Reading in Chinese as a Foreign Language

A study of how reading strategies are affected by instructional methods

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Recent years have seen an increasing interest in learning Chinese as a Foreign Language (CFL). This is partly due to China's growing importance on the world market, but equally important – at least as a motivational factor for the students – is the fascination with the exotic culture and the complex and outlandish orthography. However, the fascinating orthography is very demanding to learn, which is confirmed by the fact that only very few students achieve native-like reading skills in Chinese.

In the past few years, considerable research has been done to find out what learning strategies and didactic methods lead to better character recognition and production (e. g. Jiang 2008, Ke 1998, and Shen 2004). Several studies also looked upon how different reading strategies affect comprehension. For example, Everson and Ke (1997:12-13) found that "intermediate learners were having difficulties isolating meaningful word units in the text", and that "the ability to rapidly parse constituent units in authentic Chinese text is no mean feat, and appears to be a characteristic of advanced proficiency". Lee (1998:182) reports that CFL readers of different levels of efficiency "employed not only the same strategies but almost the same number of strategies" and that "a difference lies in the fact that the more effective readers had a stronger word recognition base and considerably more knowledge of vocabulary and grammar in the Chinese language". To date, however, no studies have touched upon how didactic methods employed in class can affect the students' reading strategies. For this reason, this study investigates what reading strategies CFL students at different levels and from different educational settings employ, and how teaching methods affect the application of these strategies.

1. Methods for data collection

In order to answer these questions I have obtained data from three different sources:

1. Recordings of think-aloud interviews performed by 22 CFL students at all levels from the University of Copenhagen and evening classes at Studieskolen[1],
2. Interviews with CFL teachers from the above institutions, and
3. Observations of classroom activities.

The data were collected in April and May 2007.

The informants participating in this study were divided into five groups according to their proficiency level. These groups were formed on the basis of my impression of the students' reading abilities, vocabulary size, and grammatical knowledge as observed during classroom activities, as well as on information provided by their teacher. As the reading strategies applied by students can be expected to vary according to text difficulty, the students at each proficiency level were given different texts. In this way all the students could be expected to find the reading task challenging but not impossible to complete. As Lee (1998) discovered that the genre of the text does not have any influence on the application of reading strategies, this aspect has not been taken into account in the selection of texts for the reading task. The chosen texts are included in appendix A.

In order not to reveal the identity of the students and teachers, the names of the participants have been replaced here with mnemonic codes that show their proficiency level and affiliation. For the students, the first two capitalized letters represent their proficiency level, for example LB for Low Beginner. The letters in low cases stand for the educational institution, while the numbers at the end of the code are added to distinguish participants from one another. In this study equal numbers of males and females participated. However, for reasons of simplicity, I have chosen to refer to all teachers as "she" and all students as "he" throughout this study.

For the think-aloud interview each student was asked to read a text in Chinese, while they verbalized all thoughts that came to their mind while performing the task. To avoid providing any clues as to how the task should be performed, or what information the researcher would like to hear, no examples of how to perform a think-aloud interview were provided. Some students asked whether they were supposed to read the text aloud or translate it. They were told that they were not required to do so, but they were welcome to do it if they found it helpful. A few students would initially forget to verbalize their thoughts when they paused at difficult parts of the text, in which case they were prompted with questions like "What are you thinking about?" or "Is there a problem?"

Immediately after completing the reading task the students were instructed to give a summary in Danish of everything they could remember of the text. They

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[1] Studieskolen is a language school which offers courses in a number of foreign languages from beginners' to advanced level. The courses are taught on a weekly basis, usually in the afternoon or evening, and may be attended for a moderate fee by anyone who is interested.

had not been informed about the recall task before reading the text, as it was assumed that this might affect the way they read. Most researchers request that the students perform a written recall. In this study, however, the students were asked to perform it orally. The decision was based on the assumption that the informal nature of speaking would be less likely to make the students feel uncomfortable in a test situation. The students would thus worry less about what the researcher might think of their performance.

After the reading and recall tasks the students were interviewed about their motivation for learning Chinese, their main purpose for learning the language, as well as their experience with learning the language.

In order to find out what teaching methods are employed in class, I also decided to interview the teachers who were currently teaching the students participating in this investigation. Four teachers participated, one from the University of Copenhagen and three from Studieskolen. Also, classroom activities were observed for one teaching session (2-3 lessons) for each group as a supplement to the information gathered from the interviews. Table 1.1. includes an overview of participants in the study, as well as a short summary of the didactic methods employed in class.

Proficiency level	Affiliation/ Length of study	Students (coded)	Didactic methods employed in class
Low beginners (LB)	Studieskolen (s), level 4 2 years	LBs1 LBs2 LBs3	Focus on the development of reading skills, character recognition and grammar.
	Studieskolen (s), level 4 intensive 1½ years	LBs4 LBs5	Textbook: *Integrated Chinese* Teacher: Ts1
High beginners (HB)	Studieskolen (s), level 5 2½ years	HBs1 HBs2 HBs3 HBs4	Focus on spoken language skills, vocabulary and grammar. Textbook: *Integrated Chinese* Teacher: Ts2
Lower intermediate (LI)	University of Copenhagen (u), first year	LIu1 LIu2 LIu3	Focus on spoken language skills, character composition and grammar. Textbook: *Kaimen* Teacher: Tu4
	Studieskolen (s), level 8 4 years	LIs4	Focus on reading skills and translation. Textbook: 汉语口语速成 Teacher Ts3
Upper intermediate (UI)	University of Copenhagen (u), third year	UIu1 UIu2 UIu3 UIu4	Focus on reading skills, translation and grammar. Reading materials: authentic Chinese texts Teacher: Tu4

| | Studieskolen (s), newspaper reading class 10 years | UIs5 UIs6 | Focus on reading skills and translation. Reading materials: authentic Chinese newspaper articles Teacher: Ts3 |
| Advanced (A) | University of Copenhagen (u), graduate level 4-6 years | Au1 Au2 Au3 | No classes offered this semester; however classes are normally focused on reading skills and translation. Reading materials: authentic Chinese texts Teacher last semester: Tu4 |

Table 1.1.: Overview of participants and didactic methods employed in class

2. Data extraction from the think-aloud protocols

The recordings of the think-aloud protocols were subsequently transcribed, which led to the extraction of five different types of strategies. These include:

- Word identification (translation of single words)
- Character analysis (focus on semantic/phonetic components or character composition)
- Word analysis (hypothesizing about word meaning on the basis of the meaning of single characters included in the word, utilizing knowledge about how characters may form words together)
- Translation (functional translation, direct translation, restatement)
- Top-down strategies (using context, reference to other parts of the text, using prior knowledge, creating a general view of the content, focus on structure of the text, identifying the main idea, summarizing, asking oneself questions about the content of the text, evaluative comments, making predictions or inferences)

Reading out aloud was also a widely used strategy during the reading task. However, this strategy was excluded from further analysis because most students virtually read the whole text out aloud, which did not reveal any significant differences between their proficiency levels. Other strategies have also been excluded from further analysis, either because they were used very infrequently (e. g. taking notes, marking the text) or because after an initial analysis they did not seem to contribute with any remarkable findings to this investigation (e. g. focus on sentence structure, skipping, metacognitive strategies). Data concerning the numbers of occurrences of the five selected strategies for each participating student are provided in appendix B.

3. Data extraction from the recall protocols

In many studies using think-aloud methodology, the students' text comprehension is measured by counting how many text units or idea units they are able to recall after completing the task. The problem with this type of assessment is that understanding a certain amount of text or idea units does not necessarily mean that the student has understood the general topic of the text. Reading is not just a matter of recognizing and identifying random idea units, but also understanding how these are connected. Therefore, I found it necessary to devise a different approach to assessing text comprehension. My method regards the students' ability to identify the main idea of the text as the basic criterion for assigning the first point, while subsequent points are assigned for being able to identify secondary topics and other important details. The scale adopted for assessing the recall protocols, as well as the points gained by each student, is presented below:

0 point: The student has not identified the main topic (even though he might have understood some less important details).

1 point: The student has identified the main topic.

2 points: The student has identified the main topic and some of the secondary topics.

3 points: The student has identified the main topic and most of the secondary topics. Yet he still has many comprehension problems and cannot create a complete overview of the text.

4 points: The student has identified the main topic and most of the secondary topics. Only a few important details have escaped comprehension.

5 points: The student has identified the main topic and all the secondary topics. A few unimportant details may have escaped comprehension.

Low beginners		High beginners		Lower intermediate		Upper intermediate		Advanced	
LBs1	3	HBs1	0	LIu1	1	UIu1	3	Au1	3
LBs2	3	HBs2	0	LIu2	1	UIu2	0	Au2	4
LBs3	3	HBs3	1	LIu3	2	UIu3	2	Au3	2
LBs4	4	HBs4	0	LIu4	0	UIu4	0		
LBs5	1					UIs5	1		
						UIs6	0		

Table 3.1.: Points assigned for students' recall of the text. In the abbreviations for the individual students, "s" stands for "Studieskolen" and "u" for "university".

4. Data analysis

This section offers an analysis of the strategies extracted from the students' think-aloud protocols at each proficiency level. The analysis includes an examination of similarities and differences between students at each level and an explanation of how didactic methods employed in class may have affected the students' strategy choice. Then the students' performance in the recall task is analysed with a view to finding out what factors may have led to good or poor text comprehension.

4.1. Data analysis for the low beginners' group

In the low beginners' group we see a lot of word identification and translation. Here it is worth noticing that LBs1 has more occurrences of top-down strategies and word analysis than the other students, and that LBs4 scores low on all strategy types.

For all students at this level the main focus of the instruction is on the development of reading skills and character recognition. Therefore, most of the students do not have a strong command of spoken Chinese, although they have fairly good character recognition skills. The only exception is LBs4, who devotes most of his attention to practicing speaking skills and frequently practices with native Chinese friends. As figure 4.1. below clearly shows, all students except LBs4 frequently use the strategies of word identification and translation. This may be due to the fact that having poor spoken language skills in Chinese to draw upon while processing the text, the students need to resort to translation.
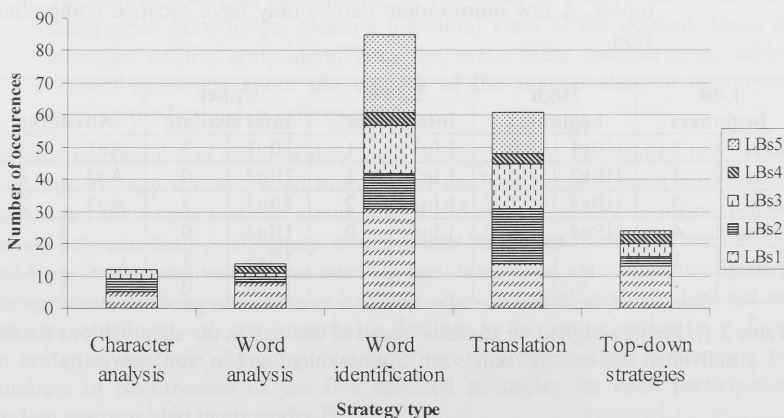

Figure 4.1.: Reading strategies found in the low beginners' group

A closer look at the word identification strategy reveals that LBs1 and LBs5 use this strategy more frequently than other students. This may be because they have difficulties identifying vocabulary items they have learnt earlier and therefore often proceed in a word by word manner.

An examination of the students' text comprehension shows that LBs4 scored 4 points, i. e. more than any other student in the group. This may seem surprising, as one would expect the opposite result from a student who focuses primarily on the development of spoken language skills. This indicates that one should not underestimate the value of good spoken language skills for successful text comprehension. Next, there are LBs2 and LBs3 with 3 points each. Both seem to have profited from their good word recognition skills, which allowed them to focus their mental resources on other tasks than word level processing. The lack of such skills had its effect on the text comprehension by LBs1 and LBs5. LBs5 lost track of general topic of the text and only gained 1 point in the recall task. LBs1 managed to compensate for his poor word recognition skills by using top-down strategies to keep track of the text content while he was trying to solve word level problems. This earned him 3 points.

4.2. Data analysis for the high beginners' group

There is a remarkably different distribution of strategies in the high beginners' group. No students use translation and they make little use of word analysis, word identification and top-down strategies. Contrary to what was observed in the low beginners' group, there are numerous occurrences of character analysis, HBs4 and HBs1 being responsible of most of them.
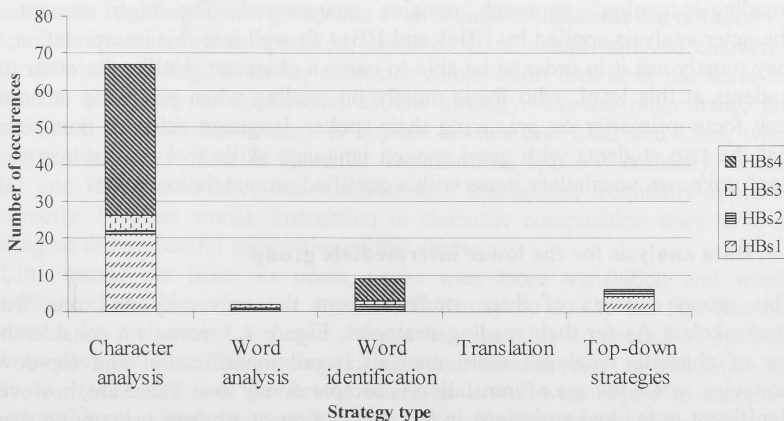

Figure 4.2.: Reading strategies found in the high beginners' group

For all students at this level instruction is focused on spoken language skills, with much attention being devoted to vocabulary building and grammatical skills. It would thus be tempting to conclude that by virtue of their good spoken language skills, the students do not need to draw on translation to process the text effectively. This explanation, however, would only be valid if the students had no significant difficulties in reading the text. A closer look at the students' comprehension scores reveals that none of them were able to make much of the text, as HBs1, HBs2 and HBs4 all achieved 0 point, while HBs3 scored only 1 point.

The question that naturally arises here is why these students did so poorly on the reading task. An obvious answer would be that the text was simply too difficult. However, the teacher of the group was consulted when the reading text was selected, and she confirmed that it would be suitable for the students' level. She might have overestimated their reading abilities, but it is not likely that her judgement was so erroneous. A closer examination of how the students went about reading the text reveals that all except HBs3 had problems identifying the most important word in the text, namely *wangba* (网吧). What is really striking is that none of the students made any special effort to identify the meaning of this word; instead they treated it in the same manner as any other unknown word. This is quite unusual, since all the students admitted in the interview after the task that they knew this word was the key to understanding what the whole text was about. It thus seems that this group of students follows an approach where they regard reading as naming. In other words, the main task in reading for them is to identify words by their pronunciation. They forget to interrupt the reading process from time to time to check their comprehension, as is confirmed by the low occurrence of top-down strategy use. Why these students follow this "reading-is-naming" approach remains unanswered. The high amount of character analysis applied by HBs1 and HBs4 fit well into this interpretation, as they mostly use it in order to be able to name a character. Unlike the other two students at this level, who focus mostly on reading when preparing at home, they focus primarily on practicing their spoken language skills. It thus seems that the two students with good spoken language skills feel a greater urge to "tag" unknown vocabulary items with a qualified pronunciation guess.

4.3. Data analysis for the lower intermediate group

This group consists of three students from the university and one from Studieskolen. As for their reading strategies, Figure 4.3. reveals a considerable use of character analysis, word analysis, word identification and top-down strategies, while the use of translation is comparatively low. There are, however, significant individual variations in the distribution of strategy use among these four students.
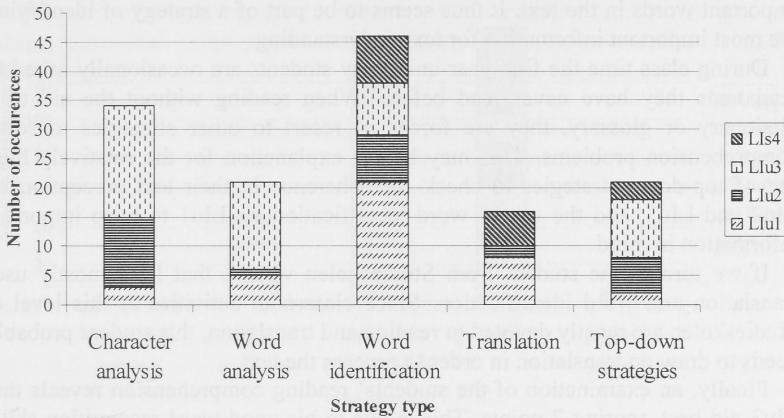
Figure 4.3.: Reading strategies found in the lower intermediate group

The instruction of the first year students from the university is focused on building strong spoken language competences and providing students with a solid knowledge of character composition. This is reflected in the fact that two of the students, LIu2 and LIu3, use little or no translation and a moderate amount of word identification, as they are able to draw directly on their spoken language resources when processing the text. The frequent use of character analysis by these two students would in this case seem to be inspired by the teaching of character composition in class. However, it was observed in 4.2 with regard to the high beginners' group that even though the students did not receive instruction in character composition, some of them would still use character analysis while reading. Teaching character composition thus does not seem to affect the frequency of application of this strategy. On the other hand, an examination of **how** this strategy is applied reveals that LIu2 and LIu3, who have received instruction in character composition, apply it correctly, while HBs1 and HBs4, who have not received such instruction, frequently apply it incorrectly. In other words, instruction in character composition does have a bearing on the successful application of this strategy.

LIu1 stands out from his peers, as he uses more translation and word identification and less character analysis. This may be due to the fact that he focuses a lot on reading at home. Moreover, since his command of spoken Chinese does not match his reading skills, he may need to resort to translation in order to process the text. As it was observed in 4.1 with regard to the low beginners' level, a high frequency of word identification may be linked to poor word recognition skills. This, however, does not seem to be the case with LIu1;

he employs this strategy more consciously, using it mostly with regard to important words in the text. It thus seems to be part of a strategy of identifying the most important information for text understanding.

During class time the first year university students are occasionally asked to read texts they have never read before. When reading without the aid of a dictionary or glossary, they are forced to resort to other strategies to solve comprehension problems. This may be the explanation for the relatively high use of top-down strategies to check for coherence in their text perception by LIu2 and LIu3, and the use of word identification by LIu1 to keep important information in mind.

If we turn to the student from Studieskolen we see that LIs4 mostly uses translation and word identification. Since classroom activities at this level at Studieskolen are mostly devoted to reading and translation, this student probably needs to draw on translation in order to process the text.

Finally, an examination of the students' reading comprehension reveals that LIu3 did best, scoring 2 points. This is due to his good word recognition skills and an effective combination of reading strategies, as he consistently uses top-down strategies to check his comprehension, at the same time making good and accurate use of character and word analysis. LIu1 and LIu2 scored 1 point each. Although they found the text difficult, both of them managed to maintain a good overview of the text by using top-down strategies and focusing on important words. LIs4 gained 0 points because of poor strategy use and problems with understanding the sentence structure.

4.4. Data analysis for the upper intermediate group

In the upper intermediate group there are four students from the university and two from Studieskolen. The generalisation extracted from Figure 4.4. below with regard to all six students is that there are many occurrences of word identification and translation, few occurrences of character analysis and word analysis, and very few occurrences of top-down strategy use. Here UIs5 differs remarkably from the other students, as he uses more character analysis. Compared to his peers, UIs6 often resorts to translation, while UIu2 does not make much use of it.
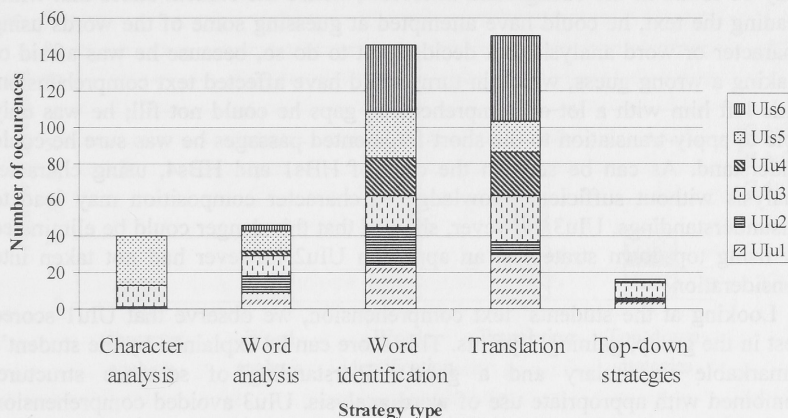
Figure 4.4.: Reading strategies found in the upper intermediate group

At this level the instructional methods at both the university and Studieskolen are similar, most of the classroom activities being devoted to translating texts from Chinese to Danish. Although the university also offers classes in oral communication at this level, the students devote most of their preparation time at home to preparing for reading classes.

The focus on reading and translating is reflected in the students' application of reading strategies. Because the students' spoken language resources do not match their reading abilities, they frequently use translation and word identification to process what they are reading. The very limited top-down strategy use may also be explained by the instructional methods. As the students approach all reading in class by reading and translating the text sentence by sentence, they also tend to do so when reading for themselves. Such an approach may be described as regarding understanding as translating.

Two of the students, UIu3 and UIs5, draw on the strategy of character analysis more frequently than their peers. However, UIs5 is more successful in his application of this strategy, as he invariably uses it correctly, thanks to a solid knowledge of character composition gained from previous instruction. UIu3 on the other hand, frequently applies this strategy incorrectly, but avoids misunderstandings by occasionally testing his comprehension by means of top-down strategies.

UIu2 uses less translation than his peers. At the same time he hardly ever resorts to character analysis while reading. Although he does sometimes use word analysis to guess the meaning of a word, he rejects most of the hypotheses generated by using this strategy. An explanation for this approach to strategy use

may be found in the background interview, where the student states that while reading the text, he could have attempted at guessing some of the words using character or word analysis, but decided not to do so, because he was afraid of making a wrong guess, which in turn would have affected text comprehension. This left him with a lot of comprehension gaps he could not fill; he was only able to apply translation to the short fragmented passages he was sure he could understand. As can be seen in the case of HBs1 and HBs4, using character analysis without sufficient knowledge of character composition may lead to misunderstandings. UIu3, however, showed that this danger could be eliminated by using top-down strategies, an approach UIu2 however had not taken into consideration.

Looking at the students' text comprehension, we observe that UIu1 scored best in the group, gaining 3 points. This score can be explained by the student's remarkable vocabulary and a good understanding of sentence structure, combined with appropriate use of word analysis. UIu3 avoided comprehension problems caused by inaccurate use of character analysis by using top-down strategies, and thus gained 2 points. UIs5 scored 1 point, solving his vocabulary problems by applying character analysis correctly to unknown words. UIu4 and UIs6 gained 0 point; both had problems with word recognition and understanding sentence structure, and they were not capable of applying strategies that might alleviate these problems. UIu2 also gained 0 point; this however was not due to problems with word recognition or sentence structure, but to insufficient strategy use.

4.5. Data analysis for the advanced group

As Figure 4.5. below clearly shows, in the advanced group we can observe numerous occurrences of word identification, Au3 being responsible for more than half of them. The students also seem to employ quite a lot of translation, some word analysis and top-down strategies, and, to a much lesser extent, character analysis.
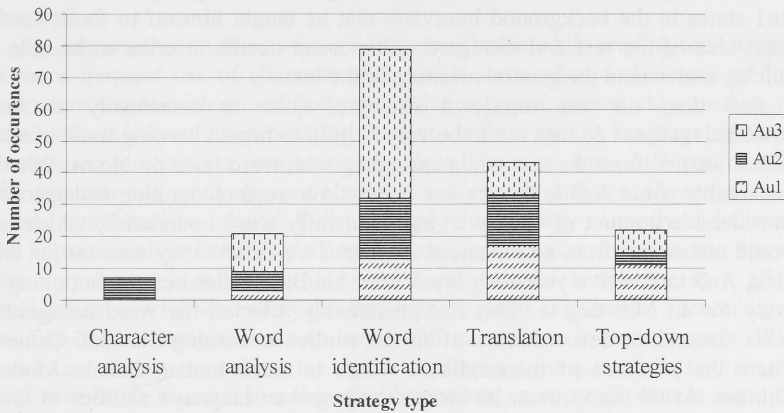
Figure 4.5.: Reading strategies found in the advanced group

Although Au1 and Au2 seem to use translation equally frequently, the numbers in Figure 4.5. present a misleading picture of how this strategy is applied. An explanation of the problem is to be found in the method of data collection. The strategy of translation, like all the other strategies, was registered for one occurrence for each time it was applied in the protocols. This method works fine as long as all students use these strategies in a similar manner. Au1, much like all the other students in the group, applied translation to parts of sentences. Au2, however, often translated entire sentences at a time. The amount of occurrences of this strategy is thus rather low for Au2, even though he virtually translated the entire text.

Although the students at this level were not offered any instruction in the spring term, i. e. when these data were gathered, their reading strategies are to some extent affected by the way they had been taught previously. Their copious use of translation and word identification is coherent with focus on reading and translation in the classroom. Especially Au2 exhibits much the same types of strategy use as the upper intermediate. This is not a coincidence, since the instruction the students at this level have received is very similar, except for the difficulty level of the texts read in class.

What makes Au1 and Au3 different from Au2 is their extensive experience with reading texts in Chinese on their own as part of their thesis research, which has allowed them to develop effective top-down strategy use. To save time while looking for relevant texts, Au1 has deliberately developed a very top-down-oriented approach to reading. As can be seen in Figure 4.5., he focuses very little on word and character level analysis. Translation is mostly used on difficult parts that to him seem important to understanding the text, while top-

down strategies are used for problem solving and creating a general overview. Au1 states in the background interview that he taught himself to focus on the main idea of the text and disregard unimportant details in order to be able to quickly understand the general meaning of the text.

Au3 does not use top-down strategies quite as extensively as Au1; nevertheless these do turn out to be very helpful to him in keeping track of what he has learned from the text while struggling with word level problems. What is remarkable about Au3 is that he has rather slow word recognition and spends a considerable amount of energy trying to identify word boundaries, which one would not expect from an advanced student. Two factors may account for this: First, Au3 took a five year long break after his BA-studies before continuing to study for an MA degree. This has presumably affected his word recognition skills. Second, he devoted much of his BA studies to learning Classical Chinese, where the presence of monosyllabic words is much higher than in Modern Chinese. At the same time, he lacks strong spoken language abilities to draw upon. This makes him spend a lot of energy on the identification of word boundaries, thus reducing the speed of text reception.

Considering the three students' comprehension, we observe that Au2 did best, scoring 4 points. This high score is due to a remarkably good vocabulary and understanding of sentence structure, which allowed the student to proceed easily through long stretches of the text at a time. Au1 scored 3 points, good top-down strategy use having enabled him to quickly get the gist of the text without having to focus excessively on the details, and then turn his attention to parts of the text he considered important. Au3 gained 2 points. By using top-down strategies he kept a good overview of the text, which prevented him from losing track of the text content while struggling with word recognition problems.

5. Conclusions

As can be seen from the analysis above, focus on reading in class is conducive to a frequent use of translation during reading. The reason for this may be that due to insufficient spoken language skills in the target language, students need to process the text via their native language. This, in turn, slows down the reading process. Kern (1994) observes that the use of translation during reading allows the student to generate and preserve meaning by allowing the reader to represent portions of L2 text that exceed their cognitive limits in a familiar, memory efficient form.

Students with good spoken language skills, on the other hand, use translation less frequently while reading. They probably draw directly on their spoken language skills in Chinese while processing the text, and thus do not need to re-sort to translation quite as often. Focus on spoken language skills in class would thus help students develop better speaking skills they can draw on while reading.

It would also make them avoid having to go through the time-consuming translation.

It turns out that students who use little translation while reading tend to make a more frequent use of character analysis. It seems they feel a need to "tag" unknown words with a qualified pronunciation guess, presumably because this allows them to continue processing the text via their spoken language resources. Instruction in character composition in class, however, was not found to affect the frequency of application of character analysis by students. However, it was found to affect the students' ability to apply this strategy correctly and also had an impact on their benefit of using it. Teaching character composition beyond the very basic character learning thus appears to be beneficial, as it allows students to use character analysis effectively to guess at unknown vocabulary.

Top-down strategies seem to be helpful to students in several ways. When used extensively, they allow the student to first get the gist of the text content, and then focus on parts that they find important, an approach that is especially useful for students who are doing independent research. Top-down strategies may also be useful as a means of checking for coherence in text comprehension and solving specific comprehension problems. For less proficient students they may even help the student avoiding comprehension breakdown; by using top-down strategies to keep in mind what they have made of the text, the student will not lose sight of the general idea of the text when focusing most of their energy on word or sentence level problems. As reading previously unread texts without the aid of a dictionary in class turned out to lead to increased top-down strategy use, activities of this sort would be beneficial for the students. Other activities that encourage top-down strategy use, such as training students to use specific reading strategies, as seen e. g. in Salataci and Akyel (2002) may also be worth consideration.

6. Future research

As this study is based on only a small number of informants at each level, further research is needed to confirm the results presented here. Future research should focus especially on two aspects: how spoken language competences influence the application of reading strategies and what didactic methods can be employed to enhance the students' top-down strategy use during reading.

References

Bech, Lene Sønderby/Nielsen, Christian. 2006. *Kinesisk 1 – kinesisk sprog for begyndere (Chinese 1 – Chinese for beginners).* Systime

Deutsche Welle. 2007. "Zhongguo jiang zai nengyuan fangmian ziji-zizu 中国将在能源方面自给自足 (China will be self-sufficient in energy resources)". From: www.deutschewelle.de (15/4-2007)

Everson, Michael E./Ke, Chuanren. 1997. "An inquiry into the reading strategies of intermediate and advanced learners of Chinese as a foreign language". In: *Journal of the Chinese Language Teachers Association* 32:1, 1-20

Jiang Xin 江新. 2008. *Duiwai Hanyu zi ci yu yuedu xuexi yanjiu* 对外汉语字词与阅读学习研究 (Research on foreign learners' acquisition of Chinese characters, words, and reading). Beijing

Ke, Chuanren. 1998. "Effects of strategies on the learning of Chinese characters among foreign language students". In: *Journal of the Chinese Language Teachers Association* 33:2, 93-112

Kern, Richard. 1994. "The role of mental translation in second language reading". In: *Studies in second language acquisition* 16/4, 441-461

Københavns Universitet. 2006. "Wangba 网吧 (Internet cafes)". In: *Kaimen: Kinesisk for universitetsstuderende, Skrivebog 2 (Kaimen: Chinese for university students, writing book 2)*

Lee, Li-Chun Caroline. 1998. *The application of reading strategies by American learners of Chinese as a foreign language when processing narrative and argumentative texts.* Unpublished Ph.D. dissertation, Indiana University

Liu, Irene/Li, Xiaoqi. 1998. "Shiyi dian liu yi renkou yiweizhe shenme? 十一点六亿人口意味着什么？ (What does a 1.16 billion population imply?)". In: *A new text for a modern China.* Boston: Cheng and Tsui Company

Salataci, Reyhan/Akyel, Ayse. 2002. "Possible effects of strategy instruction on L1 and L2 reading". In: *Reading in a foreign language* 14/1, 1-17

Shen, Helen. 2004. "Level of cognitive processing: Effects on character learning among non-native learners of Chinese as a foreign language". In: *Language and education* 18/2, 167-182

Ying, Lei 赢蕾. 1999. "Xiangshui 香水 (Perfume)". URL: http://www.mypcera.com/book/newxian1/yinglei/002.htm (17/3-2007)

Appendix A

Text for the low beginners' level

　　下个星期一是朱莉娅的生日。黄朋想给她买一件礼物。朱莉娅对中国古董感兴趣。她特别喜欢古典书法。因为黄朋不懂什么古董是真的，什么是假的，所以他决定给她买别的东西。朱莉娅常常说她没有好看的衣服。星期六上午黄朋就去秀水街买礼物。他想给他女朋友买一件好看的毛衣。因为黄朋是学生，所以他的钱不多。他只有一百四十元。他的钱够吗？

143 characters. From: Bech/Nielsen (2006:162).

Text for the high beginners' level

网吧

　　北京有几千家网吧。九十年代，超过一半是黑网吧，可是 2002 年北京的一家大网吧发生火灾。死了不少人后，黑网吧就越来越少了。现在，去网吧的人还是很多。火灾以后，去网吧的人都要登记。

　　网吧里不少人玩网络游戏，可是也有人去收发邮件，查找网页，在线聊天等等。玩游戏的大多数是年轻人。他们自己家里很可能有电脑，可是因为网吧的游戏多，速度快，所以他们更愿意到网吧去玩。

155 characters. From: Københavns Universitet (2006:21).

Text for the lower intermediate level

十一点六亿人口意味着什么？

　　根据中国第四次人口调查，到 1990 年 7 月 1 日零点，中国总人口是 11.6 亿。这个数字说明，中国的计划生育工作作得不错，人口大爆炸得到了一定的控制。八十年代前期，中国实行了计划生育政策：一个家庭只能生一个孩子。从那时起，中国大约少生了两亿多人，这是一个非常好的结果。但是中国已经有 11.6 亿人口，并且每年还要增加 1500 多万，差不多是一个澳大利亚的人口！这说明中国人口问题还是非常严重，中国真非实行计划生育不可。

182 characters. From: Liu/Li (1998:18).

Text for the upper intermediate level

香水

　　素茵离开家的时候刚好碰着张家姆妈，张家姆妈头发乱糟糟的，有一粒米饭粘在脸上，她手里拿着把扫帚从前面的过道走来，素茵笑着向她点点头。前几天为了一点卫生费，她和老太太争了几句，今天看见老太太黑着脸盯着她，素茵心里就怯了几分。果然，张家姆妈在素茵下楼梯的时候叫住了她，张家姆妈咳了几声，拉着素茵的手问她，你姆妈好吗？她的老胃病不再犯了吧？素茵一一作了回答。张家姆妈侧着脸吸了一口气，接着说，你身上真好闻，搽香水吧？素茵红着脸点点头，老太太又问道，这是什么香水？不浓不淡，这么好闻。素茵低着头想了一下，说，白合吧，我也搞不清是什么味，那是去年结婚的时候朋友送的，也不知是什么来路。素茵想她问我这些干什么？是不是要到婆婆那儿去说我坏话。说就说呗，搽香水怎么啦，又不犯法。

297 characters. From: Ying (1999).

Text for the advanced level

中国将在能源方面自给自足

　　据中国经济新闻网(德国)电：中国拥有十分庞大的能源储备，并有可能将在未来的能源需求方面一如既往地自给自足。中国国家发展和改革委员会主任陈德铭星期三在沙特阿拉伯首都利雅得举行的第二届亚洲能源部长圆桌会议上强调。陈德铭还发表了名为中国能源发展与亚洲能源合作的讲话。他在讲话中表示，中国不仅是一个能源消费国，更是一个能源出产国。到现在为止，中国已经可以满足自身的需求。不过，目前中国还急需原油和天然气，用来补充必要的能源供应。现在国际市场上原油价格的上扬不应该归咎于中国，其主要原因还是在于地方形势的不稳定，证券基金的投机行为以及自然灾害。

271 characters. From: Deutsche Welle (2007).

Appendix B

	Character analysis	Word analysis	Word identification	Translation	Top-down strategies
LBs1	5	8	31	14	13
LBs2	4	2	11	17	3
LBs3	3	1	15	14	4
LBs4		2	4	3	3
LBs5		1	24	13	1
HBs1	21				4
HBs2	1	1	2		2
HBs3	4	1	1		
HBs4	41		6		
LIu1	3	5	21	8	2
LIu2	12	1	8	2	6
LIu3	19	15	9		10
LIs4			8	6	3
UIu1		9	24	30	4
UIu2	1	9	21	7	2
UIu3	12	11	17	25	8
UIu4		3	21	24	1
UIs5	27	11	25	17	1
UIs6		3	37	47	
Au1		3	13	17	11
Au2	7	6	19	16	4
Au3		12	47	10	7

摘要

　　本论文主要研究具备不同汉语水平的汉语学习者使用阅读策略的情况，以及课堂教学法对学生使用这些阅读策略的影响。所使用的数据主要是通过记录学生的阅读思路、调查汉语老师采用的教学方法以及观察课堂里的表现这三种渠道而获取的。研究结果表明，课堂教学是以阅读为主还是以会话为主对学生使用翻译与汉字分析这两种阅读策略的频率有影响。课堂上是否教汉字偏旁结构分析不影响学生的汉字分析策略使用频率，而是关系到学生能否准确使用这种方法。学生在阅读时不使用词典或者其它辅助性工具能够提高自上而下阅读策略的使用频率。研究结果也表明，使用自上而下阅读策略有助于提高学生的阅读理解能力。在这个基础上本文作者提出了一些如何改进汉语阅读教学的建议。