A study of word order errors made by Japanese learners of Chinese

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Summary

The aim of this thesis is to expain the common word order errors created by Japanese learners of Chinese and examine the potential reasons for errors from the aspects of Cross Linguistic Influence and Interlanauge Hypothesis, with the pursose of looking for better ways to teach Japanese learners and thus improve their acquisition of Chinese. In view of the fact that Chinese and Japanese are extraordinarily close in terms of Kanji writing system and vocabularies, SVO word order of Chinese, which is different from SOV word order in Japanese, becomes the biggest impediment for Japanese learners to master Chinese well.

Furthermore, the goal is planned to be achieved by means of analyzing sentences containing errorneous word orders made by Japanese learners, which are collected from the Hanyu Shuiping Kaoshi dynamic composition corpus as well as the answers of a written questionnaire that contains 12 questions of organzing given words to creat a correct sentence in Chinese.

Based on the analysis of word order errors from the learner corpus and the written questionnaire, over generlization of Chinese in the form of placing phrases like adverbial phrases and attributive addjectives at the end of a sentence, negative transfer, non-Japanese source reffered and insuffient acquisition of certain Chinese particles like 的 are the four reasons found that resulted in the word order errors examined, in which over generlization of Chinese and the negative transfer from Japanese are the two reasons accouting for the most word order errors. Regarding the over generlization of Chinese by placing adverbial phrases at the end of a sentence, one hypothesis is that because Chinese is a SVO language while Japanese is a verb-final but flexible language, and adverbials can be placed before verbs in a Japanese sentence. Thus over generating Chinese word order by simply moving verbs before obejcts to make the sentence a SVO word order would end up leaving adverbials at the end of sentence. Accrodingly, suggestions as realizing the existence of over generlization of Chinese and clarifying the wrong logic behind it, emphasizing the differences between Chinese and Japanese in certain types of word order and making the best advantages of the similarities between the two lanauges are given to avoid word order errors.

Foreword

Upon the completion of this thesis, I would like to take this opportunity to first express my sincere gratitude to my supervisor, Tomoko Okazaki Hansen, for her patient encouragement, insightful criticism and professional guidance through all the stages of writing this thesis as well as my over two-years-studying in UiO.

Additionally, I would like to thank all the people who kindly supported and participated in the written questionnaire presented in Chapter 4.

Also, I own my thanks to all the professors and lecturers in the Japanese Studies program at UiO that they maintain high standards of lectures all the time, even in the middle of the pandemic.

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Chapter 1 Introduction

The purpose of this thesis is to discover common word order errors by Japanese learners of Chinese and examine the reasons for errors with the intension of finding better ways to teach Japanese learners.

Second language acquisition has always been an interesting and attractive field for language teachers, and there are a great number of studies existing about language learning mechanism in second language as well, though most of them are related to English. Since I am Chinese myself and a learner of multiple languages, I know that comparison between Chinese and the target languages happens all the time. In addition, based on personal experience of teaching Chinese to Japanese learners, it is difficult to neglect that there are certain errors frequently made in their acquisition of Chinese. In spite of the fact that there are incalculable numbers of similar or even same words and phrases between Chinese and Japanese due to the borrowing Chinese words and Chinese characters, learning Chinese is not as easy as expected for Japanese learners. The similarities between the two languages indeed provide certain advantages for Japanese learners comparing with English speakers, while the different word orders remain as problematic. As a result, Japanese learners might be able to learn Chinese with a little more ease if they understand and master the Chinese word order better. And this is the starting point of my study. As I would like to go back to Japan to teach Chinese and Japanese in a language school, this study would also lend a hand to the work I will do in the future.

Thus, the research questions in my study are:

- (1) What are the most common word order errors made in the acquisition of Chinese for Japanese learners?
- (2) What are the factors causing the word order errors?
- (3) How can they avoid word order errors in Chinese?

And in order to answer the research questions, the first step is to survey and define the types of common word order errors, and this can be achieved by means of looking through a learner corpus that containing Japanese learners' productions. Considering that the data in corpora might be enormous and wide range, written tasks can be added to narrow down the range of word order errors. Afterwards, a close look at erroneous parts in the sentences that containing errors in word order is required, and I will try to

explain the mistakes from the aspect of Chinese and Japanese, for instance, why the word order made by Japanese learner is wrong in Chinese and what the correct Chinese word order is. Furthermore, I will inspect whether or not the wrong word order matches Japanese word orders, and accordingly investigate the role of Japanese played in the errors. Under the circumstances that neither Chinese nor Japanese word order can account for the word order errors made by Japanese learners, I will try to find other possible explanations such as overgeneralization of Chinese word order rules.

This thesis consists of five chapters. The second chapter is about theories used in my study. They are mainly Crosslinguistic Influence Hypothesis (Brown, 2007) and Interlanguage Hypothesis in Second Language Acquisition (Selinker, 1972). And the most important concepts in the two theories are language transfer (negative or positive), interlanguage and fossilization phenomenon. The Crosslinguistic Influence Hypothesis introduces the positive or negative transfer from the first language of learners to the target language in learning. While Interlanguage Hypothesis implies that learners have their own linguistic system of the target language in learning, (i.e., interlanguage), and the concept of fossilization that certain linguistic rules of native language are apt to be kept in interlanguage suggests the possibility of observing negative transfer in learners' interlanguage.

In the third chapter, two previous studies are introduced. One is about a principle-based taxonomy of Chinese L2 word order errors studied by Wenying Jiang and the other study is about detecting word ordering errors in Chinese sentences for learning Chinese as a foreign language by Chi-Hsin Yu and Hsin-Hsi Chen. Jiang's principle-based taxonomy of word order errors in Chinese sheds light on understanding Chinese word order and categorizing word order errors, while Yu and Chen's study shows a general analysis of all word order errors collected in Hanyu Shuiping Kaoshi dynamic composition corpus¹.

In Chapter four, the introduction of corpus analysis and written questionnaire as research methods employed in my study are presented, as well as the analysis of the data collected through the two methods. In the last chapter the summary of the whole thesis and the conclusion of the result of analyzing data from HSK corpus and written

¹ Hanyu Shuiping Kaoshi: 汉语水平考试, Chinese Proficiency Test, i.e. HSK corpus.

Chapter 2 Theories in Second Language Acquisition

2.1 Crosslinguistic Influence in Second Language Acquisitin

2.1.1 From Contrastive Analysis Hypothesis to Crosslinguistic Influence

In the beginning of Second Language Acquisition (SLA) Study, second language, in the same as mother tongue, was considered being learned by imitating people around and practicing repeatedly, due to the prosperity of behaviorism² at that time. And linguistic features and items in the second language which are different from the mother tongue are thought more difficult to be acquired. In contrast, the linguistic features and items which are similar to mother tongue would be easier to be mastered³. Contrastive Analysis Hypothesis (CAH) was developed subsequently based on the above claim. And as stated by Brown (2007) that deeply rooted in the behavioristic and structuralist⁴ approaches of the day, the CAH declared that the principal barrier to second language acquisition is the interference of the first language system with the second language system, and that a scientific, structural analysis of the two languages in question would yield a taxonomy of linguistic contrasts between them which in turn would enable linguists and language teachers to predict the difficulties a learner would encounter. (Brown, 2007, p. 248) Moreover, Wardhaugh (1970) claimed that the contrastive analysis hypothesis exists in two versions: a strong version and a weak version. And the strong one presented the idea that it is possible to contrast the system of one language — the grammar, phonology and lexion — with the system of a second language in order to predict those difficulties which a speaker of the second language will have in leaning the first language and to construct teaching materials to help him learn that language (Wardhaugh, 1970, p. 124). In other words, the strong version of the CAH attempts to make predictions of learning difficulties via contrastive analysis.

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² Behaviorism refers to the attempt by Bloomfield to define the meaning of a language form as the situation in which the speaker utters it and the response it calls forth in the hearer (Blommifield, 1993, pp.20). Behaviorism analyzes semantics in context and pays more attention to human psychological activities. It also believes that the meaning of language exists in the response of language users to the received words in the process of communication. Bloomfield, L. (1933). Language. Chicago, University of Chicago Press.

³ Shirahata, T. and S. Wakabayashi. and H. Muranoi. (2010) Syosetsu Dainigengo shutokukenkyu-riron kara kenkyuho made. (詳説:第二言語習得研究-理論から研究法まで) Tokyo, Kenkyusya. pp. 7. Translated by author.

⁴ Structuralism defines that the linguist's task is to describe human languages and to identify the structural characteristics of those languages. And it proposes the notion that language could be dismantled into small pieces or units and that these units could be described scientifically, contrasted, and added up again to form the whole. Brown, H. D. (2000). Principles of language learning and teaching. White Plains, N.Y, Pearson. pp.8-9.

In order to achieve this goal, the strong version demands first a comprehensive linguistic theory to formulate a set of linguistic universals that can deal with syntax, semantics and phonology sufficiently. Secondly it also requires a theory of contrastive linguistics that can be used for yielding the correct collection of contrasts between the two languages by placing entire linguistic descriptions of the two languages in. However, owing to the facts that the two demands above cannot be completely met in reality and the process of acquiring a language is not static but dynamic, the strong version lost its viability. And the contrastive analysis under the strong version failed to predict every difficulty arose in learning. This sheds light on that learning difficulties are not incontrovertibly caused by the dissimilarities between first language and the second language on all occasions. Meanwhile, the second language indeed has inherent ease or difficulty in linguistic rules itself.

On the other hand, the weak version of the CAH, which is derived from the proof presented by language interference, brings attention to an observational use of contrastive analysis that linguists and teachers can use their linguistic knowledge of the two languages in question to figure out sources and reasons of observed difficulties. Differing from the strong version of CAH implying the a priori prediction of difficulties, the weak version recognizes the existence of interference across languages as well as its ability to account for difficulties more profitably in a posteriori way. According to Brown (2007), the weak version of the CAH is what remains today under the label Cross-linguistic Influence (CLI) (Brown, 2007, p. 252).

CLI suggests that the remarkable role of prior experience played in any learning act is well recognized and we must not disregard the influence of the first language as prior experience. It is worth noting that CLI nowadays emphasizes more the influence rather than prediction.

2.1.2 Approaches and evidences for Cross-linguistic Influence definition

In order to analyze CLI, proper approach must be determined first. In 2008, Jarvis and Pavlenko suggested two general approaches to investigate cross-linguistic influence, that are intrasubjective approach and intersubjective approach. The intrasubjective approach does focus on individuals; more precisely, it focuses on the patterns of CLI found in the language use (production or comprehension) of individuals (Jarvis and Pavlenko, 2008, p. 30). While the intersubjective approach focuses on patterns of

language use observed in relative large, well defined groups of language users (ibid. P. 31), the intrasubjective approach and intersubjective approach are commonly framed as case studies and cross-sectional studies respectively. Although the intrasubjective approach can offer interpretational validity in examining CLI, it would be deficient in generalizability just via a case study of a single learner and time-consuming is also one of its disadvantages. In contrast, the main advantage of the intersubjective approach is generalizability and its main disadvantage is the potential insufficient attention to the unique characteristics of the participants and the environments when collecting data, which nevertheless can be supplemented to some extent by qualitative analysis of patterns found in individuals' language use. Considering that my study focuses mainly on the potential reasons accounting for the word order errors made by Japanese learners of Chinese, but not the transition of Japanese learners' acquisition of Chinese, and also limited by time and the realities of the situation, the intersubjective approach is more doable and suitable in my case. Therefore, the intersubjective approach framed as cross-sectional studies would be employed to investigate CLI in my study.

The step after investigating CLI is of course to make identification of it, and three types of evidence are suggested by Jarvis and Pavlenko to be rested on, that are intragroup homogeneity, intergroup heterogeneity, and crosslinguistic performance congruity (ibid. P. 41). Jarvis and Pavlenko pointed out that all three types of evidence are connected by a underlying link, in that they all indicate a potential relationship between the knowledge of the source language and the recipient language in performance. And the source language and the recipient language refer to the language from which CLI effects originate and the language being examined for CLI effects respectively⁵. Regarding the first type of evidence, intragroup homogeneity exists whenever a group of language users who are mutually comparable in the source language as well as the recipient language behave similarly in the recipient language. This is to say, if language users' source-language knowledge is presumed to have influence on their recipient-language use, then when a group of language users shares similar knowledge of a source language, they should be expected to show a high

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⁵ Jarvis and Pavlenko clarified that the reason for using the terms 'source language' and 'recipient language' instead of the first language (L1) and the second language (L2) is that the source language is not necessarily always L1 and the recipient language is not always L2 either, such as in cases of L2 influence on L1, the source language becomes L2 while the recipient language is L1.

Jarvis, S. and Pavlenko, A. (2008). *Crosslinguistic influence in language and cognition*. New York, Routledge, pp.41.

degree similarity in recipient-language use as well. And also if so, then groups of language users speaking different source languages should be expected to show obvious differences in their use of the same recipient language, and this is the second type of evidence: intergroup heterogeneity. Finally, crosslinguistic performance congruity, as the third type of evidence, is explained as since language users' knowledge of a source language determined their source-language performance, then if their source-language knowledge is presumed to affect their performance in a recipient language. In other words, the language users are supposed to show similarities between their source-language performance and the recipient-language performance. Although the crosslinguistic performance congruity is similar to intragroup heterogeneity, Jarvis and Pavlenko claim that crosslinguistic performance congruity goes further by specifying that language users' behavior in source- and recipient-language should not only be quantitatively analogous in terms of homogeneousness degree, but should also be qualitatively identical in terms of the actual language structures and patterns that are produced (ibid. P. 47). Therefore, what in the knowledge and performance of language users' source-language has caused the observed patterns in their performance of recipient language would be shown more explicitly by cross linguistic performance congruity.

In spite of three different types of evidence available to identify CLI, it is important to take all of them into consideration to approve rigorously that a purported crosslinguistic influence effect is surely the consequence of CLI, for the reason that other factors such as universal language learning principles may cause similarities between different language users' performance in the same recipient language as well.

2.1.3 Consequences of Cross-linguistic Influences

In addition to the three types of evidence above, common outcomes of CLI also can provide another perspective to confirm whether certain pattern or error, word order errors in this case, could arise from CLI or not. The cross-linguistic influence generated by similarities and differences between the source language and the recipient language can be the causes of positive transfer, negative transfer and differing lengths of acquisition. Generally speaking, cross linguistic similarities tend to produce positive transfer while cross linguistic differences tend to generate negative transfer. For example, learns would comprehend and product the recipient

language with ease in the circumstance that the source language and the recipient language share great similarities in vocabulary and writing systems. In spite of the general tendency above, cross-linguistic similarities can also bring about negative transfer from time to time, for instance the words that look or sound similar in two languages but in fact differ greatly in meaning, namely the false friends. Taking Japanese and Chinese as example, although they both have the word '大家', yet the meaning is totally different, in that it means 'every one' in Chinese and 'owner' in Japanese. Negative transfer in comprehension thus would arise when it comes to the question '大家看了吗?' 6.

With regard to negative transfer, Odlin (1989) divided it into four categories, that are overproduction, underproduction, production errors and misinterpretation (Odlin, 1989, p. 36). Underproduction, such as avoidance, arises when learner's production of certain linguistic structure in the target language is noticeably less than the counterpart in the first language because of great structural difference between the two languages. And the evidence of underproduction can be found in Schachter's study (1974) about Chinese and Japanese students of ESL and the study from Kleinmann(1977). Regarding overproduction in the target language, it can be generated by the influence from a similarly high frequency of using certain structure in the first language. And it can be a consequence of underproduction of other structures at the same time, as learners make great effort to avoid certain difficult structures, they correspondingly need to produce more simple structural sentences instead. It is worth being reminded here that both overproduction and underproduction are signs of insufficient or failed acquisition of the target language in essence, regardless of the fact that produced structures in target language are correct. Concerning production errors, substitutions, calques and alterations of structures are the three types of production errors that similarities and differences between the first and the target languages particularly likely to bring about.

First of all, substitutions refer to employ words or forms in the first language into the target language, such as directly placing Japanese character 週(week) in the Chinese phrase '一週一次(once a week)' while the correct Chinese is '一周一次'. Although the meaning is the same, '一週一次(once a week)' is considered wrong in the exam

^{6 &#}x27;大家看了吗?' means 'did every one see (it)' in Chinese, while it means 'did the owner see (it)' in Japanese.

due to the wrong character '週'. Being similar to substitutions, calques refer to errors indicating highly closely similar structures as in the first language and are also called loan translations occasionally. There are various types of calques, while phraseological calque and syntactic calque are the two types usually shown in idiomatic expressions and word-order errors respectively, which is relevant for my case study. For example, a Japanese learner's translation of '地位/最高的/和尚 (position/the highest/monk, means the monk of the highest position)' would be '最/ 地位/高的/和尚(most/position/high/monk)', which is evidently affected by Japanese word order. In respect of substitutions and calques, Odlin (1989) stressed that substitutions and calques are frequently referred in bilingualism studies discussing transfer errors since they might suggest that an obvious correspondence between the first and target language is inevitably involved in transfer. Moreover, calques are the sole type of error being evidence of influences from the first language in all cases. Finally, misinterpretation indicates that phonology, word-order patterns or cultural assumptions in the first language might lead to a wrong way of interpreting messages or inference in the target language.

Although there remains controversy in emphasizing the role of language transfer as well as CLI in SLA, the existence of language transfer and the influence from the first language cannot be denied or overlooked. Meanwhile, as in the conclusion from Odlin (1989) that in syntax, cross-linguistic influence is evident in a number of areas, including word order, articles and verb phrases (ibid. P. 152). Therefore in my study, I will apply CLI as the theoretical grounding and mainly focus on exploring factors that result in calques referring to word order errors from Japanese learners of Chinese.

2.2 Interlanguage Hypothesis in SLA

2.2.1 Basic concept about Interlanguage Hypothesis and its core: fossilization

As the development in SLA, Larry Selinker suggested the Interlanguage Hypothesis in 1972, which is the other theoretical grounding of my study. According to Selinker, Interlanguage is the linguistic/cognitive space that exists between the native language and the language that one is learning. And Interlanguages are non-native languages which are created and spoken whenever there is language contact (Selinker, 2014, p. 223). This is to say, interlanguage would be created when learners make an effort to

convey meanings in a target language, and in this case learners' interlanguage is not only a linguistic system independent from both the native language and the target language, but also a continuum or approximation from the native language of a language learner to the target language. Although interlanguage is not the same as the native language nor the target language, it can be unlimitedly close to the target language. Furthermore, Selinker also proposed that fossilization is one of the important characteristics of learners' interlanguage and stated that fossilization refers to linguistic items, rules, and subsystems which speakers of a particular native language will tend to keep in their interlanguage relative to a particular target language, no matter what the age of the learner or amount of explanation and instruction he receives in the target language. (Selinker, 1972, p. 215). And according to Selinker, language transfer can be one reason for fossilization if fossilizable items, rules and subsystems which occur in interlanguage performance are a result of native language (ibid., P. 216). Odlin (2008) confirmed this perspective as well by claiming that learners often do not become proficient in the target language and that several factors contribute to learner difficulties, one of them being transfer. For example, learners' apparent permanence of foreign accents, which is probably the most salientbut not the only-indicator that cross-linguistic influence contributes to fossilization (Odlin, 2008, p. 457). In addition to language transfer, Selinker (2014) deems that transfer of training, learning strategies, communication strategies and overgeneralization are the other four central processes giving rise to the fossilization. In conclusion, based on the above theory, the production from Japanese learners of Chinese would approximate to Chinese and be neither homogeneous as Japanese nor as Chinese, and most importantly Japanese learners are prone to carry on Japanese rules or forms in learning Chinese, regardless of their age and length of learning. And it is necessary and valuable to pay attention to the role of transfer played in constructing learners' interlanguage.

2.2.2 Developed Fossilization Hypothesis

The fossilization hypothesis has been further developed since Selinker proposed it. Han (2009) created an analytic model of prognoses (figure 2.1) about acquisition and fossilization, by means of seizing the interaction between first language variable and input variable of second language. And the first language variable is expressed in

terms of 'markedness7' while the second language variable is in 'robustness'8.

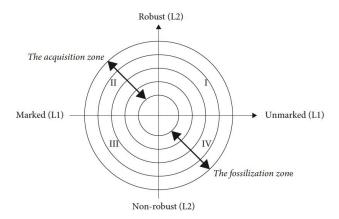


Figure 2.1 Prognoses about acquisition and fossilization (Han, 2009, p.147)

As shown in figure 2.1, the fossilization zone is featured with unmarked first language and non-robust second language. And the acquisition zone is generated by marked first language and robust second language input, conversely unmarked first language and non-robust second language input would lead to the fossilization. For instance, English articles are prone to fossilization in Chinese-English interlanguage. For the reason that English is a language with articles such as 'a' and 'the', which are frequent but pragmatically variable to a great extent. However, there are no articles in Chinese, which means that article in Chinese is an invariant basic category without actual use, and the non-usage of articles in Chinese is accordingly unmarked. As a result, the English articles border the fossilization zone. And Chinese learners of English make sentences containing article errors from time to time. For instance, the erroneous sentences as 'I am not English man, I am Chinese' and 'I stayed in the hotel near the park', which misuses the article 'an' and 'the' respectively. Regarding to the markedness of first language and the robustness of second language input, Han (2009) illustrates further with figure 2.1 and 2.2.

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⁷ Linguistic markedness is the idea that, given a set of linguistic categories, there is often a sense that one category is more basic or simpler than the other, The more basic category is referred to as unmarked, and is often thought of as a default, while the less basic category is referred to as marked. For example regarding singular and plural, singular is the basic category and hence referred to as unmarked, while plural is less basic and referred to as marked. Haskell, Mansfield, C. D., & Brewer, K. M. (2011). Linguistic markedness and category learning. *Language and Cognitive Processes*, 26(8), pp.1022. Available from doi: https://doi.org/10.1080/01690965.2010.503438. [Accessed 12 April 2022].

⁸ Robustness measured the property of second language input. Second language input could be strongly and stably mastered by learners, which would be considered as robust in this case. Conversely, non-robust input refers to that the second language input could not be mastered by learners strongly and stably.

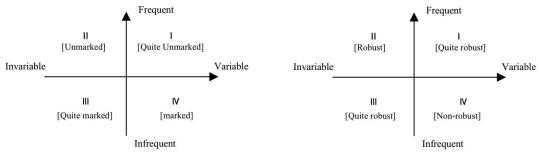


Figure 2.1 L1 markedness (ibid., p.143)

Figure 2.2 L2 input robustness (ibid., p.144)

As shown in the figure 2.1 and 2.2, both the markedness of first language and the robustness of second language input are measured by two variables: frequency and variability. Frequency refers to the number of times a given form used in first language or shown in second language input, and variability refers to the form-meaning-function relation intrinsic to that form (Han, 2014, p.61). As a result, a construction in first language that is [-frequent] and [+variable] can be marked, while one that is [+frequent] and [-variable] would be unmarked. On the other hand, the input of a construction in second language that is [+frequent] and [-variable] can be robust, while one that is [-frequent] and [+variable] would be non-robust.

In other words, when a second language form encodes only one meaning and frequently appears in the input, it can be a powerful input. Furthermore, when the counterpart in first language has many other forms encoding the same or similar meanings and is infrequently used, learners can acquire the form in second language rather well. By contrast, when multiple forms encode the same or similar meanings in second language and show infrequently in the input, the input of the forms is less sturdy. On top of that, there is just one or few counterpart in first language, which is frequently used, the features of first language tend to be kept in learners' interlanguage. Based on the prognoses about acquisition and fossilization, Han claims that fossilization is construction-, learner- and language-specific, which thus can explain inter-learner and intra-learner differential success. And though reviewing forty years of research about interlanguage in SLA, she further concludes that fossilization is selective and affects the acquisition of second language structures encoding variable form, meaning, and function (discourse pragmatics) relations. In addition, fossilization is inspired by a first language-relativized mind⁹, induced or

Han, Z.-H. (2014) From Julie to Wes to Alberto Revisiting the construct of fossilization. In: Han, Z.-H. and E,

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⁹ As explained by Han that a first language-relativized mind means the mind is tuned to the first language. In other words, the mind is based on the first language.

reinforced by second language input attributes (ibid., p. 66).

The Interlanguage Hypothesis has been widely recognized and further developed in the field of SLA today, owning to the fact that the dynamic essence of the learner's language system is admitted through the concept of interlanguage, which also extends explanations to understand continual changes of learner language more appropriately. Last but not least, Traone (2014) argued that the interlanguage hypothesis should be understood as a proposal asking us to think as widely as possible about what the nature of a possible interlanguage linguistic system might be, and how we can gain insight into that by gathering empirical data (Traone, 2014, p. 9). In this study, the Interlanguage Hypothesis will be regarded both as a theoretical ground and as a question-asking model, since it admits the existence of Japanese learners' interlanguage system of Chinese, and accordingly brings out a variety of questions to figure out the characteristics of the interlanguage system, especially about the fossilized features in word order and reasons behind it.

Chapter 3 Previous studies

3.1 A principle-based taxonomy of Chinese L2 word order errors by Wenying Jiang

Realizing the paucity of study about Chinese word order in the field of SLA (Second Language Acquisition) and also inspired by her own teaching experience, Wenying Jiang (2009) examined four different SLA approaches that are the Universal Grammar approach, the Processability Theory approach, the Competition Model approach and the Cognitive Functionalist Approach, and finally applied Cognitive Functionalist Approach as the most appropriate theoretical framework for her project to investigate Chinese L2¹⁰ word order errors (Jiang, 2009, pp.18). The Cognitive Functionalist Approach, which is based on human cognition, highlights that the grammatical structure of natural languages reflects human conceptualization of the physical world. However, languages display differences because they conceptualize the same situation

¹⁰ According to Jiang, L2 here refers to both second language and foreign language. Jiang, W., 2009. *Acquisition of word order in Chinese as a foreign language*, New York, Mouton de Gruyter Berlin. pp.18-19.

Tarone, eds. Interlanguage: Forty years later. Amsterdam, John Benjamins Publishing Company, pp.66.

from different perspectives. Chinese and English language users may conceptualize their temporal relationships in a different way, and the differences can be mirrored in the different syntactic structures and vocabularies. For instance, the conceptualizations of time for English speakers' is horizontal while for Chinese speakers can be vertical, as shown in the expressions of 'last month' and 'next month' in English while '上个月(up/counters/month)' and '下个月(down/measure word/month)'. In contrast to 'last' and 'next' used as horizontal metaphors, '上(up)' and '下(down)' are prepositions expressing vertical positions and are used as vertical metaphors in this case. In brief, linguistic structures are shaped by people's conceptualization of the real world and people employing different way of conceptualizing accordingly have different linguistic structures to some extent. And based on the review of three core areas in the Cognitive Functionalist Grammar, that are space and time, categorization, and iconicity, Jiang suggested that Chinese word order is possibly governed by underlying principles, such as the Whole-Before-Part Principle (WBP) in expressing spatial and temporal relationships and the Principle of Temporal Sequence (PTS) in arranging word order of relevant events and situations (Jiang, 2009, pp56). The principle of Whole-Before-Part (WBP) demands that a larger scope come before a smaller scope with regard to space, time and amount, such as writing address in Chinese, the sequence should be 'country-city-suburb-street-house number'. The Principle of Temporal Sequence (PTS) demands that the order of linguistic elements follows the sequence of the temporal order of states or situations that they represent, which accordingly requires that what happens earlier precede what happens later (ibid., p.77). For instance, to express the meaning "I want to study in Japan after I graduate from university" in Chinese, 'I graduate from university has to precede 'I want to study in Japan', because 'I' need to graduate first before 'I' can go to study in Japan.

By means of the Cognitive Functionalist Approach and Error Analysis, Jiang (2009) then analyzed a total of 408 written word order errors in three genres of letter, web-diary and essay that are collected form 116 L2 learners of Chinese in three different proficiency levels. And the proficiency levels are based on participants' institutional status: first year = level 1, second year = level 2 and third year = level 3 since the participants were all students who were registered in the Chinese language program at The University of Queensland in Australia. Jiang accordingly developed a

comprehensive taxonomy of Chinese L2 word order errors, which includes categories of four domains, seven principles, fourteen sub-principles and eleven sub-principle types. And all categories are organized by incorporating more specific categories into more general categories, which means that four domains are most general categories while sub-principles are most specific categories under each domain. The details are as shown in the following table from Jiang (pp.176).

A principle-based taxonomy of Chinese L2 word order errors by Wenying Jiang (pp.176)

Domain	Principle	Sub-principle	Sub-principle type
	1. GPP (The Greenberg Pattern Principle)	1.1 Question	
Grammatical		1.2 Topic-comment	
Grammatical	2. MBH (The Principle of Modifier Before Head)	2.1 Modifier + N	
		2.2 De Position	
	3. PTS (The Principle of Temporal Sequence)	3.1 Action Series	3.1.1 Natural Iconicity
			3.1.2 Conceptual Iconicity
			3.1.3 Action Direction
			3.1.4 <i>Le</i> Position
		3.2 Locative Expressions	3.2.3 Location + V
			3.2.4 V + Location
Conceptual		3.3 Time Expressions	3.3.1 Time + V
			3.3.2 V + Time
			3.3.3 Duration +
			Mei(you) + V
		3.4 Beneficiary	
		3.5 Modifiers of V	3.5.1 Adv + V
			3.5.2 V + Adv
		3.6 Subsidiary Relations	
		ROTATIONS	

	4. WBP (The Principle of Whole Before Part)	4.1 Temporal Scope 4.2 Spatial Scope 4.3 Time + Space + Manner + V 4.4 General +Particular	
Functional	5. PCD (The Principle of Communicative Dynamism)		
	6. PF (The Principle of Focus)		
Sociocultural	7. EP (The Empathetic Principle)		
Other			

^{*}N = Noun, V = Verb and Adv = Adverb. De is the possessive particle 的, Le is the particle 了 that indicates completion of an action here, and Mei(you) is the negation expression 没(有).

As shown in the table, four domains are respectively Grammatical, Conceptual, Functional and Sociocultural domains. Taking Conceptual domain as an example, which is relevant to my study, Jiang gave this domain based on the argument from Both Langacker (1987) and Tai (1989a) that a natural language system itself is a symbolization of the conceptualized world, thus language is governed by conceptual principles (ibid., p.87). And the principles governing Chinese word order under this domain are The Principle of Temporal Sequence (PTS) and The Principle of Whole Before Part (WBP). As mentioned above, PTS requires that the order of linguistic expressions is consonant with their temporal order in the conceptual world. And it can be further demonstrated in six sub-principles, that govern the word order of expression about action, location, time, beneficiary, modifiers of verb and subsidiary relations. And with regard to the sub-principle about Time Expressions in Chinese, based on the temporal relations between the time (punctual time or temporal duration) and the verb, and time expression can come either before a verb, that is punctual time, or after a verb, that is temporal duration. For instance, in the sentence '我/7 点/吃/晚 饭(I/eat/dinner/at 7 o'clock)', punctual time '7 点(7 o'clock)' precedes the verb '吃 (eat)', while in the sentence '他/等/一个小时了(he/ has waited/ for one hour)' the

verb '等(wait)' precedes the temporal duration '一个小时(one hour)'.

However, in the case that a temporal duration is utilized in a sentence demonstrateing negation, the verb comes after the temporal duration and the negation expression 'Mei(you)'. For instance, to express the meaning 'I have not been back to hometown for 3 years' in Chinese, the temporal duration '三年(3 years)' will precede the negation expression '没(mei)' to express 'I never go back to hometown in this 3 years', so that it will be '我/三年/没/回老家了(I/3 years/ negation/ be back to hometown)'. As a result, the Sub-principle about Time expression is divided into three sub-principle types in the table above, that are: Time + V(erb), V + Time and Duration + Mei(you) + V. Followed by this pattern to categorize, this taxonomy thus explains the core operating system ruling Chinese word order as well. At the same time, Jiang's new taxonomy is based on a single criterion¹¹, that is violating any basic word order principle, sub-principle or sub-principle type shown in the table. In other words, Jiang employed all the principles determining Chinese word orders in the table to decide if a word order made by participants in the project is an error, and accordingly label and sort the error under the principle it violated. Therefore, the table above shows not only a new taxonomy of Chinese word order errors but also a summary of Chinese word order rules in category.

What's more, Jiang also reported error rates for all word order error categories in the new taxonomy via a quantitative analysis of the word order errors selected from the collected written production data. And based on her analysis, the Principle of Temporal Sequence (PTS) and the Principle of Whole Before Part (WBP) in the seven principle categories were the principles that caused the most errors across all three proficiency levels. Secondly, among the fourteen sub-principles, the sub-principles under each principles categories that have higher error rate are respectively:

1) Topic-comment sub-principle under GPP (15 out of 21=71.4%)¹²

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¹¹ Although Chinese word order can be flexible in certain context, the violation of basic word order principles leads to word order error in general. Thus, generally speaking, Jiang's claim is considered correct and her new taxonomy can be used in my study.

¹² Such as the error no.60 in the appendix (pp.243)'我男朋友/有/好的/脾气(my boyfriend/ has/ a good/ temperament)' should be '我男朋友/脾气/好((As for)my boyfriend/ (his) temperament/ is good)', since the topic-comment principle in Chinese requires that when a sentence expresses a comment about a topic, the word order would be topic first and comment comes after instead of using SVO structure.

- 2) Modifier + N sub-principle under MBH (24 out of 38 = 63.2%)¹³
- 3) Spatial Scope sub-principle under WBP (31 out of 70 = 44.3%)¹⁴
- 4) Time Expressions sub-principle (68 out of 249 =27.3%)
- 5) Modifiers of V sub-principle (62 out of 249 = 24.9%) under PTS¹⁵.

Finally, regarding the sub-principle type categories under the Time Expressions sub-principle and the Modifiers of V sub-principle that have higher error rates are respectively:

- 1. time + V sub-principle type $(34 \text{ out of } 68 = 50\%)^{16}$
- 2. V+ time sub-principle type (27 out of 68 =39.7%)¹⁷ under Time Expressions sub-principle
- 3. Adv + V sub-principle type under Modifiers of V sub-principle (51 out of 62 =82.3%)¹⁸.

The error rates for all word order error categories demonstrated by Jiang clearly show which part of the operating system that rules Chinese word order is difficult for English learners of Chinese.

Jiang categorized Chinese word order errors based just on one criterion, that is violating any basic principle, sub-principle or sun-principle type of Chinese word

¹³ For instance, the error no.10 in the appendix (pp.233) '我/是/服务员/的/日本饭店(I/ am/ waitress/ *de*/ Japanese restaurant)' violates the Modifier + N principle, in that modifier of a noun precedes the noun and usually connects with the noun by the possessive particle 的(de). thus the correct sentence should be '我/是/日本饭店/的/服务员 (I/ am/ Japanese restaurant/ *de*/ waitress)'.

¹⁴ For example, the error no.219 in the appendix (pp.275) '我家/在/十二号/cedar 路(my home/ at/ No.12/ cedar road)' violates the Principle of Whole Before Part, in that a larger scope precedes a smaller scope in terms of space in Chinese. Thus the correct sentence should be '我家/在/cedar 路/十二号(my home/ at/ cedar road/ No.12)'.

¹⁵ For the reason that there are more specific sub-principle types under the Time Expressions sub-principle and Modifiers of V sub-principle, examples will be given under each sub-principle types.

¹⁶ For example, the error no.26 in the appendix (pp.236) '咱们去/星期五(we/go/Friday)' should be '咱们/星期五/去(we/Friday/go)' according to the Principle of Whole Before Part and its Time Expressions sub-principle. Since '星期五(Friday)' is a punctual time representing an earlier temporal state than the verb '去(go)', and hence '星期五(Friday)' precedes '去(go)' syntactically.

¹⁷ Such as the error no.33 in the appendix (pp.237) '我/在老家/四个年/工作(I/ at hometown/ 4 years /work)' should be '我/在老家/工作/四年(I/ at hometown/ work/ 4 years)' since the temporal duration '四年(4 years)' is a result of the action '工作(work)', thus it must come after the verb '工作(work)' according to the Principle of Whole Before Part and its Time Expressions sub-principle.

¹⁸ For example, the error no.346 in the appendix (pp.302) '我/必须/学习/努力(I/ must/ study/ hard)' should be '我/必须/努力(地)/学习(I/ must/ hard/ study)' since according to the Modifier of V sub-principle that adverb must precede a verb when the adverb functions as an adverbial indicating the manner of the verb, while adverb follows a verb when it functions as a complement indicating the resultant state from the action denoted by the verb. The adverb '努力(地)(work)' indicating the manner thus should precede the verb '学习(study)' in this sentence.

order. Therefore, as stated by Jiang, the new taxonomy is not only a taxonomy of Chinese L2 word order errors but also a taxonomy of the core operating system governing Chinese word order. Thus, this taxonomy contributes to the key operating systemic interpretation of Chinese word order, and describes and explains Chinese word order errors in a systematic way. However, on the other hand, the taxonomy only shows a word order made by L2 learners of Chinese is an error according to the basic word order, but fails to answer the reason why learners made such word order errors. And Jiang simply attributed the word order errors to the influences from learners' L1, in that in the matter of word order, learners' conceptualizations of the world seemed to still be based on their L1 to a great extent.

Nonetheless, the reasons for word order errors could be more complicated than just L1 influences, as explained in the following chapter. As a result, more studies need to be conducted to reveal the reasons why L2 learners of Chinese make systematic word order errors. Although Jiang studied word order errors from English learners of Chinese, it still sheds light on my study of word order errors from Japanese learners of Chinese, in that it is to analyze word order errors from the aspect of the Cognitive Functionalist Approach for the reason that learners' conceptualizations of the world such as time and space would have influence on their choice of relevant word order. And more importantly, the taxonomy provides coherent and comprehensive principles in sorting Chinese word order errors made by foreign learners, which could be applied in my study in determining whether a sentence includes word order error, and if so, what kind of word order error it is. And the error rates calculated by Jiang might reveal the principles in Chinese word order that are difficult for L2 learners of Chinese with different L1 as well, for the reason that the high error rates in the Principle of Temporal Sequence (PTS) and The Principle of Whole Before Part (WBP) also appeared in my analysis of HSK corpus in terms of word order errors made by Japanese learners.

3.2 Detecting word ordering errors in Chinese sentences for learning Chinese as a foreign language by Chi-Hsin Yu and Hsin-Hsi Chen

As a part of the study about detecting word ordering errors in Chinese sentences for learning Chinese as a foreign language, Chi-Hsin Yu and Hsin-Hsi Chen (2012,

pp.3006) found that there are 35,884 errors at sentence level in HSK dynamic composition corpus and among them 8515 sentences (about 24%) contain word order errors, which thus makes word ordering error the most frequent type of errors at sentence level in HSK corpus. Yu and Chen subsequently examined 200 sentences sampled from the 8515 sentences in order to categorize the word ordering errors. According to their analysis, the word ordering errors can be classified into five categories, which are adverb ordering error, subject/verb/object ordering error, prepositional phrase position error, prenominal adjective ordering error, and others (ibid., p.3007). And under the category of 'others', covert error sentences that need to be interpreted in some specific way to be correct are also included.

Regarding each category of word order errors, the adverb ordering error relates to the position of adverbs in a sentence, for instance, in the Chinese sentence '也/她/很/关心(also/she(is)/very/concerned)', the adverb '也(also)' should be placed after the subject '她(she)'. This is because that adverb '也(also)' in this sentence is used to indicate that the subject '她(she)' shares the similar property '关心(concerned)' with someone else, it thus comes after the subject to achieve its function in the correct sentence '她/也/很/关心(she(is)/also/very/concerned)'.

And the subject/verb/object ordering error relates to the position of subject, verb and object, such as the wrong position of verb '休学(drop out)' in the sentence '我/休学/大学/来/中国/了(I/drop out /university/(and) come to/China/completion)', which should come after the noun '大学(university)' since the verb '休学(drop out)' is an intransitive verb and the noun '大学(university)' is not its object. In addition, the phrase '大学/休学(university/drop out)' is a kind of topic-comment structure and the correct sentence should be '我/大学/休学/来/中国/了(I/university/drop out/(and) come to/China/completion)'.

Moreover, as given by Yu and Chen as an example for explaining the prepositional phrase position error, the prepositional phrase '在/贵国(in/your country)' must come before rather than after the verb '留学(study)' in the erroneous sentence '我/留学/在/贵国(I/study/in/your country)'. And the Principle of Temporal Sequence mentioned by Jiang in the former section can be employed to explain this error, that due to the fact that the temporal state of '在贵国(in your country)' is earlier than '留学(study)', the prepositional phrase '在贵国(in your country)' precedes the verb '留学(study)'

and hence becomes '我/在贵国/留学(I/in your country/study)'.

With reference to the prenominal adjective ordering error, it concerns the order of adjectives preceding a noun. For instance, in the erroneous sentence '我/遇到了/才貌双全的/一位/女人(I/met/ beautiful and wise/one/woman)', there are two parts functioning as prenominal adjectives that are '才貌双全的(beautiful and wise)' and '一位(one)', which in fact are attributive phrases modifying a noun as well. When there are multiple attributive phrases modifying a noun in Chinese, a priority exists among the modifiers. And in the case above, the prenominal adjective '一位(one)' functioning as a restrictive attribute precedes the prenominal adjective '才貌双全的 (beautiful and wise)', which is a descriptive attribute. As a result, the correct sentence is '我/遇到了/一位/才貌双全的/女人(I/met/one/beautiful and wise/woman)'.

With regard to the frequency of each category, the most frequent error categories are adverb ordering error (35.0%) and subject/verb/object ordering error (32.0%), while prepositional phrase position error and prenominal adjective ordering error only make up 20.5% and 6.0% respectively. Although Chi-Hsin Yu and Hsin-Hsi Chen's study is mainly about the automatic detection of word ordering errors in Chinese sentences for foreign language learners, their analysis of error types in a sentence level in HSK corpus as well as five error categories correspond to my analysis of HSK corpus. Based on the analysis of 1132 out of 2915 erroneous sentences from HSK corpus, the most frequent error types made by Japanese learners of Chinese are the orders of adverbs and subject/verb/object as well. Meanwhile, the calculation by Yu and Chen that word ordering error is the most frequent type of errors at sentence level (8515 (about 24%) out of 35,884) in HSK corpus, emphasizes the importance of Chinese word order for foreign language learners of Chinese.

In conclusion, both Jiang's study about the new principle-based taxonomy of Chinese L2 word order errors and Yu &Chen's analysis of word order errors in HSK corpus are useful for understanding and analyzing Chinese word order errors in my own study. In addition, some of their studies are consistent with my analysis in the features of Japanese learners' word order errors. Last but not least, the previous studies introduced in this chapter also confirm the value of word order error in studying acquisition of Chinese as a second language.

Chapter 4 Methods and data analysis

The main purpose of this chapter is to investigate some wrong word orders in the Chinese sentences made by Japanese learners from a learner corpus and the written questionnaire made based on the errors made in the corpus investigation, and further to examine the possible reasons causing the mistakes, for instance, over-generalization of Chinese rules, negative transfer, unknown causes and so on. Moreover, I will check out if there are positive transfers in case of correct word orders. Therefore, two researching methods employed will be introduced in the first section, and then I will illustrate the outcomes of looking through the HSK learner corpus and the written questionnaire in the second and third section respectively.

4.1 Introduction of applied research methods: corpus and written questionnaire

4.1.1 Learner corpus

In order to figure out the patterns of word order errors that are frequently made in the acquisition of Chinese as well as the potential contributing factors, a number of sentences made by Japanese learners are requisite. As a result, corpus and written questionnaire are considered and applied as two complementary research methods in my study. Firstly, corpus is a large and principled collection of naturally occurring examples of language stored electronically (Bennett, 2010, p.2), and corpus analysis enables researchers to prove or disprove hypotheses relating to language use and to quantify linguistic patterns for reaching solider conclusions as well. With regard to the types of corpora, Bennett introduces eight main types, that are generalized, specialized, learner, pedagogic, historical, parallel, comparable and monitor corpora. And among them, generalized, specialized, learner and pedagogic corpus are the most useful ones for using directly in the classroom (ibid., p.13). On the other hand, as suggested by Granger (2012) that corpus-based and corpus-driven approaches are two main methodological approaches that any researcher launching into a corpus project picks. Meanwhile he claims that the corpus-based approach is essentially a deductive approach, because this approach consists in testing a hypothesis or rule against corpus data, and corpus in this approach acts as the servant to confirm or refute a pre-existing theoretical construct instead of as the master. At the same time, the corpus-driven approach is also an inductive approach which exploits the full force of the corpus and progressively generalizes from the observation of data to build up the new theory or

rule (Granger, 2012, p13).

Due to the fact that the purpose of using a corpus determines to a great extent the choice of corpus in use, the learner corpus called HSK (Hanyu Shuiping Kaoshi, Chinese level test) Dynamic Composition Corpus¹⁹ is selected in this study. First of all, HSK Dynamic Composition Corpus is a learner corpus containing the compositions written by foreign learners of Chinese who took the Advanced Chinese Proficiency Test from 1992 to 2005. Secondly, a learner corpora is a kind of specialized corpus that contains written texts and/or spoken transcripts of language used by students who are currently acquiring the language. Learner corpora are often tagged and can be examined, for example, to see common errors students made (Bennett, 2010, p.14). For this reason, a learner corpus can be used to recognize common errors at different stages of target language acquisition, and further to show over- and under-uses of lexis or grammar by comparison with an equivalent corpus of native speaker language. As a result, HSK Corpus, which collects 2915 wrong word order sentences from Japanese learners' composition, can be used as a preliminary source and meet the demand of narrowing down the word order types made by Japanese learners of Chinese. More importantly, the corpus will be analyzed in the corpus-based approach, because the purpose of corpus analysis is not to create a new theory but to testify the pre-existing linguistic transfer theory (see 2.1). Furthermore, the tag <CJX> that indicating a word order error in a sentence in HSK corpus is extremely helpful in locating the exact erroneous part in a sentence. However, it is not proper to employ HSK corpus as the only source of data in my study, due to the reasons that the data in HSK corpus is collected from 1992 to 2005, which is obsolete, and compositions as the source of the data tend to have fixed given topics in most cases, which leads to a number of similar erroneous sentences made by different learners. And word order errors types figured out from HSK corpus could be so numerous and general that certain specific types need to be identified as the subject of this study. Therefore, a written questionnaire will be used as a supplementary research method.

4.1.2 Written questionnaire

As mentioned above, the outcomes of analyzing HSK corpus could show sufficient

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¹⁹ Available from: http://hsk.blcu.edu.cn [Accessed 9th September 2022]

types of word orders that are difficult for Japanese learners, such as the order of verbs, adjectives, adverbs, negations in a sentence. Accordingly, based on the outcomes of HSK corpus analysis, several kinds of error types were selected and a written questionnaire was made correspondingly.

Written questionnaire is a common research method frequently used in second language acquisition, and Wray together with Bloomer (Wray and Bloomer, 2012) suggest that questionnaires can be used to collect both qualitative data and quantitative data. Questionnaires allow data to be collected in the same and replicable way from a large number of informants, which makes a comparison of the results easier and the conclusion clearer (ibid., p.170). Concerning the concrete format of written questionnaires, inspired by types of questions adopted in Hanyu shuiping kaoshi (Chinese level test), sentence organizing and completion task were applied in my study. In the task participants are required to place certain given words or phrases in order to make a correct sentence in Chinese. For instance, participants are required to organize the given words '要(have to) /中国(China) /我(I) /去(go) /两年(two years) /留学(study abroad)' to make the correct sentence '我/要/去/中国/留学/两年 (I have to go to China and study there for two years)' in the written questionnaire. The sentence organizing and completion tasks exactly examine learners' understanding and acquisition of Chinese word order. For the sake of excluding or reducing the influence arising from the misunderstanding of meanings of words that would have on participants' answers, the given words would be as simple as possible. Nonetheless, since the same questions were used for learners at all levels, beginners might still have difficulties in understanding some words. The questionnaire used for beginner learners hence includes Chinese pronunciation as well as Japanese meanings, while the one given to intermediate and advanced learners would just contain the given words in Chinese. Furthermore, no auxiliary tools such as dictionary and smart phone are allowed in answering the questionnaire and all participants must finish questionnaires by using their knowledge or intuitions. Even though Japanese translations might affect beginners' answers, it would also be possible to inspect whether learners tend to use native language to solve questions encountered in target language by means of comparing answers from beginner learners and intermediate or advanced learners. Thus the difference in percentage of errors between beginners and intermediate-advanced learners is going to be examined as well.

With regard to the number of questions in the written questionnaire as well as participants, 12 questions are considered appropriate and doable when considering that too many hard and time-consuming questions would probably make participants unwilling to attend in the study or lose their patience during answering, and thus quality and reliability of the answers would decline. In addition, I was hoping to have 24 learners in total participating in the study and among them 12 participants would be Japanese learners in beginning level and 12 in intermediate and advanced level, so that the answers generated from every group can be compared well. Thus, I was planning to study at a Japanese university as an exchange student hoping to find those 24 students as participants. Unfortunately, due to the Covid-19 pandemic the exchange program was canceled and I could not go to Japan in the end. As an alternative, 8 beginners and 16 intermediate-advanced learners from a Chinese language school in Tokyo were found to answer the questionnaire. This was not ideal because unfortunately, the age, work, gender and the length of learning Chinese varied from person to person. And since it was hard to distinguish students between intermediate and advanced learners at this language school, there were just two versions of questionnaire, one for beginners and another for intermediate and advanced learners who are set in the same group.

4.2 Analysis of data from HSK corpus

As introduced in former section, the learner corpus, named HSK Dynamic Composition Corpus, is the preliminary source of the data demanded for my study, because of the nature and advantages of learner corpus and also the large amount of erroneous sentences in it. In the HSK corpus 2915 wrong word order sentences from compositions written by Japanese learners of Chinese can be found from 1992 and 2005, and these sentences are enough for spotting word order error types that are more common in the acquisition of Chinese for Japanese learners. After clarifying the source and its use, 1132 out of 2915 sentences in the corpus have been examined and three types of word order error types stood out in the end:

- 1) the word order of adverbs/adverbials (365 out of 1132 = 32.2%),
- 2) adverbs derived from adjectives and attributive adjectives before noun (totally 290 out of 1132 = 25.6%)
- 3) subjects, verbs as well as objects (totally 250 out of 1132 = 22%).

First of all, the word order of adverbs turns out to be most difficult for Japanese learners, because there are about 365 sentences containing erroneous position of adverbs in a sentence, such as 也(also, too), 就(then), 最(most), 都(both, all). Taking the erroneous sentence (他)相貌/端正,也/表达力/强((he) /appearance/regular, also/expression ability/strong) as an example, in this sentence the adverb 也(also, too) should come right before the adjective 强(strong) instead of the noun 表达力(expression ability), and the correct word order is (他)相貌/端正, 表达 力/也/强(he /appearance/regular, expression ability/also/strong; he is good looking and has a strong expression ability). As in Chinese the adverb $\#_{A}$, which means same, also and too, can be used to add additional information/characteristics about the same subject, or indicate that two different subjects perform the same action or share similar properties, and it should come right before adjectives or verbs (e.g. 强 (strong) in this case). It is worth noticing that in the corresponding Japanese of this sentence the adverbial particle も(also) is also placed right before the adjective 彼は 見た目がいい(し)、表現力も強い. Thus even though Chinese and Japanese have the same word order when it comes to 表达力/也/强 (expression ability/also/ strong) and 表現力も強い (expression ability/also/strong), positive transfer from Japanese failed to be observed in this sentence, and thus other possible contributing factors should be checked. One possible explanation could be that learners overgeneralized the rule that adverb 也(also, too) should come right before adjectives or verbs as in the order of adverb 也(also, too) in a sentence such as 他/喜欢/看书, 也/喜欢/运动 (he/like/reading, also/like/sports). As a result, learners may have placed the adverb 也 (also, too) first in the second sentence as in (他)相貌/端正, 也/表达力/强. In the second place, the number of the sentences containing word order errors about adverbials derived from adjectives and adjectives before nouns is around 190 and 100 respectively, which makes adverbials derived from adjectives and adjectives as a whole category the second most common word error types found in HSK corpus. For instance, in the wrong sentence 路上(omitted)/聊天/高兴地(on the way/chat/happily) the adverb 高兴地(happily) should be placed right before the verb 聊天(chat) and thus the correct word order is 高兴地/聊天(happily/chat), which is the same word order as 楽しく/話す(happily/chat) in Japanese. Consequently, it became another example

showing that the assumed positive transfer from Japanese did not work.

Thirdly, the Japanese learners also have great difficulty with the word order of subjects, verbs including modal verbs, and objects, based on the data that there are over 250 sentences containing word order errors of subjects, verbs and objects. And misunderstandings part of speech can account for many incorrect sentences. For instance, the position of 入学(enter) and 北京师范大学外语系(Department of Foreign Languages in Beijing Normal University) should be reversed in the wrong sentence 我/1980 年/北京师范大学外语系/入学²⁰ (I/1980/Department of Foreign Languages in Beijing Normal University/enter) because of the SVO word order in Chinese., as in 我/1980 年/入学/北京师范大学外语系. However, as Japanese is a verb-final language and the counterpart in Japanese is 私は/1980 年/北京師範大学 外国語学部に/入った(I/1980/Department of Foreign Languages in Beijing Normal University/enter), which indicates that Japanese word order might play the role of negative transfer. Furthermore, a number of sentences containing other types of word order errors have also been found in HSK corpus, such as conjunctions and subjuctions like 但是(but) and 虽然(although), demonstrative pronouns, and tense markers like past tense markers \mathcal{T}^{21} or \mathcal{Z}^{22} . And some word order errors referring to particular grammars are found as well.

Based on the result above, the word order of adverbials, adverbs derived from adjectives and attributive adjectives before nouns as modifiers, and subjects, verbs as well as objects are the most common types of word order errors for Japanese learners in the acquisition of Chinese. And among the three types, the word order of adverbs/adverbials, adverbs derived from adjectives and attributive adjectives (before nouns) were finally chosen as the word order error type of this study and accordingly the written questionnaire was made about it. This is because it would be too narrow to take the word order of several certain adverbs as the subject of the study, and at the

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This sentence also contains the wrong use of verb $\nearrow \equiv$ (an intransitive verb 'get into school- that does not take an object), but since it is the word order that matters in this study, the other types of errors in a sentence would be disregarded. And the principle applies in all examples given in the thesis.

in Chinese is an auxiliary that comes after a verb or adjective to indicate that an action or change in nature or state has been completed either in the past or in the present, or in the future. Thus it can indicate past tense or perfect tense in different situations.

²² 过 (pronounced as guo) in Chinese is also an auxiliary, and it can indicate that the action is done or a certain behavior/change has occurred in former times when it comes after a verb.

same time the word order of subject, object and verbs is too general to be the subject, while the word order of adverbials and attributive adjectives (before nouns) are two types of word order errors constituting the largest amount of erroneous word order sentences examined in HSK corpus. In addition, the degree adverb 最(most) was chosen as one of the adverbs/adverbials in checking, for the reason that despite the exactly same characters/Kanji in Chinese and Japanese, it is one of the adverbs that Japanese learners made more errors in HSK corpus, and the factors attributing to errors like '最/规模/大(most/scale/big)' in HSK corpus are fascinating, since the correct expressions '规模/最/大(scale/most/big)' and '最/大/规模(most/big/scale)' exist in both Chinese and Japanese.

4.3 Analysis of data from written questionnaire

The detailed data from each task

Based on the outcome of HSK corpus analysis, a written questionnaire consisting of 12 sentence completion tasks was made to better examine Japanese learners' acquisition of the word order in Chinese. More specifically, there are 3 tasks for each category of word order about duration adverbials, frequency adverbials, manner adverbials and degree adverbs, and attributive adjective forms before noun. The written questionnaire has two versions: beginner version and intermediate/advanced learner version, and the only difference between them is that every given word has its Chinese pronunciation and Japanese translation marked in the version used for beginning learners. In the end, 8 beginners and 16 learners in intermediate and advanced level took part in completing the written questionnaire. Next, all erroneous answers gathered from participants would be listed so as to investigate what the word order errors exactly are, along with the analysis of possible factors that might result in such errors.

4.3.1 Adverbs of duration

In this section, the word order of durational adverbials are examined. The Chinese word order of durational adverbials should be placed right after the verb. This is different from the Japanese word order since Japanese is a verb-final language, and nothing should be placed after the verb. This, in turn, means that there may be mistakes because of negative transfer from Japanese.

4.3.1.1 Ten hours

The first task made for word order of durational adverbials is to organize the following words: 坐(take), 我(I), 要(have to), 火车(train), 十个(ten), 小时(hour). The correct answer of this question should be as following:

(1)我/要/坐/十个/小时/火车.

I/have to/take/ten/hours/train.

There are totally 15 out of 24 participants, 62.5% in beginners (5 out of 8 while 62.5% in intermediate-advanced learners (10 out of 16)), failed in this task and 14 of them made the same mistake by placing the time phrase '十个/小时(ten hours)' in the end of the sentence, while only one participant improperly placed the time phrase '十个/小时(ten hours)' before the modal verb '要²³(need to)'.

a: 我/要/坐/火车/十个/小时. *14 (B*5)²⁴ (I/need to/take/train/ten/hours)

b: 我/坐/火车/<u>十个/小时</u>/要. *1 (B) (I/take/train/ten/hours/need to)

As shown in the wrong sentences above, after all 15 learners (62.5%) in both levels made the same error, in which the time phrase '十个/小时(ten hours)' was placed after the object '火车(train)'. However, according to the Principle of Whole Before Part and its Time Expressions sub-principle mentioned in chapter 3, duration adverbial expressions should come right after the verb to express how long a certain action lasts, which in this task means that the length of taking a train '十个/小时(ten hours)' should come right after the action verb '坐(take)', but not after the object '火车(train)'. Even though the position of duration expressions in Japanese is flexible in that it can come both before and after 火车(train), it always comes before verb because of the Japanese verb-final word order, as in the counterpart Japanese sentences for this task:

私は/十時間/列車に/乗ら/なければならない (I/ten hours/train/take/need to) 私は/列車に/十時間/乗ら/なければならない (I/train/ten hours/take/need to)

²³ 要 in Chinese have different meanings as 'need to, hope, want to, be asked to, be going to, should and so on', and it is translated to 'need to' based on the context. While in task 2 is translated to 'want to' to express personal desire.

[&]quot;I have to take the train for ten hours."

²⁴ The answers from Japanese learners in beginning level are marked as B and the number of the same errors is marked with '*number'. Meanwhile, the checking point in each task is highlighted with underlines.

As a result, it is difficult to simply ascribe the word order error made in this task to negative transfer from Japanese, since the erroneous sentences do not correspond with Japanese either.

4.3.1.2 two years

The words given in the second task about durational adverbial word order are 要(want to), 中国(China), 我(I), 去(go), 两年(two years), 留学(study abroad), and they should be organized as:

(1)我/要/去/中国/留学/两年.

I/want to/go to/China/study abroad/two years

"I want to go to China and study (there) for two years."

In this task, 11 out of 24 participants made four different incorrect word orders for the duration expression '两年(two years)', and the error rates in beginners and intermediate-advanced learners are 50% (4 out 8) and 43.75% (7 out 16) respectively.

- a: 我/要/去/中国/<u>两年</u>/留学. *7 (B*2) (I/want to/go to/China/two years/study abroad)
- b: 我/去/中国/<u>两年</u>/要/留学. *1 (B) (I/go to/China/two years/ want to/study abroad)
- c: 我/要/去/两年/中国/留学. *2 (B*1) (I/want to/go to/two years/China/study abroad)
- d: 我/两年/要/去/中国/留学.*1 (I/two years/want to/go to/ China/study abroad)

As introduced in the first task, durational adverbial expression in Chinese should follow the verb it describes, and additionally the two verbs 去(go) and 留学(study abroad) in this task should follow the Principle of Temporal Sequence (seen in chapter 3), which requires what happens earlier precede what happens later. Therefore, 去中国(go to China) should precede 留学(study abroad), and 两年(two years) comes after the verb 留学(study abroad) to express the period of studying after going to China. However, eight learners in the sentence a and b placed the durational adverbial phrase after the verb 去(go) and the noun 中国(China), and two learners in the sentence c placed the durational adverbial phrase between the verb 去(go) and the noun 中国(China). Regarding the sentence d, it may be the case that the learner

confused durational time with punctual time, because it is punctual time that can be placed between subject and verb, but not durational time 两年(two years) in this case. On the other hand, the same as in the first task, the counterpart of durational adverbial phrase 两年(two years) in Japanese is more flexible and can come in two different orders. One comes before verb 留学(study abroad) in 私は中国に行って2年留学したい (similar word order as in a and b), and the other comes between subject and object in 私は2年中国に行って留学したい (similar word order as in c). Different from task 1, the negative influence from the Japanese word order seems to be observed from the comparison of the erroneous answers and counterpart Japanese in task 2.

4.3.1.3 (for) a very long time

Task 3 is the last question about word order of durational adverbial expression in Chinese, and words 病(fall ill), 了(auxiliary perfect tense), 奶奶(grandmother), 时间(time), 长(long), 很(very) should be placed in the following order: (1)奶奶/病/了/很/长/时间.

Grandmother/fall ill/perfect tense /very/long/time

"Grandmother has been sick for a very long time."

In this task, in addition to the principle that the durational phrase '很长时间(very long time)' have to be placed right after the verb '病(fall ill)' and the auxiliary verb 了, the adjectival modification '很长(very long)' should come right before the noun '时间 (time)' to compose the durational noun phrase 'very long time' which syntactically functions as a durational adverbial.

The incorrect sentences found are the followings:

a: 奶奶/<u>时间</u>/<u>很/长</u>/了/病. *1 (B) (grandmother/time/very/long/auxiliary/fall ill)

b: 奶奶/病/了/<u>时间/很/长</u>.*1(grandmother/fall ill/auxiliary/time/very/long)

Sentence a is completely wrong in terms of Chinese word order because the auxiliary verb 了 cannot connect adjectival modification '很长(very long)' and verb '病(fall ill)', and it is difficult to find a reasonable explanation for sentence a in terms of Japanese. The sentence b would become an unnatural and barely used expression 祖母が病んでいる時間がとても長い (the time that grandmother has been sick is

very long) when it is translated in Japanese, The phrase 奶奶病了/祖母が病んでいる(grandmother has been sick) became an attributive phrase that modifies the head noun 时间/時間(time). However, in this case, the particle 的 that functions as a marker to change a noun (phrase) into an adjective phrase, should have been used in this modifying sentence to make the Chinese sentence correct. Then the sentence should be as 奶奶/病/的/时间/很/长(grandmother/sick/adjectival mark/time/very long = grandmother's time of being sick was very long). At the same time, taking the high correct rate (around 92%) in this task into account, sentence b might reveal the learner's insufficient acquisition of the difference between プ(auxiliary) and 的 (particle) in Chinese, which ended up being expressed in the form of word order error. Despite of the assumption that misusing プ(auxiliary) and 的 (particle) caused erroneous sentence b, sentence a and b shows that the learners did not follow Japanese word order when encountering difficulties in Chinese when considering the same expression とても/長い/時間(very/long/time) in Japanese. And this implies that there might be unknown reasons caused the word order errors.

4.3.2 Adverbs of Frequency

In this section, the word order of the frequency adverbials are examined. In Chinese, frequency adverbs must be placed right after verbs. This can be difficult for Japanese learners since Japanese places adverbials before verbs, and negative transfer may therefore be expected.

4.3.2.1 Once a week

The words given in task 4 are: 看(see), 她(she/her), 一周(one week), 医生(doctor), and the frequency adverbial phrase 一次(once), which is the checking point in this task. The correct answers of this question can be:

(1)她/一周/看/一次/医生 or (2)医生/一周/看/一次/她

She/one week/see/once/doctor. or Doctor/one week/see/once/her.

"She sees doctor once a week." Doctor sees her once a week."

All of the 8 beginning learners made mistakes (100%) in this task while 12 out of 16 (75%) participants in the higher level were also wrong, and their erroneous answers are:

a: 医生/看/她/一周/<u>一次</u>. *7 (B*4) (doctor/see/her/one week/once)
b: 她/看/医生/一周/<u>一次</u>. *4 (B*1) (she/see/doctor/one week/once)
c: 她/看/一周/<u>一次</u>/医生. *2 (B*1) (she/see/one week/once/doctor)
d: 她/一周/<u>一次/</u>看/医生. *3 (she/one week/once/see/doctor)
e: 医生/一周/看/她/<u>一次</u>. *1(B) (doctor/one week/see/her/once)
f: 她/一周/看/医生/<u>一次</u>. *2(B*1) (she/one week/see/doctor/once)
g: 医生/看/<u>-次</u>/她/一周. *1 (doctor/see/once/her/one week)

Frequency adverbial phrase in Chinese should be placed right after the verb to indicate how often or how many times the action has been done. Thus, the adverbial phrase 一次(once) should come right after the verb 看(see)²⁵. Twenty participants in total made mistakes in this sentence (about 83%), and overall, sixteen participants who made sentence a,b,c and d all placed time expression 一周(one week) and the frequency expression 一次(once) together as in the phrase 一周一次(once a week) in spite of little differences in the other part in sentence a, b, c and d. It is reasonable to assume that Japanese played a negative role (i.e. negative transfer) in causing placing time phrase and frequency phrase together in view of the fact that 週に一回(once a week) is a very fixed structure in Japanese. Frequency adverb 一次(once) was placed at the end of the sentence e and f, which does not match the Japanese word order either. Yet along with the answers from task 1 it demonstrated a rule of placing elements such as adverbial phrases at the end of sentences when Japanese learners failed to master the correct Chinese word order. And this tendency can also be observed in the answers from other tasks about frequency adverbial phrases. One possible factor generating this tendency can be the basic SVO word order in Chinese, in which verb comes after subject, object is placed after the verb, and other phrases might come after object (i.e. overgeneralization of a wrong rule in Chinese). As a result, the over generalization of Chinese seems to be the reason in sentence e and f but not negative transfer. Regarding the last sentence g, because the frequency adverb 一次(once) was correctly placed right after the verb 看(see), and the error in this

²⁵ 一周(one week) in this case should be treated as a punctual time expression, but not a durational time indicating how long the action of seeing a doctor last. Thus it follows the Principle of Whole Before Part and its Time Expressions sub-principle: punctual time + verb (一周/看 one week/see) as explained in Jiang's taxonomy of Chinese L2 word order errors in Chapter 3.

sentence is just caused by the position of the time phrase 一周(one week) that should be before the verb 看(see). Even though the time phrase 一周(one week) is not the checking point in this task, being placed at the end of sentence shows the tendency of placing adverbial phrases at the end of sentence, which may be considered as over generalization of Chinese word order.

4.3.2.2 How many times

Task 5 is the second question aiming at frequency adverbials' word order, and the words \pm (go to), 你(you), 过²⁶(auxiliary which expresses past experience), 几(how many), 中国(China), 次(counter: time) can be organized in two ways as follows.

$$(1)$$
你/去/过/几/次/中国? or (2) 你/去/过/中国/几/次?

You/go to/auxiliary/how many/times/China. or You/go to/auxiliary/China/how many/times. "How many times have you been to China."

Although it is mentioned in task 4 that the frequency adverbial phrase must come right after the verb and its related auxiliary, it is also possible to place frequency adverbial phrase after a direct object when the direct object is a noun that indicates places as in (2) above. Therefore, the frequency adverbial phrase 几次(how many times), which is also a question phrase of frequency, can come between the verb 去过 (has been to) and its object 中国(China)²⁷, as well as coming after the object 中国 (China) at the end of the sentence. The number of answering correctly as 5-1 and 5-2 is nine and thirteen respectively, which appears to suggest that more learners tend to place the frequency adverbial phrase at the end of the sentence. In addition, there are only two erroneous answers found from participants in intermediate or advanced level . Thus the error rate in beginners and intermediate-advanced learners is 0% and 12.5% respectively.

a: 你/<u>几/次</u>/去/过/中国?*2 (you/how many/times/go to/auxiliary/China)

Regarding the word order error in sentence a, two learners placed the frequency adverbial phrase 几次(how many times) between the subject 你(you) and the verb 去

 $^{^{26}}$ As mentioned in footnote 4 that 过 (pronounced as guo) in Chinese can indicate that the action is done or a certain behavior/change has occurred in former times when it comes after a verb. And in task 5 it is used to ask about the experience of going to China, Therefore, the verb phrase \pm 过 is translated to 'has been to' in this task.

²⁷ 去 (go) in Chinese is a transitive verb and 中国(China) here is the direct object of the verb 去 (go).

(go to), and the sentence matches the equivalent sentence (3) in Japanese below.

(3)あなたは/何回/中国に/行ったことがあるか

(you/how many times/China/have been to)

Thus negative transfer from Japanese can still be taken into consideration in analyzing the erroneous sentence a.

4.3.2.3 Twice

我(I/me), 打了(called), 他(he/him), 电话(phone), 给(preposition: to), 两次(twice) are given in task 6 for accessing learners' acquisition of word order for the frequency adverbial phrase 两次(twice). And the right answers are as follows.

(1)我/给/他/打了/<u>两次</u>/电话 or (2)他/给/我/打了/<u>两次</u>/电话

I/ to/him/called/twice/phone or He/to/me/called/twice/phone

(3)我/打了/<u>两次</u>/电话/给/他 or (4)他/打了/<u>两次</u>/电话/给/我

I/called/twice/phone/ to/him or He/called/twice/phone/ to/me

"I called him twice' or 'he called me twice"

As seen from the above four correct sentences, no matter which word is subject and no matter how the position of preposition phrase changes, the frequency adverbial phrase 两次(twice) should be placed right after the verb 打了(called), which follows the Chinese word order principle for frequency adverbial expression. With regard to the word order errors generated in this task, there are 10 out of 24 participants who made two types of error, and three of them are from beginners' group (37.5%) while seven are from the other group (43.75%).

a: 我/给/他/打了/电话/两次.*8(B*3) (I/ to/him/called/phone/twice)

b: 我/给/他/<u>两次</u>/打了/电话.*2 (I/ to/him/twice/called/phone)

Sentence a is precisely the same type of error as in task 4-e and 4-f that merely placed frequency adverbial phrase at the end of sentence, and it seems to show the tendency of overgeneralizing Chinese word order as appeared in task 1 and 4. while sentence b is similar to a Japanese sentence 私は/彼に/三回/電話を/かけた (I/to him/twice/phone/called), and it might be another example demonstrating the negative transfer from Japanese.

4.3.3 Manner Adverbials and degree adverbs

In this section, the word order of manner adverbials and a degree adverb are examined. Manner adverbials must be placed right before verbs in order to describe and modify the way in which the actions are done. This is similar to the Japanese order of manner adverbials and verbs (ゆっくり話す manner adverbial + verb) and positive transfer is therefore expected. A degree adverb must be placed right before an adjectives to express superlative. In the task 9, the word order of a degree adverb 最(most) and an adjective † (big) is examined.

4.3.3.1 Like this

Task 7 inspects the position of adverb 这样(like this) in the sentence made up of words 他(he), 这样(like this), 没有(negation), 过(auxiliary to express past experience), 说(say). The correct word order in task 7 should be as:

(1)他/没有/这样/说/过

He/negation/like this/say/past experience

"He didn't say like this."

In this sentence the manner adverbial expression 这样(like this) should come right before the verb 说(say) in order to describe and modify the way in which the action is done. However, 11 participants in sentence a mistakenly placed 这样(like this) at the end of the sentences and 2 participants placed it between the subject 他(he) and the negation word 没有(negation) in sentence b. And the error rate in this task is 62.5% (5 out of 8) in the beginners group and 50% (8 out of 16) in the other group.

a: 他/没有/说/过/这样。*11(B*4) (He/negation/say/past experience/like/this)

b: 他/这样/没有/说/过。*2(B*1) (He/like this/negation/say/past experience)

In this task, neither sentence a nor sentence b entirely correspond to the word order of the Japanese sentence 彼は/こういうふうに/言わ/なかった(he/like this/say/negation + past). Nonetheless, sentence a is consistent with the tendency of placing adverbials at the end of the sentence (i.e. overgeneralization), though it can also be interpreted as a misunderstanding of the adverbial expression 这样(like this) as an object of the verb 说(say) as in 'He did not say this'. What is more, the sentence

b seems like a combination of Chinese and Japanese word order from the aspect that placing negation before the verb matches Chinese word order, while keeping adverbial expression between subject and negative verb form matches Japanese word order. Despite that sentence b manifested inadequate acquisition of using adverbial and negation together, the word order for adverbial expression before the verb here seems to be a positive transfer although the place of negation 没有 is wrong.

4.3.3.2 Slowly

Task 8 is a task inspecting the word order of adverbial modifier 慢慢地(slowly), which consists of adjective 慢慢(slow) and adverbial marker 地. The words given in this task are 他们(they),地(adverbial marker),慢慢(slow),想(modal verb want to),走(walk)²⁸, that should be placed as follows.

(1)他们/想/慢慢/地/走

They/want to/slow/adverbial marker/walk

"They want to walk slowly."

As explained in task 7, the manner adverbial expression 慢慢地(slowly) should come right before the main verb 走(walk) in this sentence in order to describe the manner of walking. Five out of twenty four (about 21%) participants made four types of wrong word orders in this task, and two erroneous sentences are from beginners (2 out of 8, 25%) while three sentences are from intermediate-advanced group (3 out of 16, 18.75%).

a: 他们/想/走/<u>慢慢/地</u>. *2(B*1) (They/want to/walk/slow/adverbial marker)

b: 他们/<u>慢慢/地</u>/想/走.*1 (They/slow/adverbial marker/want to/walk)

c: 他们/想/走/<u>地</u>/慢慢. *1(B) (They/want to/walk/adverbial marker/slow)

d: 他们/想/<u>地/慢慢</u>/走.*1 (They/want to/adverbial marker/slow/walk)

Although the position of the whole manner adverbial phrase 慢慢地(slowly) is not correct in sentence a and b (i.e. it should come before the main verb), both have the correct order of 慢慢/地 (slowly) which has the same order in the Japanese

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 $^{^{28}}$ 想 in Chinese is a modal verb and has different meanings, such as think, want, miss, remember and so on. In this task it is translated to 'want to' based on the context. While 走 in this task is the main verb, which means walk. And when there is manner adverbial modifying the main verb, the modal verb and the main verb should be placed in different places.

expression $\emptyset \supset \langle 9/2 \rangle$. This seems to be a positive transfer. In addition, sentence b would be correct if there is no word 想, because without 想 the manner adverbial phrase 慢慢/地 would come right before the verb 走(walk), but placing 慢慢/地 before 想 would made the manner adverbial phrase modify modal verb 想 and hence incorrect in meaning. At the same time, sentence a is wrong probably due to the overgeneralization of placing adverbial phrase 慢慢地(slowly) at the end, while sentence b seems to be wrong because of negative transfer from Japanese 彼らは/ゆ っくり/と/歩きたい in which adverbial phrase ゆっくり/と=慢慢地(slowly) is placed before the auxiliary verb and not the main verb. On the other hand, sentence c and d are wrong because adverbial marker 地 is not placed right after the adjective 慢 慢(slow) to compose a manner adverbial phrase slowly. Despite of Japanese translations ゆっくり and と given for 慢慢 and 地 respectively, the adverbial phrase in sentence c and d are not corresponding to Japanese expression $\Phi > \langle 9/2 \rangle$, in which と=地 should come after ゆっくり=慢慢, and this implies that learners do not always follow Japanese word order when they need to solve problems in Chinese. There was thus no positive transfer here. Moreover, sentence c as a whole seems to show the over-generalization of the rule of placing adverbials at the end of sentences, and the error in sentence d is in word order of adverbial marker 地, but the order of manner adverbial before the verb was correct. On the other hand, one possible explanation for placing 地 before adjective 慢慢(slow) might be that learners confuse particle 地 with particle 得, for the reasons that particles 地 and 得 both pronounce as 'de' in Chinese but used in different ways. Particle 得 can be place after verbs while before adjectives to express the degree or result of the action, while particle 地 has to be placed after adjectives and before verbs to describe how the action is taken.

4.3.3.3 Biggest (最大)

Task 9 aims at examining the order of an degree adverb 最(most) before an adjective to form a superlative. And words: 大(big), 爸爸(father), 我(I/me), 对(preposition on), 的(possessive particle/adjectivising particle)²⁹, 影响(influence), 最(most), 大

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²⁹ Depending on the context, the particle 的 in Chinese can be used as both adjectivising particle as in the correct

(big) should be organized as:

- (1)爸爸/对/我/的/影响/最/大 or (2)我/对/爸爸/的/影响/最/大
- (1)Father/on/me/adjectivising particle/influence/most/big. (2)I/on/father/adjectivising particle/influence/most/big.
- "The influence that father has on me is biggest" or "the influence that I have on (my) father is biggest"
- (3)爸爸/的/影响/对/我/最/大 or (4)我/的/影响/对/爸爸/最/大
- (3) Father/possessive particle/influence/preposition/me/most/big.
- (4)I/possessive particle/influence/preposition/father/most/big.
- "Father's influence on me is biggest" or "my influence on (my) father is biggest"

The key to this task is that the adverb 最(most) should be placed right before the adjective 大(big) to compose the superlative form 最大(biggest) in Chinese, which can come after the noun 影响(influence) 影响/最/大 'influence (is) biggest, or come at the end of sentence to make a topic-comment sentence. Even though there are ten sentences different from the given correct answers above, and four are made by beginners (50%) and six are from intermediate-advanced learners (37.5%), none of them made mistake in the superlative form 最大(biggest) because the same expression is used in Japanese. Moreover, except sentence a that might be cause by negative transfer from Japanese translations $\mathcal{L}/\mathcal{O}/$ 影響は/私/に/最も/大きい given in the questionnaire, the sentences b, c, d and e are in fact partly correct in that they made adjective phrases. But they are incomplete sentences due to different functions of particle 的 caused by its various position in the sentences.

a: 爸爸/的/影响/我/对/最/大.*1(B)

(Father/possessive particle/influence/me/on /most/big)

b: 我/对/爸爸/影响/最/大/的*1(B)

(I/on /father/influence/most/big/adjectivising particle)

c: 爸爸/对/我/影响/<u>最/大</u>/的.*2

-

answer (1) and (2), and possessive particle in the correct answer (3) and (4). In answer (1) and (2), 爸爸/对/我 or 我/对/爸爸 became a modifying phrase by placing adjectivising particle 的 after it. This is because the preposition 对 already expresses the object being influence, and then the particle 的 adjectivized the phrase 爸爸/对/我 to describe the noun 影响(influence). While in answer (3) and (4), particle 的 is placed right between 爸爸/我 and the noun 影响(influence) to indicate the influence is directly belong to 爸爸 or 我, which equal to 'father's or my' in English.

(Father/on /me/influence/most/big/adjectivising particle)

d: 爸爸/对/我/最/大/的/影响. *5(B*2)

(Father/on /me/most/big/adjectivising particle/influence)

e: 对/我/爸爸/的/影响/最/大.*1

(on /me/father/adjectivising particle/influence/most/big)

All in all, the errors arose in task 9 are not in word order of adverb 最(most) but in particle 的 which was not the focus of this question, and in the end all participants placed adverb 最(most) with adjective 大(big) correctly. This is most likely a positive transfer from Japanese expressions such as 最大 or '最も大きい'.

4.3.4 Attributive adjective phrases before noun

Task 10 to 12 focus on word order of attributive phrase such as national (servant), permanent/forever (friend) and very many (problems) In Chinese, as well as in Japanese, attributive adjective phrases comes before the noun, and the positive transfer is therefore expected here.

4.3.4.1 National (+ noun)

In task 10 the participants are requested to organize words 我(I), 一个(one), 是(am), 国家(nation), 公务员(civil servant) and 的(adjectivizing particle) as in:

(1)我/是/国家/的//一个/公务员

I/am/nation/possessive particle/one/civil servant

"I am one national civil servant."

As mentioned earlier in task 9, the particle 的 can be used after various word classes, such as noun, pronoun, verb, adjective or attribute phrase. In this sentence, adjectivizing particle 的 is placed after noun 国家(nation) to make the phrase 国家/的 (national) an adjective phrase. However, none of the participants made the same word order as (1), and the wrong answers collected are:

a: 我/是/一个/国家/的/公务员. *15(B*5)

(I/am/one/nation/adjectivizing particle/civil servant)

b: 我/是/一个/<u>国家</u>/公务员/<u>的</u>. *6(B*1)

(I/am/one/nation/civil servant/particle)

c: 我/是/国家/公务员/的/一个.*1(B)

(I/am/nation/civil servant/particle/one)

d: 我/是/一个/<u>的/国家</u>/公务员. *1(B)

(I/am/one/particle/nation/civil servant)

e: 我/是/一个/公务员/<u>的/国家</u>.*1

(I/am/one/civil servant/possessive particle/nation)

The sentence a made by most participants is not completely wrong but ambiguous, because placing the measure word 一个(one) before the noun 国家(nation) makes 一 ↑(one) the number of countries, instead of the number of civil servants. The same is the case with sentence b. Yet, the word orders of the adjectival modifier 国家/的 (national) in sentence a is right. With regard to sentence b, c and d, 国家(nation) and 公务员(civil servant) become a whole in the three types of sentences, which is consistent with the Japanese word 国家公務員(government official). This is an example of negative transfer from Japanese. Moreover, the word order of sentence c and d are similar to the equivalent Japanese sentences 私は/国家/公務員/の/一人 だ(I/nation/civil servant/particle/one) and 私は/一人/の/国家/公務員だ (I/oneparticle/nation/civil servant) respectively. These seem to be also examples of negative transfer from Japanese. In the last sentence e, the head noun 国家(nation) functions a predicative while the subject is 我(I), thus the whole sentence meaning 'I am one civil servant's country' is wrong. Even though the word order error caused in task 10 are mainly due to the misuse of particle 的, negative transfer from Japanese is still observable.

4.3.4.2 Eternal

Task 11 is also about the word order of attributive phrase in modifying a noun, and the adjectival modifier in this task is 永远的(eternal), which is consisted of 永远 and the adjectivizing particle 的. The particle 的 plays the role of indicating modifying and modified relationship. As the result, the word order of words 她(She/her),朋友 (friend),是(is),我(I/my) and 永远的(eternal) is as following:

(1)她/是/我/永远的/朋友 or (2)我/是/她/永远的/朋友

she/is/me/eternal/friend or I/am/her/eternal/friend

"She is my eternal friend." Or I am her eternal friend."

There is only one participant in intermediate-advanced level who made the mistake of placing the adjectival modifiers 永远的(eternal) at the end of the sentence as in sentence a, and the error rate in this task is 0% in beginner group and 6.25% (1 out of 16) in intermediate-advanced learner group.

A reasonable explanation for high correct rate in task 11 is that the expression 永遠 \mathcal{O} /友達 (eternal/friend) in Japanese is exactly the same word order as in Chinese 永远 的/朋友(eternal/friend), and they are both noun phrases with attributive adjectival phrase coming right before head noun. In other words, there is a positive transfer from Japanese in this task. In addition, the sole erroneous sentence a confirms the tendency of placing adverbials at the end of sentence, which also appeared in task 1, 6, 7, 9 and 10. This seems to be a case of over-generalization.

4.3.4.3 Very many

Task 12 is the last task in the written questionnaire and examines the word order of adjectival phrase <u>很/多(very /many)</u> before a noun. The words 他(He/him),很(very),多(many),问了(asked),问题(question),我(I/me) setting in this task should be organized in the following word order.

$$(1)$$
他/问了/我/ $很/多/问题 or (2) 我/问了/他/ $很/多/问题$$

He/asked/me/very/many/questions. or I/asked/him/very/many/questions.

"He asked me very many questions." Or I asked him very many questions."

The key of task 12 is that adjectival modifier 很/多(very many) composed by a degree adverb 很(very) and an adjective 多(many) should be placed right before the noun 问题(question), And word order error is only found in only one sentence from a beginner.

In spite of the fact that 很(very) is a degree adverb, the phrase 很/多(very many) is an adjectival modifier. Thus it seems that this learner misunderstood the adjectival modifier 很/多(very many) as an adverb and accordingly placed it before verb 问了 (asked) in sentence a (e.g. He asked me questions very many (times)/ abundantly.

4.4 Summarizing data analysis of written questionnaire

In this chapter, I have examined the word orders of adverbials of duration, adverbials of frequence, adverbials of manner, and attributive adjective phrases before nouns. Adverbials in Chinese usually come after verbs, which is not possible in Japanese since Japanese has verbs at the end of sentences. For this reason, mistakes may be caused by negative transfer from Japanese. On the other hand, attributive adjective phrases come before nouns in the same way as Japanese attributive phrases, and we could therefore expect positive transfer from Japanese. The results of these 12 questions are summarized below in table 1.

Table 1 Rates of wrong word orders in beginners and intermediate/advanced levels

	Question	Beginners (N=8)	Intermediate-advanced learners (N =16)	Average %
Section 1	1	62.5	62.5	62.5
duration	2	50.0	43.75	46.9
	3	12.5	6.25	9.4
	Average	41.7	37.5	39.6
Section 2	4	100	75	87.5
frequency	5	0	12.5	6.25
	6	37.5	43.75	40.6
	Average	45.8	43,8	44.8
Section 3	7	62.5	50	56.2
manner	8	25	18.75	21.9
	9	50	37.5	43.8
	Average	45.8	35.4	40.6
Section 4	10	100	100	100
attritutive	11	0	6.25	3.1

adjectives	12	12.5	0	6.3
	Average	37.5	35.4	36.5

The word orders of section 1 (adverbials of duration) and section 2 (adverbials of frequency) are different from the word order of them in Japanese. Therefore we expected more mistakes in section 1 and 2 than section 3 (adverbials of manner) and section 4 (attributive adjective phrases before nouns) which have the same word order as those in Japanese. This assumption does not completely bear out. Alghough the average rate of mistakes in section 2 is high (44.6%), the average rate of section 1 (39.6%) is lower than that of section 3 (40.6%). This suggests that there are other reasons for mistakes than negative (or positive) transfer, for instance the confusion caused by particle 的 in task 9. The rate in section 4 is the lowest (36.5%) of these four groups, and this is probably due to positive transfer from Japanese. Regarding the group differences in word order errors, between beginners and intermediate/advanced learners as shown in the table 2, the error rate in intermediate and advanced learners is lower than beginners in general. However, beginning learners made less word order errors in task 5, 6 and 11, and the difference in error rates between the two groups is not large at all. This might be caused by the facts that the participants are from a private language school and that there are no exams to pass in order to go on to an intermediate or advance level, as opposed to university students who must pass exams. This is indeed very unfortunate. However, this was the best I could do to collect data during the COVID 19 period. Regarding the specific tasks showing factors attributing to word order errors or high

Regarding the specific tasks showing factors attributing to word order errors or high correct rate, I have attempted to categorize the causes in Table 2. Note, however, that the causes are suppositions although they are based on the previous researches and my own analysis. And although positive transfer are observed in task 9, 10 and 11 as the possible cause for high correct rate, for the reason that it does not account for word order errors, positive transfer is not included in the table 2.

Table 2 Hypothesis about possible causes to word order errors

Possible causes	Observed in task number	Percentage in all erroneous sentences (N=114) ³⁰
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³⁰ The percentage in all erroneous sentences = the number of incorrect sentences with certain reasons divided by the total number of sentences. The number of erroneous sentences gathered is 114 in total. However, there might be two different reasons attributing to word order error in one sentence, such as in task 4-a/b and task 9-c. Thus the

Tendency of placing adverbials in the end/over generalization of Chinese rules,	Task 1-a, Task 4-a/b/e/f/g, Task 6-a, Task 7-a, Task 8-a/c, Task 11-a	45.6%
Negative transfer	Task2-a/b/c, Task 4-a/b/c/d, Task 5-a, Task 6-b, Task 7-b, Task 8-b, Task 9-a, Task 10-b/c/d	36.8%
Non-Japanese source referred/Unknown reasons	Task 1-b, Task 2-d, Task 3-a, Task 8-c/d, Task 12-a	5.3%
Other reasons (such as insufficient acquisition of certain particle 的)	Task3-b, Task 9-b/c, Task 10-a/e	22.8%

According to the above analysis of each task in written questionnaire, 1) negative transfer, 2) non-Japanese source referred/unknown reasons, 3) over generalization of Chinese rules in form of placing any adverbial parts at the end of sentence, 4) other reasons relating to non-target checking point, such as insufficient acquisition of certain particle 的, seem to be the main potential reasons causing word order errors observed. And among the four types of reasons, over generalization of Chinese rules (45.6%) and negative transfer from Japanese (36.8%) seem to account for the most word order errors. With regard to the special tendency leading to word order errors in written questionnaire, one thinkable explanation is that it is a kind of over-generalization with simply moving the word order of verb. Owing to the fact that Japanese is a verb-final but flexible word order language and sometimes adverbials in a sentence can be placed before verbs and by purely changing the word order of verbs before adverbials, it might make adverbials to be left at the end of sentence. However, this is of course an hypothesis, and more research is needed to corroborate it. Additionally, the outcomes suggest that participants seem to refer to other unknown sources, instead of their native language Japanese, to solve word order problems in Chinese from time to time. However, it is difficult to confirm whether the unknown source is English or other language, due to the fact that English word order cannot explain word order errors in some cases, and that the English levels of participants are not clear. Therefore, this question needs to be answered with further examination. Apart from the above potential reasons causing word order errors, it is also worth noting that learners' production in target language is complicated and word order

sum of the percentages does not equal 100.

errors can also arise from deficient acquisition of certain expressions in a sentence, such as particle 的 in task 9 and 10. This implies that the reasons for word order errors need to be examined closely to exclude influence from other certain adverbials.

Chapter 5 Summary and Conclusion

Based on my own learning and teaching experiences, errors made by Japanese learners in the acquisition of Chinese caught my attention. And considering that the similarities between Chinese and Japanese in Kanji and vocabularies are advantages for Japanese learners, I focused on word order errors in this study.

According to the Interlanguage Hypothesis (Selinker, 1972), learners' acquisition and production of target language is a linguistic system existing between the native language and the target language. Moreover, interlanguage is neither identical to learner's native language nor to the target language, but approximative from the native language to the target language. And words, linguistic rules, and subsystems from the native language will tend to be fossilized in the interlanguage relative to the target language. Interlanguage Hypothesis suggests the independence of learners' interlanguage system as well as the flaw of the system. With regard to the causes of fossilization in interlanguage, negative transfer stated in the Crosslinguistic Influence Hypothesis is one of the reasons accounting for it. Briefly, Crosslinguistic Influence Hypothesis suggests that the similarities between native language and target language will contribute to acquisition of target language while differences between the two languages in question will hinder or generate errors in the acquisition.

Therefore, aiming at pining down potential reasons for common word order errors in Japanese learners' interlanguage of Chinese, and correspondingly attempt to improve Japanese learners' acquisition of target word order, a written questionnaire in addition to the learner corpus- HSK composition corpus has been employed as the main methods of inspecting Japanese learners' interlanguage of Chinese to answering the following research questions: what is the most common type of word order errors made in the acquisition Chinese for Japanese learners? What are the factors causing the word order errors except negative transfer from Japanese? Is it able to eliminate or weaken the causes of word order errors?

With the help from Wenying Jiang's previous study of a principle-based taxonomy of

Chinese L2 word order errors, the types of word order errors of Chinese as a second language became clear. And the analysis of 1132 sentences found from the HSK corpus showed that the word order of adverbs/adverbials (32.2%), adverbs derived from adjectives and attributive adjectives before noun (25,6%) and the word order of subjects, verbs as well as objects (22%) are three most common types of word order errors among Japanese learners who attended in the Chinese level test (Hanyu Shuiping Kaoshi). As a result, the answer of the first research question about the most common type of word order errors made in the acquisition of Chinese for Japanese learners is the word order of adverbs/adverbials. And this result is similar to the previous study by Chi-Hsin Yu and Hsin-Hsi Chen, which shows that the most frequent error categories are adverb ordering error (35.0%) and subject/verb/object ordering error (32.0%). Although the subjects in Yu and Chen's study are foreign language learners from different countries, it shows the importance and the need for studying difficulties of word order for foreign language learners of Chinese.

Regarding the second research question about the factors causing the word order errors, by means of analyzing answers of the written questionnaire from 24 Japanese learners, there are four main possible reasons found that might be able to account for the word order errors of adverbs of duration, adverbs of frequency, manner adverbials and degree adverbs, and attributive adjective phrases before noun. And the biggest possible causes seem to be overnegeralization of Chinese word order rules (45.6%) and negative transfer from Japanese (36.8%). Regarding the over generalization of Chinese rules, it is expressed in the form of the tendency of placing adverbials in the end of sentences. And this probably is because Chinese is a SVO language while the word order of Japanese is a verb-final yet flexible, and adverbials in a Japanese sentence are placed before verbs. Thus over generating Chinese word order by means of purely moving verbs to make the sentence a SVO word order would make adverbials to be left at the end of sentence. On the other hand, insufficient acquisition of the particle 的 (22.8%) also caused ample word order errors in answering the questionnaire, especially in tasks about the word order of degree adverbs as well as attributive adjective phrases before noun. What is more, apart from the influence, both negative and positive, from Japanese detected in the answers, non-Japanese source (5.3%) might also be referred in answering the word order tasks. However, due to the fact that participants' acquisition of other languages is unknown, non-Japanese source

Last but not least, there are two shortcomings in my study. Firstly the sample of Japanese participants is not homogeneous. 8 beginners and 16 intermediate-advanced learners are not equal in numbers, and the genuine level of intermediate-advanced learners is hard to assure due to the fact that they come from a private Chinese language school and their length of learning Chinese varied from person to person. Additionally, some of them do not have any certification of passing a Chinese exam as a reliable proof of their Chinese level. Unfortunately, this is because of the Covid-19 pandemic as the force majeure, and the plan of finding identical participants in universities in Japan could not be put into action. These 24 learners in a private Chinese language school were the best I could have in this situation.

Furthermore, the written questionnaire could have been designed with more care. For example, the disturbance from particle \mbox{HJ} was not expected and thoughtfully considered in the beginning as in 4.3. Accordingly, the written questionnaire about word ordering tasks of higher quality should be conducted in the future study. On the other hand, the hypothesis about the reason why Japanese learners tend to place adverbials at the end of sentences is remained to be confirmed in the future study. And if possible, the identity of non-Japanese source referred in answering Chinese

word ordering tasks can be studied by means of employing a principled and homogeneous sample of multilinguals learning Chinese.

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