which begins "with an epigraph," believing that it "invites open reading rather than interpretative closure" (1987, p.169).

Kercher (1985) examines Márquez's novel and its illustrations that are made by Márquez's fellow Fernando Botero. Her study aims at constructing an analogous model by maintaining the details apart "to better judge the distance there is between the novel and the illustrations" (1985, p.90). She emphasizes the popular forms of the novel like the romance, epistle, memoir and so on. She concludes her study by emphasizing the vision of *Chronicle of a Death Foretold*, saying that it is "of the brilliant technician of postcapitalist society who tinkers with literature and art" (1985, p.100).

In another study, Alonso (1987) focuses on the ritual dimension in *Chronicle of a Death Foretold*, which is usually considered a sort of ritual repetition of the crime. He argues that it is "not a matter of understanding or accounting for the murder of Santiago Nasar, but of re-enacting it" (1987, p.156). This study helps in realizing the "performative intention" which rules the novel as well as the coherence in which there is no meaningless or wasted action.

## III. METHODOLOGY

The present paper is a qualitative study that makes use of the argumentative and analytical approaches, in which the later requires a close analysis of the different social languages and voices that build up a special type of dialogue. The narrative discourse used in this novel is composed of various points of views and consciousnesses; 'double-voices discourse'. For that reason, this paper discusses Bakhtin's concept of polyphony and attempts to apply it on Márquez's *Chronicle of a Death Foretold* to achieve a new perspective in understanding it. The main argument, thus, is that polyphony is an important key concept to take into account to better comprehend the interrelationships of voices between the narrator and the other characters in Márquez's novel. While the minor argument is that the reader can easily realize the differentiated layers of social voices.

## IV. DISCUSSION AND ANALYSIS

Vice (1997) refers to Bakhtin who argues that the novel can achieve a “unity only if it is constructed out of heteroglot, multi-voiced, multi-styled, and multi-linguagedness features” (p. 11). Primarily, the diversity of social speech types and the multiplicity of characters play an essential role in understanding Bakhtin’s other concept, ‘Heteroglossia’, which means ‘multi-linguagedness’. Moreover, Márquez’s journalistic style of narration in *Chronicle of a Death Foretold* proves the importance of polyphony in achieving a better understanding of the novel.

Furthermore, Vice (1997) points out that Bakhtin views the novel as polyphonic when “the character reveals his or her own inner conflict, rather than being narrated from the outside,” he assures that “what looks like a unitary voice turns out to be multiple and interactive” (p. 57). In *Chronicle of a Death Foretold*, Márquez uses a first-person narrator who recalls the events of the murder that took place more than twenty years ago, by going back to the other characters’ testimonies which he finds written in the remains of an investigation report. In doing so, the narrator outlines the events of Santiago Nasar’s murder from various points of view; those who really witness the crime, those who hear and spread the rumors, and those who contradict what seems to be the truth. Although the narrator appears to be speaking on behalf of the characters, their unmerged voices are still present within the complex narrative of the narrator’s voice.

Márquez’s *Chronicle of a Death Foretold* parallels an actual murder that occurred in 1951 in Colombia, where the author used to live. However, Márquez’s novel has distinct features which distinguish it from being only about a real event. Mambrol (2020) states that “The murder is being pieced together by the nameless narrator, a friend of the victim, in the same manner that a detective might approach the case” (para. 11). Accordingly, the journalistic style merges with the fictitious narrative and constructs a unique structure for the whole novel. Moreover, Williams convincingly argues that the detailed narrative of the story is what gives the novel the sense of fiction (1985). The narrator, being one of the minor characters, is the first voice presented in the novel. Through his voice, the reader knows about all the incidents. Based on direct observation and interviews with the other characters, the narrator acts like a reporter retracing the events in details and mentioning the exact time for each. However, the frame of the events in the novel does not follow a chronological order (Aghaei & Hayati, 2014). One possible reason for this frame is the multiplicity of voices and events.

The novel begins with a sentence informing the reader that the protagonist- Santiago Nasar- is going to be killed; he is accused of taking the virginity of Angela Vicario (as the narrator explains a few pages later). After finding out that she is not a virgin, Angela’s husband, Bayardo San Roman, brings her back to her parents’ home. Her twin brothers, Pedro Vicario and Pablo Vicario, force her to tell them who did this, only then and without any effort, the name of Santiago comes out of her mouth. The brothers decide to take revenge and to kill him. While they are waiting for him in front of his house, almost every person in the town becomes aware of the rumor which the brothers themselves have spread; hoping that someone will prevent them from committing the crime, but alas. Although the unnamed first-person narrator exposes in advance the information about what is going to happen, where and to whom, the reader is still interested to know the rest of the story.

The dialogic nature of *Chronicle* contains two levels of voices. Both levels constitute the novel’s internal discourse. The first one refers to the stratification of the narrator’s voice, and the other refers to the voices of the characters. The large number of characters in *Chronicle* - those who are involved in the plot of the murder and those who are not- makes it a relevant framework to apply the concept of polyphony on the novel. According to Bakhtin (1984), the most important thing to consider in a polyphonic novel is the interaction and interdependence between the various characters’ consciousness. In this novel, this interaction can be found in the unique relationship between the narrator and all other characters.

## V. THE DOUBLE-VOICED NARRATOR

Throughout the novel, the reader can notice two voices for the narrator: the first one is his first person view as a teller of the whole story, acting like an investigator asking around about the missing pieces of the crime that took place twenty- seven years ago. The second one is his voice as a character who has been through many unpleasant experiences and events. So, he plays two important integrated roles. In addition, through the first voice, the narrator introduces particular details about Santiago’s mother, stating that she never forgives herself after all these years for misinterpreting the dreams which her son had the night before his murder. By doing so, the narrator tries to figure out exactly what has happened in that day by making a conversation with Santiago’s mother.

In almost the entire novel, the reader is able to recognize the narrator’s unique style of dialogue. He is addressing, anticipating and reacting to the other characters’ discourses without having them present in the dialogue, as if he is directly addressing the reader. This type of narrative is called literary discourse, through which the narrator “tends toward an objective style of speech—relating the action as something happening to someone else, to the characters” (Park-Fuller, 2009, p. 3). The narrator uses direct speech in order to permit the reader to hear each voice of the characters without taking the final word for himself as in the example above. Another example occurs when he refers to Victoria Guzman, the cook, talking about Santiago: ““He always got up with the face of a bad night,” Victoria Guzman recalled without affection” (Márquez, 2003, p. 7). Sometimes, the narrator uses both direct and indirect speech. This way of narration can be seen in many occasions, as when he says:

On the day they were going to kill him, his mother thought he’d got his days mixed up when she saw him dressed in white. “I reminded him that it was Monday,” she told me. However, he explained to her that he’d got

dressed up pontifical style in case he had a chance to kiss the bishop's ring. She showed no sign of interest. "He won't even get off the boat," she told him. (Márquez, 2003, p. 6)

At some points, the narrator moves from the literary discourse to the oral discourse, he "becomes not only the telling voice but also a voice coming from within the tale, a voice that exists on a level between the literary voice and character voices" (Park-Fuller, 2009, p. 3). For example, the narrator says: "They were twins: Pedro and Pablo Vicario. They were twenty-four years old, and they looked so much alike that it was difficult to tell them apart. 'They were hard-looking, but of a good sort,' the report said. I, who had known them since grammar school, would have written the same thing" (Márquez, 2003, p. 14). By using the first person pronoun 'I', the narrator asserts his voice as an active character. He also asserts that his role is not only to narrate the events.

At other times, the oral discourse emerges from within a literary sequence. For example, the narrator says: "'One night he asked me what house I liked best,' Angela Vicario told me. 'And I answered, without knowing why, that the prettiest house in town was the farmhouse belonging to the widower Xius.' I would have said the same" (Márquez, 2003, p. 34). So, one can notice that the narrator is using a double-voiced narrative. According to Bakhtin, this kind of narrative has developed "in forms of literary discourse," and "in forms of oral speech— *skaz* in the strict sense of the word" (1984, p. 190). One can argue, then, that the narrator's double-voiced narrative is part of the polyphonic whole of the novel, as it allows the characters to freely present their views and inner feelings, though sometimes the narrator's comments are provided as well.

The narrator's two voices interact with each other. Through his detective voice, he helps the reader to understand the by providing detailed information about some important events (Aghaei & Hayati, 2014). For instance, such details can be seen, for example, in referring to the exact time when Santiago gets up at "five-thirty in the morning" (Márquez, 2003, p. 1) and when Santiago leaves his house "at five minutes past six until he was carved up like a pig an hour later" (p. 2). In addition, the narrator presents in details the origin of some characters as well; like when he introduces Angela's husband- Bayardo San Roman- where he is from and his appearance, he says:

BAYARDO SAN ROMAN, the man who had given back his bride, had turned up for the first time in August of the year before: six months before the wedding. He arrived on the weekly boat with some saddlebags decorated with silver that matched the buckle of his belt and the rings on his boots. He was around thirty years old, but they were well concealed, because he had the waist of a novice bullfighter, golden eyes, and a skin slowly roasted by salt-peter" (Márquez, 2003, p. 24).

From this description, the reader can get a very good idea about Bayardo San Roman.

In addition, the narrator's personal voice gives him the chance to participate in presenting his opinions and to interact with the characters' simultaneously. For example, he says:

The most current version, perhaps because it was the most perverse, was that Angela Vicario was protecting someone who really loved her and she had chosen Santiago Nasar's name because she thought her brothers would never dare go up against him. I tried to get that truth out of her myself when I visited her the second time, with all my arguments in order, but she barely lifted her eyes from the embroidery to knock them down. 'Don't beat it to death, cousin,' she told me. 'He was the one.' (Márquez, 2003, p. 91)

In this example, using the first person pronoun 'I' demonstrates the role of the narrator in figuring out the missing pieces of Santiago's murder and his attempts to investigate the characters' actions to find the truth.

## VI. MANIFESTATIONS OF POLYPHONY

Similarly, the voice of the narrator interacts with the other characters' voices, in the broad sense, which establishes a special type of polyphonic framework. The independence of the characters' voices, which distinguishes the polyphonic novel, is implicitly illustrated in the novel; the reader might refer these voices to the same layer of the narrator's voice.

Talking about the voices of the characters, it is important to mention some points that illustrate how they have independent voices, coming up, as a result, with a polyphonic novel. The first point is the layering of their voices when they speak out their views about the murder. Such layering enriches the novel with a multiplicity of perspectives. For instance, the narrator refers to the announcement that the Vicario brothers have spread in the meat market when they go to trim their knives and kill Santiago, he says:

Twenty-two people declared they had heard everything said, and they all coincided in the impression that the only reason the brothers had said it was so that someone would come over to hear them. (Márquez, 2003, p. 51)

The butcher's friend, Faustino Santos, surprisingly observes the scene because he usually meets them on Fridays. He adds his own view:

I thought they were so drunk," Faustino Santos told me, "that not only had they forgotten what time it was, but what day it was too." He reminded them that it was Monday. 'Everybody knows that, you dope," Pablo Vicario answered him good-naturedly. "We just came to sharpen our knives.' (Márquez, 2003, p. 51)

Another example shows that the upcoming event sounds unlikely to happen in townspeople's views. It took place when the mayor Colonel Lázaro Aponte finds the twins in Clotilde Armenta's store: "'When I saw them I thought they were nothing but a pair of big bluffers,' he told me with his personal logic, 'because they weren't as drunk as I thought'" (Márquez, 2003, p. 56). Like the other examples, the reader can observe the layering of the characters' and the narrator's voices.

The second point about the characters' voices is about their interaction with the voice of the narrator, answering his questions or sometimes simply correcting his information regarding some of the rumors, an interaction which is dialogic in nature. In spite of the narrator's insistence on controlling and taking the lead of the dialogue, the reader can still notice the characters' independent and significant voices.

The third point, which is related to the concept heteroglossia, is the 'differentiated speech' of the characters' voices. In this kind of speech, the heteroglot nature of the characters' language builds a relevant structure for the course of the events. Vice (1997) argues that "Bakhtin uses the term 'heteroglossia' to mean not simply the variety of different languages which occur in everyday life, but also their entry into literary texts" (p. 18). Hence, the characters' languages, adds Vice, "bring with them their everyday associations" (ibid). Furthermore, the forms of heteroglossia are quite significant so that the "characters' dialogue and inner speech", "the various kinds of 'speech genre'", and "texts which reproduce a culture's various dialects and languages" (p. 19) all of them, as Vice (1997) explains, illustrate how heteroglossia functions within the novel. From the examples mentioned earlier from Márquez's novel, the reader can clearly notice such 'languages' made by the characters.

As for the characters' dialogue, the novel is full of examples of dialogue between the characters and the narrator and between the characters themselves. One of these examples is a dialogue between the Vicario brothers and Clotilde Armenta, the owner of the milk shop where the two men have been waiting for Santiago to kill him, they ask her "if she had seen any light in that window," (p. 55) pointing at Santiago's house, then she replies negatively and asks back:

"Did something happen to him?" she asked.

"No," Pedro Vicario replied. "Just that we're looking for him to kill him." (Márquez, 2003, p. 54).

She carries on: "And might a person know why you want to kill him so early in the morning? she asked.

"He knows why," Pedro Vicario answered (Márquez, 2003, p. 55).

The other form of heteroglossia in the novel is the variety of speech genres, "languages of a profession, class, literary school, newspaper" (Vice, 1997, p. 19). The reader can easily realize the different layers of social voices in the novel. Some of these voices include: the voice of Don Lázaro Aponte - the colonel and town mayor, the voice of Father Carmen Amador, Maria Alejandrina Cervantes's voice who owns a house of mercies, Bayardo San Roman's father's voice, General Petronio San Roman- the hero of the civil wars of the past century, and the voice of Doctor Dionisio Guarán- a physician and a man of letters.

In addition to the third form of heteroglossia referring to the various dialects and languages in the same culture, these voices have built and shaped the society described in Márquez's novel. In this novel, the national language is the Spanish, with some use of its Papiamento dialect which the narrator refers to as Bayardo San Roman's mother's language. According to Vice (1997), heteroglossia has two forms that have "different national languages within the same culture" (p. 19). These two forms are the most obvious in the novel, in the sense that the Spanish is the first national language and the Arabic being the second one in the same Caribbean culture. The Arabic language has its presence, though in a limited way, it is spoken by Santiago and his father Ibrahim Nasar for that their origin go back to the 'Turks' as the townspeople call them, "They spoke Arabic between themselves, but not in front of Plácida Linero (Santiago's mother), so that she wouldn't feel excluded (Márquez, 2003, p. 6). Also, it is clearly mentioned as a spoken language between Santiago and Yamil Shaium, "one of the last Arabs who had come with Ibrahim Nasar" (p. 104):

Santiago Nasar didn't reply, but said something in Arabic to Yamil Shaium, and the latter answered him, also in Arabic, twisting with laughter. "It was a play on words we always had fun with," Yamil Shaium told me.

Without stopping, Santiago Nasar waved good-bye to both of them and turned the corner of the square. It was the last time they saw him (Márquez, 2003, p. 105).

So, Márquez's novel is enriched by the multiplicity of characters and voices. With the journalistic style of narration, this multiplicity gives the novel a unique structure that would catch the readers' attention from the very first word. *Chronicle of a Death Foretold* has some features of a polyphonic novel because these characters and voices are placed differently, and in some cases they are opposing each other. As a result, the reader feels the existence of different characters with different perceptions on the murder.

## VII. CONCLUSION

In conclusion, one can argue that it is highly illuminating to read Gabriel Garcia Márquez's *Chronicle of a Death Foretold* according to Mikhail Bakhtin's concept of polyphony. Such reading reveals that it is a polyphonic novel with a special kind of independent voices. With its peculiar style of narration, its double-voiced narrator, its various speech genres, and its multiplicity of characters belonging to different social groups, the novel reveals heteroglot features besides the polyphonic ones, which make it a polyphonic and heteroglot novel at the same time. Further research can be done to thoroughly study and analyze Márquez's novel depending on more specific concepts by Bakhtin like "dialogism," "polyphony," and "carnival."

## REFERENCES

- [1] Aghaei, M.B., & Hayati, S. (2014). Application of Journalistic Style of Narration in Marquez's Novels. *Studies in Literature and Language*, 9 (2), 12-15. DOI: <http://dx.doi.org/10.3968/n>

- [2] Alonso, C. (1987). Writing and ritual in Chronicle of a Death Foretold. In B. McGuirk & R. Cardwell (Eds.), *Gabriel Garc ía Márquez: New Readings* (Cambridge Iberian and Latin American Studies, pp. 151-168). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511898006.012
- [3] Bakhtin, M.M., & Holquist, M. & Emerson, C. (1981). *The dialogic imagination: four essays*. Austin, Tex: University of Texas Press. Retrieved April 10, 2022 from [https://www.academia.edu/38565705/Bakhtin\\_The\\_Dialogic\\_Imagination\\_Four\\_Essay](https://www.academia.edu/38565705/Bakhtin_The_Dialogic_Imagination_Four_Essay)
- [4] Bakhtin, M.M., & Booth, W. (1984). *Problems of Dostoevsky's Poetics* (Emerson C., Ed.). Minneapolis; London: University of Minnesota Press. doi:10.5749/j.ctt22727z1
- [5] Dentith, S. (2003). *Bakhtinian Thought: Intro Read.* Routledge. Retrieved April 11, 2022 from [https://books.google.jo/books?id=KfyHAgAAQBAJ&lpg=PP1&ots=Vw\\_8\\_aQEPg&dq=bakhtinian%20thought%20simon&lr&hl=ar&pg=PP1#v=onepage&q=bakhtinian%20thought%20simon&f=false](https://books.google.jo/books?id=KfyHAgAAQBAJ&lpg=PP1&ots=Vw_8_aQEPg&dq=bakhtinian%20thought%20simon&lr&hl=ar&pg=PP1#v=onepage&q=bakhtinian%20thought%20simon&f=false)
- [6] Garcia Marquez, G. (2003). *Chronicle of a death foretold*. Harlow, England: Penguin Books.
- [7] Kercher, D. (1985). Garcia Marquez's "Cronica de una muerte anunciada" ("Chronicle of a Death Foretold"): Notes on Parody and the Artist. *Latin American Literary Review*, 13 (25), 90-103. Retrieved March 20, 2022 from <http://www.jstor.org/stable/20119389>
- [8] Mambrol, N. (2020). Analysis of Márquez's Chronicle of a Death Foretold. *Literary Theory and Criticism*. Retrieved March 25, 2022 from <https://literariness.org/2020/09/26/analysis-of-marquezs-chronicle-of-a-death-foretold/>
- [9] McGuirk, B. (1987). Free-play of fore-play: The fiction of non-consummation: Speculations on Chronicle of a Death Foretold. In B. McGuirk & R. Cardwell (Eds.), *Gabriel Garc ía Márquez: New Readings* (Cambridge Iberian and Latin American Studies, pp. 169-190). Cambridge: Cambridge University Press. doi:10.1017/CBO9780511898006.013
- [10] Park-Fuller, L.M. (1986). Voices: Bakhtin's heteroglossia and polyphony, and the performance of narrative literature. *Literature in Performance*, 7(1), 1-12. DOI: 10.1080/10462938609391621
- [11] Popescu, C. (2020, March). The Borders of Historical Truth in Gabriel Garcia Márquez's Postmodernist Work. *NOVA Universidade Lisboa*. Retrieved March 30, 2022 from [https://www.researchgate.net/publication/339750737\\_The\\_Borders\\_of\\_Historical\\_Truth\\_in\\_Gabriel\\_Garcia\\_Marquez%27s\\_Postmodernist\\_Work](https://www.researchgate.net/publication/339750737_The_Borders_of_Historical_Truth_in_Gabriel_Garcia_Marquez%27s_Postmodernist_Work)
- [12] Vice, S. (1997). *Introducing Bakhtin*. Manchester University Press. Retrieved April 10, 2022 from [https://books.google.jo/books?id=R1CI4Mga\\_cUC&lpg=PA1&ots=3ggvdkT5BM&dq=introducing%20bakhtin%20sue%20vice%20pdf&lr&hl=ar&pg=PA1#v=onepage&q=introducing%20bakhtin%20sue%20vice%20pdf&f=false](https://books.google.jo/books?id=R1CI4Mga_cUC&lpg=PA1&ots=3ggvdkT5BM&dq=introducing%20bakhtin%20sue%20vice%20pdf&lr&hl=ar&pg=PA1#v=onepage&q=introducing%20bakhtin%20sue%20vice%20pdf&f=false)
- [13] Williams, R. (1985). An Introduction to the Early Journalism of Garcia Marquez: 1948-1958. *Latin American Literary Review*, 13(25), 117-132. Retrieved June 3, 2021, from <http://www.jstor.org/stable/20119391>
- [14] Zaidi, A. (2011). *The Hidden Depths of Garc ía Márquez's Chronicle of a Death Foretold*. Retrieved April 10, 2022 from [https://www.researchgate.net/publication/274713519\\_The\\_Hidden\\_Depths\\_of\\_Garcia\\_Marquez%27s\\_Chronicle\\_of\\_a\\_Death\\_Foretold](https://www.researchgate.net/publication/274713519_The_Hidden_Depths_of_Garcia_Marquez%27s_Chronicle_of_a_Death_Foretold)

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*Areas of interest include:* language education, language teaching methodologies, language acquisition, bilingualism, literacy, language representation, language assessment, language education policies, applied linguistics, as well as language studies and other related disciplines: psychology, linguistics, pragmatics, cognitive science, neuroscience, ethnography, sociolinguistics, sociology, and anthropology, literature, phonetics, phonology, and morphology.

## Special Issue Guidelines

Special issues feature specifically aimed and targeted topics of interest contributed by authors responding to a particular Call for Papers or by invitation, edited by guest editor(s). We encourage you to submit proposals for creating special issues in areas that are of interest to the Journal. Preference will be given to proposals that cover some unique aspect of the technology and ones that include subjects that are timely and useful to the readers of the Journal. A Special Issue is typically made of 15 to 30 papers, with each paper 8 to 12 pages of length.

A special issue can also be proposed for selected top papers of a conference/workshop. In this case, the special issue is usually released in association with the committee members of the conference/workshop like general chairs and/or program chairs who are appointed as the Guest Editors of the Special Issue.

The following information should be included as part of the proposal:

- Proposed title for the Special Issue
- Description of the topic area to be focused upon and justification
- Review process for the selection and rejection of papers
- Name, contact, position, affiliation, and biography of the Guest Editor(s)
- List of potential reviewers if available
- Potential authors to the issue if available
- Estimated number of papers to accept to the special issue
- Tentative time-table for the call for papers and reviews, including
  - Submission of extended version
  - Notification of acceptance
  - Final submission due
  - Time to deliver final package to the publisher

If the proposal is for selected papers of a conference/workshop, the following information should be included as part of the proposal as well:

- The name of the conference/workshop, and the URL of the event.
- A brief description of the technical issues that the conference/workshop addresses, highlighting the relevance for the journal.
- A brief description of the event, including: number of submitted and accepted papers, and number of attendees. If these numbers are not yet available, please refer to previous events. First time conference/workshops, please report the estimated figures.
- Publisher and indexing of the conference proceedings.

If a proposal is accepted, the guest editor will be responsible for:

- Preparing the “Call for Papers” to be included on the Journal’s Web site.
- Distribution of the Call for Papers broadly to various mailing lists and sites.
- Getting submissions, arranging review process, making decisions, and carrying out all correspondence with the authors. Authors should be informed the Author Guide.
- Providing us the completed and approved final versions of the papers formatted in the Journal’s style, together with all authors’ contact information.
- Writing a one- or two-page introductory editorial to be published in the Special Issue.

More information is available on the web site at <http://www.academypublication.com/tpls/>





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