Contrastive Study of English and Chinese Word Order from the Perspective of Figure-ground Theory—A Case Study of *The Moonstone* and Its Chinese Version

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Abstract—**The relationship between human language behavior and cognition can be reflected by the Figure-Ground Theory in cognitive science. In the frame of cognition, figure is more prominent. It is the focus of attention; ground is less prominent and it provides the cognitive reference for the figure. In English expression, figure is usually put on the prominent position. This article points out the similarities and differences between English and Chinese word order by comparing English and Chinese sentences from The Moonstone written by Wilkie Collins. It delves into their cognitive differences through cognition pattern. English adopts cognitive model from figure to ground, while Chinese takes the order from ground to figure. According to the analysis of the article, a conclusion is made that the difference between English and Chinese word order lies in different cognitive models.**

Index Terms—**figure-ground theory, word order, cognitive model, English, Chinese, The Moonstone**

I. INTRODUCTION

English is one member of the Indo-European language family, while Chinese belongs to the Sino-Tibetan language family. English is characteristic of being hypotactic, which depends on conjunctions to keep sentences complete. By contrast, Chinese is paratactic, following the word order of chronological sequence. Chinese differs from English in many aspects, such as phonology, morphology, word-formation and syntax. This article studies the distinction of English and Chinese word order in order to strengthen people's comprehension of English and Chinese languages.

In light of figure-ground theory, this article is devoted to making an analysis of the contrastive study of English and Chinese word order represented in sentences of The Moonstone and its Chinese version from the cognitive perspective with the aim to explore the underlying relationship of languages and find out reasons of the distinction between English and Chinese word order.

II. PREVIOUS RELEVANT RESEARCH

A. Research on Word Order

The study of the order of the syntactic constituents of a language is the category of word order typology. In reality, different languages have different word order in organizing the sentence structure. The study of word order pays attention to the sub-sentence domain, but the primary concern is the word order of the subject, verb and object, the order of modifiers in a noun phrase, such as adjectives, demonstratives, possessives, numerals and adjuncts, and the order of adverbials. The word order of some languages is of grammatical property which is applied to convey important grammatical function. Some inflectional languages allow more flexibility which can be used to encode pragmatic information. However, most languages have some preferred word orders which are used most frequently.

Based on the sequential arrangement of the basic constituents of most languages, the word order can be classified into the following six types, namely, SVO, SOV, OSV, OVS, VSO, and VOS. English and Chinese belong to the SVO type.

Word order studies involve many grammatical models, which roughly falls into two models: to consider word order as an abstract underlying property of sentences and to view word order as an independent issue. Chomsky's transformational-generative grammar is the typical case of the first model. The representatives of the latter models are functional grammar, lexical functional grammar and word grammar.

The publication of Greenberg (1963) marks the beginning of an interest in word order typology. In masterpieces, *Language and the Study of Language, and The Life and Growth of Language*, William Dwight Whitney observes the

classification and arrangement of language phenomenon, and regards "position" from language constituents as important features of form in the last half of 19th century.

Since the 1980s, as an independent grammatical phenomenon, word order has become more active. The study of word order has two orientations. One is the study of position and influence of word order in language and language acquisition from the perspective of psychology and psycholinguistics. For example, Slobin and Bever (1982) in cross-language research have found that children form canonical word order scheme by the age of four. He points out that this scheme plays a vital role in discourse comprehension. The other orientation is the study of regulations and features of word order itself in terms of syntax.

In contrast, functioning grammar views word order as an independent issue. These grammatical models believe that word order is not the implicit property of clauses; the alignment of each constituent can be inferred from the semantic properties of each word and the correlation between different classes of words. Linguist Halliday (1994: p.37) illuminates in his book *An Introduction of Functional Grammar* that the theme is the element which acts as the point of departure of the message, and the remainder of the message with the purpose of developing the theme, is called rheme; the structure is expressed by the order.

Cognitive linguistics established in America in the 1950s is the study of language that is in accordance with our experience of the world and the way we perceive and conceptualize it, and the study of the human language with consciousness knowledge. Langacker, (1991) the founder of cognitive grammar, suggests that a unified explanation of this syntactic diversity is possible if one understands the subject-verb-complement pattern as a reflection of the general cognitive principle of figure-ground theory.

B. Application of Figure-ground Theory in Linguistics

Figure-ground theory is one of the basic cognitive principles which was first introduced into psychology by Edgar Rubin in 1915, and later integrated into more comprehensive framework of perceptual organization by the gestalt psychologists. Cognitive linguistics holds that the application of language is determined by people's empirical structure and cognitive mode. Expressions of language based on people's perception to things and events are divided into figure and ground to organize language performance by means of arranging them perpetually. In terms of present study, figure-ground theory is demonstrated to explain many language phenomena efficiently, such as syntactic diversity, sentence structure, use of preposition, definition of adverbial of time, and stress mechanism of inversion, etc.

Talmy is the first linguist applying figure-ground theory to language study. He (2000: p.312) proposes two conceptualizations of figure and ground in language:

a. The general conceptualization (in single clause): The Figure is a dynamic or conceptually movable entity whose route, site, or direction is believed to be a variable. The value of the figure is a relevant issue. The Ground offers a background or reference for the figure, and it has a comparatively stable setting with regard to a reference frame, with respect to which the Figure's path, site or orientation is characterized.

b. The temporally specific conceptualization (in complex clause): Temporally the figure is a variable concept or entity. The value of the concept or entity is the relevant issue. The Ground offers a reference, which has comparatively stable setting relative to a reference frame. And against such background the figure's location or orientation in time sequence is identified.

The linguists after Talmy begin to adopt figure-ground theory as a basic cognitive principle. Talmy applies figure-ground theory in explaining the expressions of prepositions indicating time in language and specifies the defining property and associated characteristics to entities which are used as figure and ground in language. Talmy (1978) also studies figure-ground theory in simple and complex sentences and between events. The conclusion is that the relation of figure and ground in complex sentences is decided in accordance with the following five principles: sequence principle, cause-result principle, inclusion principle, contingency principle and substitution principle.

Langacker, on the other hand, introduces another pair of "figure and ground", namely, "trajector and landmark". He defines trajector as "the figure within a relational profile" (Langacker, 1987: p.217). The ground within a relational profile would be the landmark, which is less prominent in the relation. The trajector refers to the entity serving as a moving figure or as being located relative to the landmark and the landmark is the frame of a dynamic figure. The figure moves along the "path" to the ground. Trajector and landmark may differ from each other in size and shape and the trajector can come into contact with the landmark.

Ungerer and Schmid (2001) agree with Langacker's proposing the term of "trajector and landmark" and his elaboration of simple transitive clause as well. Similarly, in the aspect of simple clause, Ungerer and Schmid initiate the terms of "syntactic figure" and "syntactic ground" to refer to subject and object accordingly, postulating that the verbs can account for the scale of prominence between subject and object in basic sentence patterns like SVC or SVO.

III. THEORETICAL ANALYSIS

A. Cognitive Approach

Cognitive approach is an approach to language that is based on our experience of the world and the way we perceive and conceptualize it (Ungerer & Schimid, 2001: p.36). It was emerged in America in the 1950s being a new approach to

language study. Cognitive linguistics, which is a new discipline that is the synthesis of linguistics and cognitive science, argues that cognition and language are inseparable, for language is the result of cognitive process. Thus, being part of cognition, language can promote the development of cognition. Cognitive linguistics is represented by three main approaches: the experiential view, the prominence view, and the attentional view of language.

The experiential view holds that a more practical and empirical path should be pursued rather than postulating objective definitions and logical rules based on theoretical considerations and introspection (Ungerer & Schimid, 2001: p.37). It is not limited from objective description of one entity, but also offers more meaningful description.

The prominence view argues that the expressed selection and arrangement of information in language depend on the degree of prominence. For example, although they have the same propositional meaning, the expression The car crashed into the tree is different from the expression The tree was hit by the car in the selection and arrangement of the clause subject. This explanation suggests that the construction of the sentence is determined by how the cognitive model deals with the different degrees of prominence of information. This prominence is not only reflected in the selection of the subject as opposed to the object and the adverbials of a clause, but there are also many other applications of what may be called the prominence view of linguistic structures (Ungerer & Schimid, 2001: p.38-39). hus figure-ground theory can be viewed as the heart of this theoretical framework.

"The attentional view is an alternative approach of the prominence view. Based on the assumption that what we actually express reflects which parts of an event attract our attention, the attentional view interprets why one stage of the event is expressed in the sentence while other stages are not. The potential of the attentional view starts out from the notion of 'frame', which is an assemblage of the knowledge we have about a certain situation, e.g. buying and selling. "Depending on where we direct out attention, we can select and highlight different aspects of the frame, thus arriving at varied linguistic expressions" (Ungerer & Schimid, 2001:p. 39-40).

Generally speaking, cognitive linguistics studies the following aspects: categories, prototype and categorization, metonymy and metaphor, figure and ground, frame and attention, iconicity, grammaticalization, etc. This article is aimed at analyzing English and Chinese word order from the perspective of figure and ground.

B. Origin of Figure-ground Theory

The figure-ground theory is an important theory from the perspective of the prominence view in cognitive linguistics. The previous chapter mentioned that the notion of figure and ground was first introduced by Danish psychologist Edgar Rubin in 1915. Later the gestalt psychologists integrate the notion into a more comprehensive framework of perceptual organization, especially the visual and auditory perceptual organization. In cognitive linguistics, the perception field is divided into two parts: figure and ground. Figure is the more prominent part in cognition, which is the focus of attention, and more easily attracts people's attention, while the ground is less prominent than figure in cognition and can be regarded as the reference of figure in people's cognition. Rubin is interested in the way that human beings percept things, direct and pay much attention to something which is more prominent than others, and regard the less prominent things as the background of the more prominent ones. That is how we human beings could single more salient things out as our focus of attention, namely figure from the ground. Therefore, he designs the famous face/vase illusion (see Figure 1) to explain this phenomenon.

The well-known face/vase illusion is the best illustration of the figure-ground theory. There are two illusions in Figure 1: a white vase and two faces. We can see one illusion on the first sight, either a vase or two faces, but after longer inspection, we can easily notice the other possibility. Obviously, the perception of these two possibilities is not difficult and does not need much time or energy, and we can easily switch between the two ways of looking at the picture. But there is no possibility that we can catch both of them at the same time. In other words, we can not see both a vase and two faces at the same time. The perception of these two possibilities can not take place at the same time but must be in order. We make out of the one what we think more prominent first and take the rest as its environment. After long observation or implication, we can get the other possibility take the former environment as prominent one and the former prominent one as environment. In the perception of face/vase illusion, we cannot see them both simultaneously; we must take one of them as the prominent figure and the rest as the ground.

C. Figure-ground Segregation and the Principle of Pragnanz

Why we can not see a white vase and two faces simultaneously? It seems that there is something invisible controlling our perception and stops us from catching them both simultaneously. In what way can we decide which element of a situation should be the figure and which the ground? The following two concepts: Figure-Ground Segregation and the Principle of Pragnanz can give us the explanation to these questions.

a. Figure-Ground Segregation

The picture in the Figure 1 indicates that we can only see one possibility at one time. The figure-ground segregation is a phenomenon to explain that people can not at the same time capture both figure and ground in one setting.
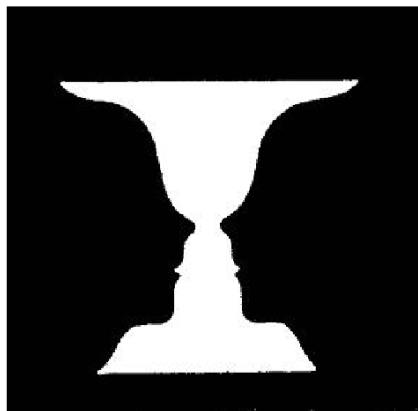
Figure 1 The face/vase illusion (Rubin)

It is concluded that figure is the focus of attention which refers to the prominent parts in cognitive concepts or perception; it has a definable shape, or form, and "thing-like" qualities such as structure and coherence, while the ground refers to the background or environment, and it seems to be unstructured, formless and uniform. The relation between figure and ground is such that figure seems to be put in front of ground which is less prominent than figure in cognition and can be viewed as the cognitive reference. "Psychological study has indicated that it is more likely to be identified and remembered and to be associated with meaning, feeling and aesthetic values" (Ungerer & Schmid, 2001: p.157). Things can be selected as either figure or ground according to many aspects, such as personal taste and preference. An object selected as figure or ground is determined by the observer's personal taste to a large extent. Psychological studies have shown that the perception of figure from the ground is a result of an internal selection. Personal beliefs, needs and values, etc. are the important stimulus for the selection of figure in the internal world; the selection is also enhanced by the drive to seek for meaning, a drive intrinsic in human beings. One point we should be clear about is that our putting too much emphasis on the figure does not indicate the ground is unimportant. It only suggests that the ground is not the focus of attention. If the ground is absent, on the one hand, the gestalt of a sentence or scene cannot be kept, and on the other, the figure cannot be prominent. Thus, the ground is indispensable. "The perception of figure-ground is the direct result of human experience and ground can be regarded as the cognitive reference point of figure" (Kuang Fangtao & Wen Xu, 2003). Apparently, there is a factor that plays an important role in assigning the status of figure to certain parts of a visual scene, and this factor is taken granted as the Principle of Pragnanz.

b. The Principle of Pragnanz

The Principle of Pragnanz is a guiding principle which reflects the way that people choose something as figure. Figure-ground theory should observe the Principle of Pragnanz, which offers a meaningful guide to determine figure and ground. The Principle of Pragnanz consists of a series of formula that are reflections of human being's visual processing. "The term is used by the gestalt psychologists to portray a phenomenon as the more a configuration of individual elements adheres to these principles, the more it will tend towards a clear-cut and cogent organization" (Ungerer & Schmid, 2001: p.160). These principles are called "gestalt principles". The most important of these principles are:

"Principle of Proximity": individual elements with a small distance between them will be perceived as being somehow related to each other.

"Principle of Similarity": individual elements that are similar tend to be perceived as one common segment.

"Principle of Closure": perceptual organization tends to be anchored in closed figures.

"Principle of Continuation": elements will be perceived as wholes if they only have few interruptions. (Ungerer & Schmid, 2001: p. 160)

D. Abbreviations and Acronyms Properties of Figure-ground Theory

Considering the examples stated above carefully, we can notice that the one we select as figure appears to have some special properties. In the face/vase illusion, if we take attention on the white part, the vase may emerge, and if we focus on the black part, the two faces will emerge. It seems that the factor which determines the selection of figure is our subjective attention. However, it seems that it is not reasonable in the determination of figure when we explain the situation of a book and desk. Here it is not subjective attention or focus but the gestalt properties that decide the selection of figure. The Principle of Pragnanz is quite applicable in the above example, in which the book and desk are quite different in shape and contour, and it is easy to distinguish the figure and ground. However, it is not always applausive and effective. For example, the following two sentences Linda sits next to Tom; Tom sits next to Linda. In this situation, Linda and Tom are almost equal no matter in shape, contour, or other figure-like features as the principle claims. There exists a problem of the determination of figure and ground. In this case, some other properties of figure and ground must be introduced. Talmy first uses the figure-ground theory to explain some linguistics phenomenon the

spatial relation in natural language. According to him, the determination of figure and ground should follow the rule that figure is more salient, much smaller, geometrically simpler, more concrete and movable, while on the contrary, the ground is less salient, much larger, geometrically complex, more abstract and permanently located. "Palmer claims that the figure is the one which draws our focus and attention easily in a situation, while the ground provides background, acts as the reference point, and it is relatively stable. Figure is smaller, more compact, more easily defined, simpler and more likely to be in motion" (1996:p. 101). Talmy (2000) contributes a lot to the study of the characteristics of figure and ground. He uses the following table to identify them.

Figure		Ground
Definitional characteristics	Has unknown spatial/temporal properties to be determined	Acts as reference entity, having known properties that can characterize the figure's unknowns
Associational characteristics	More movable	More permanently located
	smaller	larger
	Geometrically simpler(often pointlike) in its treatment	Geometrically complex in its treatment
	More recently on the scene/in awareness	More familiar/expected
	Of greater concern/relevance	Of lesser concern/relevance
	Less immediately perceivable	More immediately perceivable
	More salient once perceived	More backgrounded once the figure is perceived
	More dependent	More independent

Fig3.4 Characteristics of Figure and Ground (Talmy, 2000:p.315)

On the basis of this table, Kuang Fangtao and Wen Xu (2003) add two other associated characteristics to the figure and ground: time length and predictability. Figure is much shorter in the time length than ground, and more difficult to be predicted than ground. In the determination of figure and ground, the definitional characteristics play a determinative role and the associated characteristics only supplementary acts as an assistant. Usually more than one associated characteristics function in the determination process of figure and ground. Not only the features that the Principle of Pragnanz gives function in the determination of figure and ground, but also the definitional and associational characteristics of figure and ground affect in the determination process of figure and ground.

IV. A CASE STUDY OF THE MOONSTONE AND ITS CHINESE VERSION FROM THE VIEW OF FIGURE-GROUND THEORY

The sequence of English and Chinese expressions is different, but sometimes is identical. Some scholars believe that Chinese logic order is simpler than that of English. Generally, Chinese complies with rules of time sequence, rules of cause-effect sequence, etc. Nevertheless, English word order is more flexible. For example, adverbial clause of time introduced by after, before can precede the main clause, or follow the main clause. In order to point out the similarities and differences in cognitive structure between English and Chinese word order, English and Chinese sentences in original text and its Chinese version of The Moonstone will be selected to be compared.

A. Contrastive Study of Word Order from Time Order

In terms of time order, events that happen earlier will be described first in Chinese, and events that happen later will be talked about afterwards. Sometimes, in English, sentences will be constructed according to the sequence of action or events. The following examples are taken from the novel *The Moonstone* written by Collins. (2014)

Example 1:

The matron, seeing my lady took an interest in the place, pointed out a girl to her, named Rosanna Spearman, and told her a most miserable story, which I haven't the heart to repeat here; for I don't like to be made wretched without any use, and no more do you. (Collins, 2014:p.35)

那位女管事者看到我房东太太对于那个地方很感兴趣，就把一个姑娘指给她看，那姑娘名字叫罗珊娜·史珀尔曼，并且讲了她的悲惨的身世故事，这些故事我没有心情在这儿重复；因为我不喜欢做那些没有什么用处的事情，你可能也是这样。

The matron seeing my lady took an interest in the place is put in the first position. Then pointed out a girl to her, and introduced her name. During the narration, it is still in the light of time order. After I heard this story, I had s series of psycho reaction. English and Chinese word orders concord with the same time sequence.

Example 2:

Only yesterday, I opened my Robinson Crusoe at the place. Only this morning (May twenty-first, Eighteen hundred and fifty), came my lady's nephew, Mr. Franklin Blake, and held a short conversation with me. (2014: p.9)

就在昨天，我把我的《鲁宾逊漂流记》翻到了此处。就在今天早上（1850 年的 5 月 21 日），我的女房东的外甥，弗兰克林·布莱克先生来了，他与我简短交谈。

From yesterday to this morning, the original text and its translated text both have obviously the same time order.

Example 3:

If the unknown person who has pledged the Moonstone can redeem it in a year, the jewel will be in that person's possession at the end of June, forty-nine, I shall be thousands of miles always from England English news that date.(2014:p.253)

如果那个不知名字的已经抵押了那颗月亮宝石的人在一年之后能够赎回它的话，那件珠宝将在四九年的六月底再次回到那个人的手中。那时我将离英国数千英里之外了，而那个时期英国发生的事也将离我很遥远了。

The things described in these sentences have not taken place, but just existed in people's imagination. However, both English and Chinese expressions are in accordance with time sequence.

As two different languages, English and Chinese also have differences besides the similarities. The differences will be analyzed by combining characteristics of figure and ground with English sentences and Chinese version in The Moonstone under the figure-ground theory. The following examples can demonstrate this.

Example 4:

She has never spoken a word in private to Rosanna, since that unhappy woman fires entered my house.(2014:p.155)
自从那个不幸的姑娘罗珊娜最初来到宅邸以来，她从来没有私下里跟这个姑娘说过一句话。

In this example, in English, the main clause she has never spoken a word in private to Rosanna is the focus of the information, revealing the central point of view of the clause, having unknown spatial or temporal properties to be determined, so it is the figure part. The main clause precedes the subordinate clause functioning as a reference entity in English sentence. Therefore, it is a typical instance following the order from the figure to the ground. By contrast, the Chinese equivalent is in the opposite sequence, and the subordinate clause 自从那个不幸的姑娘罗珊娜最初来到宅邸以来 is placed at the beginning part of the sentence, providing reference event for the main clause, which complies with the common expression of Chinese. The whole sentence follows the order from ground to figure.

Example 5:

About four months before the time I am writing of, my lady had been in London, and had gone over a reformatory, intended to save forlorn women from drifting back into bad days, after they had got released from prison.(2014:p.21)
大约在我写这些东西的四个月以前，我的房东夫人去伦敦参加了一个感化院，这个感化院的目的是拯救那些失足绝望的妇女，以防止她们从监狱里得到释放后又重新回到堕落的路子上去。

In this example, the former part is the focus of attention. After they had got released from prison is the subordinate clause functioning as a reference entity. It follows the order from figure to ground. On the contrary, Chinese is in the opposite sequence. 她们从监狱里得到释放后 provides the reference event for the main clause. Chinese follows the order from ground to figure.

Example 6

You are tempting me with new prospect, when all my other prospects are closed before me.(2014:p.99)
当我其他的一切生活前景都暗淡下去的时候，你正用一种新的前景在引诱我。

In the tenth example, the same situation occurs. The English sentence is initiated by new information "You are tempting me with new prospect". Subordinate clause "when all my other prospects are closed before me" provides reference entity for the main clause. It is ordered in the way from the figure to the ground. The Chinese sentence is in the opposite sequence The Chinese sentence 当我其他的一切生活前景都暗淡下去的时候 is put in the first position, having known properties and getting people aware of which field is talked about, then followed by the focus of the sentence 你正用一种新的前景在引诱我. Complying with definitional characteristics of figure and ground, Chinese sentence follows ground-figure sequence.

From the view of the definitional characteristics of "figure" and "ground", the figure has undefined properties with regard to time and space; and the ground is a reference entity, having all-known qualities that can characterize the figure's unknowns. The relevant characteristics of figure and ground are analyzed from the perspective of salience, accessibility, dependence, familiarity, and expectation. From the dimension of accessibility, figure is less immediately perceivable and ground is more immediately perceivable. Specifically, on the level of syntactic structure, the main clause is the focus of information of the whole clause, having unknown spatial or temporal properties to be determined. The subordinate clause expresses given information, functioning as a reference entity and having known properties that characterize the main clause's unknowns of the figure part.

In accordance with associated characteristics of figure and ground, figure is more salient and ground is more backgrounded. The main clause shows the new information and is the focus of information so that it will be more salient than the subordinate clause. Therefore, the main clause is taken as figure, and the subordinate clause is the reference event functioning as ground. From above-mentioned examples, it is obviously seen that Chinese sentence accords with time order. Things that happen are described in sequence so as to be consistent with Chinese expressions. However, English sentence is constituted according to grammatical rules rather than time sequence. Constituents in English sentence are linked through the use of conjunctions. For instance, in the above examples, such as when, after are applied in the sentences. From the analysis, a conclusion will be made that cognitive structure of English follows the order from figure to ground, but Chinese follows the opposite way.

B. Contrastive Study of Word Order from Space Order

Objects occupy certain space with different constituents. In order to illustrate their spatial expressive mode, it should be explained according to a certain sequence of spatial location. That is space order. Shen Jiaxuan (1996) holds that when people perceive spatial relations of two objects, one object is treated as the focus of attention, and the other as a reference entity for the first object. Generally speaking, the focus of attention is called figure and reference entity as

ground. Figure and ground are a pair of basic concepts in cognitive psychology. There is a certain rule for which object is perceived as figure, and which is ground specifically. In a general way, there exists a tendency that movable object is figure, stable object is ground; smaller object is figure, while larger one is ground; the part one is figure, while the whole one is ground. He also believes that the constituents denoting the figure are usually placed before the ground in English spatial expressions. Specifically speaking, people are sure about the categorization of figure and ground in objects' spatial relations, but the conceptualization could be different in experiencing a spatial relation. There are two processes of experiencing spatial relations: one is from the figure to ground, the other is from the ground to figure. English has a strong tendency of figure to ground, while Chinese is in the opposite way of ground to figure. Nevertheless, marked situation may exist. In other words, exceptions may exist. English and Chinese adopt the same cognitive model. The following instances will illustrate it.

Example 7:

There stood Miss Rachel at the table, like a person fascinated, with the Colonel's unlucky Diamond in her hand. There, on either side of her, knelt the two Bouncers, devouring the jewel with their eyes, and screaming with ecstasy every time it flashed on them in a new light. There, at the opposite side of the table, stood Mr. Godfrey, clapping his hands like a large child, and singing out softly, "Exquisite! Exquisite!" There sat Mr. Franklin in a chair by the bookcase, tugging at his beard, and looking anxiously towards the window. And there, at the window, stood the object he was contemplating-my lady, having the extract from the Colonel's will in her hand, and keeping her back turned on the whole of the company.(2014:p.56)

This paragraph is translated as: 蕾茜尔小姐坐在桌子的旁边，像一个有点儿神智不清的人一样，一只手里拿着上校送给她的那颗不祥的宝石。艾伯怀特家的两位小姐分别跪在她的两边儿，眼睛盯着那个宝石，几乎要把它吞下去。那颗宝石每发出一次新的闪光，她们都着迷一般尖叫声叫喊起来。在那张桌子的对面，站着高孚利先生，正拍着两只手像一个大孩子一样，低声赞叹着说道："漂亮极了！漂亮极了！" 弗兰克林先生坐在书柜旁边的一把椅子上，正摸着他的胡须，一面焦急地朝窗子处看着。而在窗口站着他正端详的那个人-我的房东太太，她手里拿着上校遗嘱的摘要，一直背对着那些人站在那儿。

Miss Rachel is the reference entity of two Bouncers and Mr. Godfrey, while Mr. Franklin is the reference entity of my lady. Miss Rachel is the known information, and is salient. In the example, both English and Chinese sentences obey the sequence from ground to figure.

Example 8:

He was almost fifty, and looked it. His hair was long and uncombed and greasy, and hung down, and you could see his eyes shining through. It was all black; so were his long whiskers. There wasn't any color in his face, where his face showed. As for his clothes, they were just rags. (2014:p.76)

他差不多五十岁了，看起来也像那么老。他的头发又长、又蓬乱、又油腻，往下搭拉着，你能看见他的眼睛透过头发闪着亮光。头发全是黑的；长长的络腮胡子也是一样。他露出来的脸上毫无血色。至于他的衣服，简直就是一堆破布。

In this example, English and Chinese both obey the principle from whole to part, from top to down. The author describes the whole impression of this person first-He was almost fifty, and looked it. Then every part of his body is depicted respectively, which follows the sequence from top to down. This description complies with the sequence of people's spatial perception. English cognitive model is the same with Chinese. So do the next three instances. Both English and Chinese word orders comply with the sequence from whole to part, namely from ground to figure.

Example 9:

The man's swarthy face was placed and still; his black hair and beard were slightly, very slightly, discomposed. His eyes stared wide-open, glassy and vacant, at the ceiling. The filmy look and the fixed expression of them horrified me. (2014:p. 386)

哪个人黑黝黝的脸一动也不动；他黑色的头发和胡子都稍微，只是稍微有一点凌乱。他的两只眼睛睁得大大地，正在茫然而无神采地瞪着天花板。两只眼睛中的那种呆滞的样子和凝滞的表情把我吓坏了。

First the man's face is described, and then his hair, beard, and eyes, which follows the sequence from the whole to the part during the description of the man. Thus, English and Chinese descriptions also obey the sequence from ground to figure.

Hence, we cannot say English only adopts a bottom-up model which is from part to whole casually through the analysis of the existing exceptions. Through a large number of examples from The Moonstone and its Chinese version, it is proved that English and Chinese word order accord with people's cognitive sequence with regard to the description of spatial relations. Descriptive sequence of English and Chinese in spatial relation possesses the similarity because people's body and material experience are the basis for people's perceiving space and obtaining spatial thought.

C. Contrastive Study of Word Order from Logic Order

Chinese is a logical language, and the arrangement of its word order depends on logical thinking. Chinese word order complies with the sequence from cause to effect, from condition to result when describing things, while English word order is more flexible, which comes straight to the point first, and makes an explanation later. Thus English follows the

sequence from effect to cause. The following examples will show the differences between English and Chinese word order.

Example 10:

It is impossible you can see her for the present.

现在你要想去看她，是不可能的。

In English, the result is usually put in the first place. Describing causes or truth is placed later. In this example, English is from result to narration. In other words, English word order obeys effect-to-cause order. By contrast, according to logical rules, Chinese is in the opposite way.

Example 11:

They want to be certainly informed of the earliest period at which the pledge can be redeemed because that will be the earliest period at which the Diamond can be removed from the safe keeping of the bank.(2014:p.181)

因为那就是那颗钻石可能从保存在银行的保险柜里拿出来的最早日期，所以他们当然想要弄明白抵押品可能被赎回来的最早的日期。

This example shows that English accords with effect-cause order. The main clause precedes the adverbial clause of reason in English sentence. But the Chinese sentence is in the opposite way, which demonstrates that Chinese emphasizes logical order.

Example 12:

The search must be given up, because your young lady refuses to submit to it like the rest.(2014:p.99)

搜查必须取消了，因为你家小姐也像其他人那样拒绝接受搜查。

The search must be given up is the effect part, so English is from effect to cause. Chinese word order also follows the same sequence.

This example has the same situation. According to associated characteristics of figure and ground, figure is more salient and dependent on ground. In the cause-effect sentence, the effect part is figure, and cause part is ground. Effect-cause order in English belongs to normal word order at the level of grammar, and English takes the order from figure to ground in the clause of cause-effect. Chinese version takes the opposite order, namely, from ground to figure.

V. CONCLUSION

The contrastive study of English and Chinese word order is conducted from three aspects, namely, time order, space order and logic order. Similarities and differences between English and Chinese word order are examined from the perspective of figure-ground theory. According to figure-ground theory, when people are observing the spatial relation of two objects, one object is taken as the focus of attention, and another object as reference or background. The focus of attention is usually called "figure", the reference is regarded as "ground". Properties of figure and ground are divided into definitional characteristics and associated characteristics. Through the qualitative studies of English and Chinese word order, it is found that figure and ground has similar realizations in English and Chinese sentences or even paragraphs, which reflects that human beings possess the universal thinking modes. Nevertheless, the cognitive models are different through the analysis. he analysis of word order in English and Chinese sentences from The Moonstone and its Chinese version demonstrates that English word order adopts the basic cognitive structure from figure to ground, while word order from ground to figure is often seen in Chinese sentences according to the properties of figure and ground. Thereby, English word order differs from Chinese word order. Through this study, a conclusion can be drawn that different word orders are determined by different cognitive models.

Nevertheless, there are also some exceptions through the case study. In terms of space order, it is obviously found from above instances that both English and Chinese word order complies with the sequence from whole to part, namely from ground to figure. English and Chinese comply with the same cognitive model because the sequence that people perceive spatial location is similar. In other words, the sequence of things that people observe is from far to near, from big to small, from whole to part. Therefore, English and Chinese expressions have the similarities. Comparing the similarity of English and Chinese word order is aimed at exploring the common relations and laws of the two languages.

The value of this study lies in that English and Chinese word order are examined from cognitive perspective. In practical translation, different word orders in English and Chinese as well as arrangement of figure and ground should be noticed. In translation from English to Chinese, the ground part should be put at the beginning of the sentence because Chinese cognitive model is from ground to figure, and Chinese focuses on logic relation, but in translation from Chinese to English, the figure part should be put in the first place. Furthermore, the study gives a great contribution to providing an instruction for the translation between the two languages and language teaching and learning.

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