Student Thesis
Bachelor's thesis
Students' views on the learning of kanji

A study the views and experiences of students at the Swedish universities concerning the teaching and learning of Chinese characters as used in Japanese

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Abstract:

Kanji, the Chinese characters adopted to write the Japanese language, is often mentioned as one of the most difficult aspects of mastering said language. This is especially said about people from outside the Sinosphere i.e. PRC, Taiwan, North and South Korea, Japan and Vietnam. In the following thesis 12 students studying the Japanese language at Swedish universities were interviewed about their experiences when it comes to learning and being taught about kanji.

A chapter summarizing some of the research that is relevant to this thesis is also included. Topics touched upon in this and the result chapter include the desire for more structured approach to kanji learning based on breaking down the characters into elemental components, spaced repetition (SRS), mnemonics.

Keywords:
Kanji, hanzi, learning, spaced repetition, SRS, components, radicals
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Background and introduction

The learning of kanji, the Chinese characters used in the Japanese language is commonly thought of as one of the most challenging aspects for anyone attempting to master the language in question. Not only are the shapes more complicated than e.g. the letters of the Latin alphabet, but the characters often have more than one reading, as the characters not only are used to write Chinese loan words, but also Japanese words. The characters are composed of smaller and simpler components, these however are not merely arranged serially left-to-right as letters in a word written in the Latin alphabet, but may also be horizontally and/or one part on the exterior and one in the interior part of the character in question. For those not familiar with the Japanese writing system an introduction can be found further down on this page.

Speaking of these components, from my own experience when I was being introduced to Kanji when I took my first semester Japanese at Dalarna University, I got a bit frustrated when introduced to new characters such as 旅 (tabi, travel), which included no parts I was familiar with before, and thus having to be learnt as a lump of seemingly randomly arranged lines.

Research questions

The aim of this thesis is to examine the experiences of students in Swedish universities when it comes to the studying and instruction on kanji.

• What are the experiences of students in Swedish universities when it comes to the studying and instruction on kanji?

• Is there a desire for a more methodical, analytical approach based on deconstruction of the characters that might be more efficient or at least less frustrating?

• What kind of difficulties do these students encounter and how are the difficulties addressed in the learning materials and lectures?

It should be noted that the efficiency of a learning approach is hard, if not impossible to measure, however, a relatively low level of frustration and some satisfaction of one's level might indicate better efficiency.

Brief introduction of the Japanese writing system (and its problems)

Since this thesis focuses on difficulties that students encounter, I have chosen to focus on difficult and inconsistent aspects of the Japanese writing system in question. As any writing system
currently in use, the Japanese one can, despite its complexities, allow its users to communicate and disseminate information.

Firstly, the term “writing system” conjures up an image of something orderly, that some systematic pattern can be found between the language and its sound and the characters which you use to write down said language. When it comes to Japanese though, the term “system” is perhaps less apt than that of thousands of different ad-hoc solutions to the problem of writing a particular word. The reason for this is that the basis for the Japanese writing system are Chinese characters, which might seem reasonable due to the proximity of these two countries, however the languages have (apart from loanwords) nothing in common. Indeed it is not practical to write Japanese with Chinese characters alone, luckily a set of two syllabaries\textsuperscript{1} had developed from short hand forms of some Chinese characters. Though not the original intension, these syllabaries have been implemented to write e.g. verb conjugations and European loanwords. These three parallel writing systems might be viewed as a source of complexity, but since the number characters of each syllabary is quite low, I imagine that the challenge of memorizing them is comparable e.g. to having to learn the Arabic alphabet. That is to say that the major challenge is how the Chinese characters are mapped unto the Japanese language, an example with the high frequency\textsuperscript{2} characters 大, 人 and 気:

大  Ōkī (Large)
人  Hito (Person)
気  Ki (Spirit)
大人  Otona (Adult)
人気  Ninki (Popular) or Hitoke (Sign of life)
大人気  Daininki (Very popular)

As one can see, to predict the pronunciation of a written word, or the writing of a spoken is not infrequently challenging and in some cases impossible.

\textsuperscript{1} I.e. sets of characters to write syllables as opposed to single phonemes like an alphabet
\textsuperscript{2} Number 5, 1 and 25 according to Agency of Cultural Affair, Government of Japan: http://www.bunka.go.jp/kokugo_nihongo/bunkasingi/kanji_24/pdf/sanko_3.pdf
Individual characters are read differently depending on context\(^3\) and even two
coloracter sequences (大人 and 人気 in this example) can be read differently.

The *Jōyōkanji* (常用漢字, literally “Common use kanji”), a list of 2136
characters issued by the Japanese Ministry of Education, Culture, Sports, Science
and Technology serves as a standard for adult literacy. However one does not have
to venture into too obscure vocabulary to find words that fall outside this list, e.g:
石鹼 (Sekken, soap) or 罠 (Wana, trap), and until fairly recently (2010) a common
first person singular pronoun 俺 (Ore) and both the word for chin and cheek; 顎 (Ago) and 頬 (Hoho/Hō) and some characters used in names of prefectures were
not included in this list. Consequently, the question of how many characters there
are, or how many one must learn is not as straight-forward as in the case of an
alphabetical orthography.

Another point is that the very same word can be written with different
characters depending on the context and/or the whim and taste of the author. E.g.
the verb *omou* (to think) can be written in at least five different ways; 思う, 想う, 懐う,
念う and 憶う. Shortly put, in Japanese instead of a one-to-one relationship
between the phonetics of the language and the orthography, there is instead a
many-to-many relation. For these and other reasons Hannas\(^4\) writes that:

> Japanese orthography shares with English the distinction of being the worst of its
class, except that instead of being the worst of a good lot it is the worst of a bad lot.

\(^{p}27\)

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\(^3\) Here a rule of thumb is that characters in isolation are read with a Japanese reading
(kun’yomi), while in compounds a Sino-Japanese one (on’yomi) is used more commonly,
however there are uncountable exception to this and similar rules

\(^4\) Hannas, W. Asia's Orthographic Dilemma :. Honolulu, HI, USA: University of Hawaii Press,
1997
Previous research

General research on kanji learning

Investigations on the learning of kanji are numerous, however, this research does not seem to have affected the way kanji is taught in textbooks commonly used in schools in any significant way; Toyoda\(^5\) indeed describes this situation thusly:

In many cases, however, after the initial introduction and explanation of components at the beginning, learners are generally left to their own devices in terms of how to learn and store the kanji

(p 17)

And this is in spite of that it has been long known that a knowledge of a few hundred sub-components are needed to know several thousands characters. Vorobeva's\(^6\) compilation of a number of "Compositional kanji systems" (漢字の構成要素のシステム) shows that even though the different authors choose different nomenclatures more than half of them (10/14) use less than 310 components to cover roughly 2000 characters. In fact in the oldest "system" mentioned in Vorobeva's compilation Wieger\(^7\) writes that knowledge of comparatively few "primitives" (in his case less than 300) and principal compounds (about 1500) is all one needs in order to to master the Chinese characters.

There is no consensus on what to call these basic building blocks; component, primitive and radical, nor is there one universal definition of what is and what is not a component. Regardless of all this, the same authors warns of trying to reduce the number of components that are frequently learned by decomposing characters that might already be considered basic. In other words, a

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further decomposition would not yield any gains in efficiency of learning, and even if one would do a reduction all the way down to the individual stroke level, there is no consensus even there on how many different strokes there are. According to Vorobeva (2014) the number of different strokes "ranges from 10 to 41 types" (p 45). A higher number of different strokes comes from e.g. counting | and  as different strokes because of the small hook on the latter. Another reason for a high number of different strokes would be viewing something as complex as one of the strokes in the two stroke character 乃 (the wave shaped “diagonal M” part being written without lifting the pen from the paper) as an elemental stroke type. A lower count would come from viewing these strokes as special cases or compositions of simpler strokes.

As the title of Vorobeva's thesis includes the word "coding" it should perhaps be noted that this refer to giving a "code" (or perhaps a "label" would be a more apt description) to a stroke type or component to make referencing and memorization easier. Indeed the act of labeling something anything is seemingly more important than that the assigned code is relevant to the thing which it is assigned to. To give an example, Heisig9, which Vorobeva also mentions assigns the keyword “Silver” (as he calls it) to the rather rare character (but also sub-component) 艮10, since it is found in (among other) in the very common 銀 (Gin or Shirogane, meaning silver). As there seems to be advantage of a learning method being based on analytical decomposition, especially considering that surely the vast majority of people studying the Japanese language in the West are older (high school and university age) and thus have a more developed analytical thought process than the young school children in the Sinosphere who come in contact with these characters at a much younger age. However according to Vorobeva the analytical approach is frequently abandoned and gives this example of characters being introduced in a less than optimal order:

In the textbook ‘Minna No Nihongo Kanji I’ the character 口 is included in the list of radicals, but, 員 (#30), 古 (#67), 右 (#87) and 名 appear (#150) earlier than 口 (#163) (p 143) (Author's translation)

8 その数は10種類から41種類までである。
10 Which in Japanese is read Ushitora refers to a northeast direction
In fact, computer analysis done by Vorobeva of a number of kanji learning materials shows that this is far from an isolated case, but rather “Results from this analysis showed that the percentage of such cases [of characters being out of order] was 42.6%.” (Abstract, p 2).

Toyoda tested 103 Australian students in six different aspects of kanji:
• **Real-artificial**: being able to distinguish a real character from a artificial one.
• **Radical**\textsuperscript{11} **identification**: being able to identify the radical of a given character.
• **Same-different meaning**: being able to tell if two characters with a common radical are semantically related.
• **Meaning categorization**: being able to tell if the character's radical was related to its meaning.
• **Same-different sound**: being able to tell if two characters share the same reading.

With such a wide and ambitious investigation one might expect quite a lot of results. However because of the breadth there are so many variables. For this or other reasons, Toyoda does not manage to reveal much in the conclusion, merely showing that the awareness of the aspects that were tested increased gradually among the students in relation to their study time. Toyoda indeed describes this analysis that the learners have to do gradually figure out things on their own. That is contrasted to a assumed sudden change in awareness because of a being taught or having learnt some fact for e.g. facilitating in the field of analyzing characters.

Gamage\textsuperscript{12} reports that repeated writing was the method most widely used, especially among students from an “alphabetic background”. I.e. the most used method is the one that is most focused on rote memorization and the most simplistic one. On the point that character background learners (e.g. Chinese) use repeated writing less can be argued to be case of cherry picking, since they most certainly have done their fair share of repeated writing, only not when they were studying Japanese, but earlier. The fact that “Both descriptive and statistical

\textsuperscript{11} The radical can be referred to as the part carrying meaning (as opposed to pronunciation)
analyses of the questionnaire responses revealed that the strategies used most often are the most helpful.” may also have less to do with the actual efficiency of the methods in question, but rather a lack of knowledge that something more efficient might exist.

Richmond\textsuperscript{13} deals with several assumptions that he has encountered in kanji learning materials, on the need for JSL learners (Japanese as a Second Language) to use different learning methods than native learners he says:

Perhaps the most commonly held of the assumptions about kanji is that learning them in the same way as Japanese students is illogical and time-consuming. Many of the motives for this view (mostly differences between L1 and L2 learners and learning environment) are valid, though ironically it is the over-generalisation of this idea that is responsible for many of the problems in JSL kanji education.

(p. 62)

It can be argued that there is a bigger need for more efficient (and eventually different) for JSL learners. In the case of a native, considering the time given to achieve adult literacy, the constant exposure and not to mention the fact that you have really no choice but to learn your native language. Considering all this, there does seem to be a bigger need for efficient methods, though they do not have to necessarily differ from those employed by native speakers when growing up.

Furthermore on the topic of mnemonics he continues. As a way of ‘easing the memory burden’, mnemonic imagery and etymological explanation, are both examples of popular methods for JSL kanji learners, as witnessed in two of our surveyed texts. Richmond acknowledges that “Certainly, these methods utilise the learner’s imagination and encourage motivation”, but he does not wholly accept Sisk-Noguchi’s\textsuperscript{14} claim, or rather what he sees as Sisk-Noguchi claim, namely that “mnemonic use unequivocally aids the retention of kanji in memory”. He further cites studies that “mnemones have yet to be completely accepted as a major methodology”. Speaking of a major methodology, Richmond is skeptical of the existence of a single universal methodology that would suit all learners, mentioning cognitive research that show a “inconsistency of strategy use across learners”. In order to counter the claim of the usefulness of mnemonics,

\textsuperscript{13} S. Richmond, \textit{A Re-evaluation of Kanji Textbooks for Learners of Japanese as a Second Language} Journal of the Faculty of Economics, KGU, Vol. 15, July 2005

\textsuperscript{14} Noguchi, M. Component analysis of kanji for learners from non-kanji using countries. The Language Teacher, 1995
Richmond cites a study by Wang and Thomas\textsuperscript{15}. However this study does seem to have some problems with it that indicates that the results might not be relevant for case of somebody studying e.g. Japanese. Firstly, the participants did not have any knowledge of Chinese characters beforehand, though this might seem apt for a “control type group”, when the group that are taught using mnemonics they have to remember not only that the character 囚 means prisoner, but also that it shows a man (人) in confinement (囗), while a student who would learn the character with a mnemonic would have already learned the parts that it consists of. In other words, this example of so called mnemonic learning have more to do with the aforementioned “out of order rote-memorization”. On the other hand, the rote-memory based group are given the opportunity to write the character multiple times, in essence review their memory, albeit over a short period of time. One might say that surely the mnemonic group also has a chance to review by mentally going over the mnemonic and perhaps even writing it in their mind (though this might be challenging for complete newcomers to Chinese characters), but instead something peculiar is done right after the character learning session; the test subjects were actively distracted with a ”general knowledge” questionnaire to "effects and to minimize the chance of spontaneous rehearsal” (p367). This is especially relevant for mnemonic approach where being able to do a "spontaneous rehearsal” by recalling the mnemonic any time without tools such as paper and pen.

Studies of this nature of course tend to be artificial, but it is easy to see that the approach of the study differs on so many points than from that of an actual learning environment that the results might not have any bearing on the memorizing of characters in practice. One thing that should be noted is that the rote based group was given more time per character (42s and 30s respectively), but this was not addressed in the study and neither was the fact that 30 seconds might just be far too short to effectively picture the mnemonic to avoid forgetting it.

Richmond also points out that there is a difference of being supplied a ready made mnemonic (as in Wang, Thomas) and creating one oneself. The latter possibly being more effective as you can draw on images and scenarios that you know you find hard to forget. As a contrast to a mnemonic driven approach, Richmond also discusses a vocabulary centered one, i.e. not treating kanji as a

separate part of the teaching of Japanese, but integrating it with the learning of vocabulary. Concerning this he claims that

Although there are many proponents of this […] it seems to have remained a classroom-centered approach, and as reported in this paper, there is still little evidence of it in JSL kanji textbooks and learning material (p. 67)

However it can be argued that relating vocabulary will be introduced sooner or later. The interval between learning the character and some corresponding vocabulary or vice versa might be a few seconds or several months. Regardless, if the vocabulary is needed to understand the material the student is encountering and if the same student is also motivated enough, the vocabulary in question will be learnt. Consequently, this classification might not be all that useful. This point might be moot though, since Richmond as mentioned does seem to be in favor of a “let a thousand flowers bloom” approach since different students might have different needs and favored methods of learning.

**Spaced repetition**

Firstly, a definition of “Spaced repetition” (or SRS standing for “Spaced repetition system”) is in order. The basic concept that if an item is correctly answered correctly the first time it might be encountered the next day. If then correctly answered, a week might pass until shown again, if answered correctly yet again a month might pass until the next review of the item in question. The intervals can differ in different implementations, but the basic idea of increasing the intervals is kept. This spacing is done not only for long term retention of information, but also to enabling spending more time on items that prove to be troublesome.

Historically, SRS was implemented with physical paper flashcards that would be put in different boxes depending on when they would be reviewed again. However, a piece of software, such as Anki\(^\text{16}\), can be used to keep track of the intervals and removing the need to create and carry physical cards.

\(^{16}\text{http://ankisrs.net/}\)
Even though spaced repetition might not be too well known it has shown to be efficient. According to Cepeda et al.\textsuperscript{17} this is not particularly new information, as "more than a century of research" (p1) has shown the effects on using this type of reviewing for retention of information. The same authors go on to criticize established educational practices, which are unlikely to use longer gaps "on the order of months, rather than days or weeks" (p9), with cramming courses and shortened summer sessions being especially noteworthy offenders. As for the effectiveness of SRS it is concluded that

spaced (vs. massed) learning of items consistently shows benefits, regardless of retention interval, and that the learning benefits increase with increased time lags between learning presentations.

(p 18)

The lack of impact of the retention interval is noteworthy. This is because it indicates that after the first few reviews of an item, as the intervals become increasingly longer, the workload lessens without negatively affecting the recall.

**Phonetic components and on'yomi**

Firstly a definition of what is meant with "phonetic component". It is simply the part of certain\textsuperscript{18} kanji (that is a so called phono-semantic compound or 形声 (keisei)) that indicates the on'yomi. The following table shows two examples of such components:

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\textsuperscript{17} Cepeda et al. *Distributed Practice Over Multiday Intervals* Experimental Psychology 2009; Vol. 56(4) Hogrefe & Huber Publishers, 2009

\textsuperscript{18} It is clear that the majority of characters have been coined according to this principle, though an exact number is difficult to give. There is a tendency for this proportion to be larger in a large set, Banno, et al. (2009) claims 80% for all characters used today, while Barnett, Nishida (2010) claims 70% of the then current 1945 character Jōyō list.
Table 1: Example of two phonetic components

Two examples of two phonetic components with different levels of consistency. As one can see both of them give some information about the reading, but 剣 is more predictable than 余.

Pertaining to the usefulnesses of these components Townsend (2011) writes that this aspect of kanji have been largely neglected in Japanese language instruction and describes the situation very similarly to Toyoda in the way that students are largely left to their own devices as to own to learn the readings of the characters. And furthermore they are left alone to discover the relation between the character and their readings.

Even though her paper examines a inventory of 2230 characters and their 146 phonetic components rather than testing students' awareness, she demonstrates that indeed there is helpful information embedded in the characters themselves.

<table>
<thead>
<tr>
<th>Phonetic component</th>
<th>Example characters and words</th>
</tr>
</thead>
<tbody>
<tr>
<td>剣</td>
<td>剣道 (kendō)</td>
</tr>
<tr>
<td>余</td>
<td>余計 (yokei)</td>
</tr>
</tbody>
</table>

19 剣, being outside of the officially sanctioned list of character is written in the un-simplified form, while the example characters use the simplified form.

http://sdsu-dspace.calstate.edu/bitstream/handle/10211.10/1203/Townsend_Hiroko.pdf
Methodology

The method chosen for data collection is interviews, as I am interested in the process of learning, which can be quite subjective and individual. That is to say that Vorobeva's study of different kanji learning materials and Toyoda's more or less examination like meetings can indicate e.g. efficiency of ordering for learning and the student's awareness of different aspects of kanji respectively, not much knowledge is gathered on the process the student go through by using a certain material to get to some level of awareness. It should also be mentioned that it matters little if a method is very efficient if learners find it tedious and for that matter can not continue to use the method in question for a prolonged time to reach a certain level. Speaking of level, different students obviously have different goals and wishes and if an examiner tests an ability that the student is not too interested in acquiring, it can hardly be said to be a failure on the student's part if that a ability is lacking, as the student might not actually try of wish to acquire that skill.

So for the afore-mentioned reasons interviews were chosen as the method, and more specifically in a semi-structured format as Gill et.al. 2002 calls it. That is to say that the format to be used for the data collection is between “verbally administered questionnaires” (a “structured interview”) and a completely free form “unstructured” one. Firstly, this is because a too structured format would lack the depth and flexibility that is required to gather the students' different learning experiences and while a too unstructured way of conducting the interviews might give flexibility and depth, but since such a degree of flexibility and depth is firstly not needed. Secondly there are certain core questions that will be asked. Thirdly, as Gill et.al. writes these kind of interviews can be very time consuming, the most fitting approach is judged to be the semi-structured one.

When it comes to being able to capture the data for later use and analysis Remenyi (2012) writes that:

There is also the problem with scribbled notes that sometimes the researcher won’t be able to read his or her handwriting later. It is therefore helpful if the researcher is able to record the interview on a non-intrusive device.

(p 8)

21 Methods of data collection in qualitative research: interviews and focus groups P. Gill, K. Stewart, E. Treasure and B. Chadwick British Dental Journal volume 204 no. 6 2008

Luckily this is much of a problem of the past, since nowadays one can run freely available applications on one's phone or personal computer in order to record an on-site or phone/Skype conversation.

Furthermore, when it comes to recordings, an important point is that of acquiring the permission to record the conversation from the informant, however since the recording will not be spread and only used from data collection and since the questions will probably hardly contain any sensitive information this should not be a major obstacle. The interviewee will be informed not only in a letter but also in the interview itself that the interview will be recorded and also that recordings will be deleted after they have been used for data collection for this thesis. This is done to comply with general ethical guide lines.

Since the subject of on-site and phone interviews has be mentioned, it should be clarified that the majority if not all interviews will be conducted with the latter, since the informants will likely be spread across Sweden and doing on-site interviews would then become highly impractical.

What group to select the informants from is also an important point. I have chosen to focus on people that have studied Japanese at Swedish universities for 4-6 semesters, the reason behind this is that at that length of study, I judge that these people are genuinely motivated or interested in learning or even mastering the Japanese language and on top of that I do not consider it an unreasonable goal at that level to be able to read at some level of proficiency. If they have not reached a level that they are very pleased with, e.g. having to look up characters too frequently to be able to read for pleasure this might be an indication of if not flaw, at least a non-optimal aspect in the instruction. I also consider this form of individual goals and aspirations more relevant to the learning of each student rather than general criteria for grades, which might include skills that the student in question has little or no interest in acquiring.

How to prematurely end the interview and to keep the atmosphere relaxed and to not limit oneself to the prepared questions is nicely illustrated by this quote by Gillham:

> However achieved, the interviewee’s concluding comments (often spontaneous) can be uniquely revealing. After the tape-recorder has been switched off and the ‘main task’ accomplished, people often find they have things to say that did not surface in the narrative. There are various reasons for this but one of them is probably the limits of narrative structure itself, that somehow it couldn’t be fitted in, but is still felt to be important. Another is that the very activity of giving a full account often leads to a process of discovery, the articulation of which emerges in the more relaxed atmosphere after the interview.

(p 52)

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That is to say that a too rigid and formal outset might make one miss the unknown and unexpected and if you miss that it is not much point of doing the research in the first place. Also this also shows the importance of trying to create a relaxed atmosphere in general when it comes to interviewing, which also talks in favor of a less rigidly structured series of questions, which might also involve things that are somewhat irrelevant to the research questions, rather than the “verbally administered questionnaires” mentioned in the beginning of this section.

**How the interview were conducted**

For each institution, a representative for the relevant faculty was contacted via e-mail. In this e-mail a informant letter was attached which for example informed the informant that the interview would be recorded. With the help of this representative, contact informant for willing participants were acquired. Though doing the interview over telephone was always given as an option, all interviews were conducted, as per each informant's individual request, over Skype. All of the 12 interviews were conducted in Swedish.

The interviews would range between 20 to 30 minutes and would first start with a request for consent for recording the interview. What would then follow was series of questions starting generally with the informants being asked to describe their study history when it comes to the Japanese language and also a question asking how they would describe how kanji was taught, and also what materials were used. Depending on what the informant answered the conversation would flow differently, so the topics might occur in different orders, but general difficulties when it comes to kanji, if some readings were harder than other to learn, other materials or learning approaches outside the course and the ability to read unaided were touched upon. A more thorough listing of questions can be found in the appendix.
Results

Finding willing participants proved to be difficult. A total of 12 people who currently studied or had studied at Dalarna University, Gothenburg University and Stockholm University participated in interviews taking roughly 20-30 minutes each. Of 12 informants 3 were female and 9 male. Because of the small sample size not many firm conclusions can be drawn, but some interesting tendencies are still visible. In the following section the pronoun ”he” is used regardless of the actual gender of the person in question. In the quotations ”A” denotes the author and ”I” denotes the interviewee. Also since the quotations has been translated from the original Swedish some parts has been slightly paraphrased, e.g. removing false starts and the like as to remove some of the inefficiencies that are common to normal unscripted dialogue. This is to make the reading easier.

The study history when it comes to Japanese was as follows (with the chart on the next page with colors denoting different universities and saturation denoting study length for easy overview).

- On his second semester at Dalarna University
- Four semester at Dalarna University and halfway done with a 1 year at a language school in Japanese
- Four semesters at Dalarna University, two further semesters of related courses and roughly a 1 month at a language school
- At his third semester at Gothenburg University
- At his third semester at Gothenburg University, having taken a break from study for several years between his second and third semester, but reviewed somewhat during this break
- At his fourth semester at Gothenburg University and have studied at a Language school in Japan for 1 year
- At his fourth semester at Gothenburg University and have studied at a Language school in Japan for 1 year (note: a separate person and not a repeat of the previous)
- At his fifth semester at Gothenburg University, having spent one semester in a Japanese university
- Taking fifth semester courses after having studied Japanese in Indonesia several years earlier.
- At his third semester at Stockholm University
- At his third semester at Stockholm University
- At his fourth semester at Stockholm University while taking a small course at Dalarna University

Structure

The heading refers both to structure in teaching but also in the characters themselves. There were just two students who were not interested in having the teaching of kanji to be more structured and out of those, one them said so since he thought that the material used was structured enough. One problem that has been mentioned by e.g. Vorobeva is the introduction of characters with new and previously unknown parts. One student "had heard” that breaking down characters into radicals/parts might be advantageous, but had not used that approach, opting to repeatedly writing the characters he was attempting to memorize. One student found that during the first two semesters the breaking down of characters as presented in the lectures was really helpful, but that starting from the third semester he found this lacking both in the text book and the lectures. One student describes his experiences in this way:

A: What do you think about that new characters are introduced with new parts that you don't recognize?
I: That's something that I've been thinking about quite a lot. In my case, I've been checking out, you know these radicals to check if those could help me remembering the kanji. Earlier, I haven't thought too much about it. Rather it has been more: either I know this kanji or I don't. I haven't really thought about the


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structure of the kanji. It's more something I've been thinking recently to if this might be helpful when memorizing the kanji.

A: So, is that's [the structure of kanji, etc.] something that you would like to have been brought up in class?

I: Yes I think so. But if you look at the first two semesters, you're still learning the basics of the language. There's so many unknowns. It's not just kanji, there's the grammar and so on. It's just now, when you're getting more comfortable with the language, that you can focus on these kind of details. But, sure, it might have been good to, for example have a separate course that focused on radicals.

A student at Stockholm University that learning the Japanese names for radicals as being part of a course, which would seem to be more of trivia to be learned be by someone interested, rather than indispensable knowledge for learning how to read and write. The act of assigning labels to parts is something that is important though, but there's no real need that these labels should be in Japanese. Actually, most of the radical names are the kun'yomi for the character in question and one of a few suffixes.

One common theme was also that there was more emphasis put on deconstruction, mnemonics and other aspects being related to learning strategies in the first two semesters, while later semesters were more geared to just listing vocabulary to be learnt:

I: If we go back to the first two semesters, then we had more emphasis put on radicals... And I feel that that was important for my learning. We had a proper introduction to the radicals. What part the radical is, what its name and meaning is and how you can use radicals to guess the meaning of new kanji. But now, in the third semester it has been very little emphasis put on radicals. Now it's just like: "Here is how the kanji looks, here's the readings and here's the vocabulary"

A: So, you think that in the two first semesters that you got a good foundation when it comes to the structure?

I: Yes, exactly.

A: So, you'd like it continue in a similar manner? [as the previous two semester]

I: Now when I talk to you about this, I realize that this with radicals is a important aspect in my learning. The better grasp I have of the individual parts of the kanji, the more the pieces of the jigsaw puzzle fall into place and create this picture I need to remember the kanji.

A: Maybe especially now when you're expected to learn more [kanji]?

I: Yes, exactly.

Other learning resources

Of the interviewees, only two said that they used resources outside the ones assigned by respective institution. Of these two, one can be said to be a non-example, since it is a book with the
same approach of preparing for the JLPT (Japanese-Language Proficiency Test) as much of the material that the language school the person in question attended. In any case, the approach this student used for studying this material was that of the traditional repeated writing.

Thus only one person remained who, uses WaniKani of tofugu.com that uses a more analytical and structured way, much in the same vain as Heisig (one of books with a analytical approach mentioned by Vorobeva), but with added vocabulary that uses the character in question. The same student had in fact also tried Heisig, but did not feel that it suited him/her. On the same web site there is also an article\textsuperscript{25} that's critical of the way kanji is taught, which shows the general attitude of the creators of this web site.

When asked about other materials, many interviewees mentioned, instead of textbooks and the like, different kinds of authentic material. This being mainly in the form of popular media (manga, light novels, articles, TV programs, etc.).

\textbf{Spaced repetition}

Six of the twelve participants reported on using SRS software for retaining information such as readings and meanings of vocabulary (which also involves recalling readings and meanings of individual kanji). Since this is not something that is part of traditional classroom instruction, it might also be interesting to know where the students got aware of this kind of software. Since Gothenburg University actually had a link on their website to the SRS software Anki that was mentioned in the previous research chapter, some students was made aware of SRS through that. Apart from those, one had heard about it from a friend. Another found out about it after doing a Google search because he was a bit frustrated that his study method at the time did not make the information he wanted to learn stick as well as he wanted to. It might be noteworthy that this student came from a technological background rather than the humanities as wanted to see if there were something more “efficient and scientific”.

\textbf{Mnemonics}

Two of the interviewed students said that they actively used mnemonics in order to remember the kanji, with one of them coming to this approach independently and one having received a recommendation from a more advanced student acting as a mentor. Two more students had used them somewhat in the past, but these were mainly mnemonics created by someone else. These students reported that mnemonics was sometimes beneficial, but that had a hard time creating their own memorable ones.

\textsuperscript{25} Koichi (Pseudonym) \textit{The 5 Biggest Mistakes People Make When Learning Kanji}  
Worth noting is that two stories that were mentioned during the interviews could be considered incomplete. The first one for remembering夢(yume, dream) was: “At night (夕) the Sandman puts grass (艹) in your eye (罒) so you can dream (夢)”, which excludes冖(wakanmuri, wa crown). When it was mentioned that this part was missing from the story the answer was “Well, everyone knows that you sleep inside”, as it together with宀(ukanmuri, u crown) has the connotations of a roof. The second story was for a character with fewer parts, namely歯(ha, tooth), which had the story “Stop (止), you have a grain of rice (米) stuck in your teeth!”, which omits the part丂(ukebako, box for receiving e.g. mail).

Reading
One question that was hard to define in order to ask it, was the one of the ability to read for pleasure, an activity that most students and teachers of languages would agree is beneficial for e.g. one's vocabulary. Reading for pleasure was that defined as being able to read without having to look up words/characters/grammatical patterns frequently enough to be irritating. The answer that might be expected was that it depended on the level of the text and that it was generally a problem of both kanji and vocabulary or just vocabulary rather than a mostly kanji related problem. General approaches such as guessing from the meaning of a word from the context to push through the "dictionary look up wall" or using applications such as Rikaichan, which enable dictionary look ups with just a quick mouse over when reading on a computer. A student that seemed primarily to be interested in reading manga reported to being able to read quite un-interrupted, much thanks to the visual confirmation and also the frequent glossing of readings (furigana). One other way to facilitate reading mentioned by one informant was reading texts that he was already familiar with in another language, in this case old fairy tales.

On'yomi and phonetic components
Of the six interviewees that reported having had more problems with kun or on'yomi five people said that they found on'yomi more difficult. Worth noting is also that the only student that said that he occasionally used phonetic components to guess the on'yomi of unknown characters.

Three students from Gothenburg University gave the view that although phonetic components was something that had been briefly mentioned in some lecture(s) on the introductory level, this concept had not been used actively either in the lectures or the course materials. This following exchange is fairly typical including the example of空(sora, sky).

26 Named so since it resembles the katakana for wa (ワ)
27 Same reasoning but with u (ウ)
28 http://www.polarcloud.com/rikaichan/
A: When it comes to on'yomi... many kanji are constructed in such a way that one part is the radical and one part that indicates what on'yomi it can be.

I: What do mean?

A: If we take *sora* [空] as an example…

I: Yes.

A: … there you have the lower half, *kō* [工]. And this indicates the on'yomi which in *sora*'s case is *kuu*, so it's not 100%, but it shows what it might be.

I: Mmnh... oh OK so that's what you mean.

A: So, is that something that has been mentioned in the lectures?

I: Well, yeah it has. Sometimes when you don't know you look at the radical29 and guess, "Well, this has this and this, so it might be read as that". […] Sometimes I use it at the reading comprehension lessons. So, it has been a big help. Well, if it has been mentioned in the lectures… I think it has been, yes probably it has been mentioned, but only like an anecdote.

A: Just in passing?

I: Yeah … something like that. I don't have any memories that if was something that was brought up for any longer period of time.

A: Is it something that you would have wanted to been brought up more, perhaps especially exceptions and the like?

I: Well, there's always exceptions, but those you would have to learn by yourself, I guess, but it might have been good to bring up things, "these contain these radicals and read like this". Then people might have learned easier.

A similar sentiment can be gathered from another interviewee, with first some critical statements on how he views how the lessons are contacted. The “outside perspective” of encountering people “in the know” might also be of interest:

I: That [phonetic components] is not something that has been brought up much in class. Had we been presented that in combination with the radicals, so that you deconstruct each kanji. Speaking for me, I think that it would have been very positive, but that would of course take a lot of time from the lessons. […]

A: Is these phonetic components something you use when you are learning readings?

I: No, since that hasn't been brought up too much, it's something of unexplored territory for me. I've heard people talking about it, but it's not something that has been brought up as a specific part in the kanji. And as a result it's not something a choose to focus on.

A: Okay, but do you think it's something that might be beneficial?

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29 Note the difference usage; A uses the word “radical” for the “part carrying によるによって he general meaning”, or what under heading the character will be found in a character dictionary. I on the other hand uses “radical” more generally for any more or less independent part of a character, which explains how a “radical” can help to ascertain the reading.
I: I think it would be very beneficial. I have a class mate who has studied in Japan for two years and his Japanese is vastly superior. And he can see these parts. He points this out occasionally when we study […] But that information together with the other that would have been very beneficial, I think.

Writing

All students reported a lowered expectation from the teachers of being able to write the kanji by hand as time went on. i.e., early on there were tests and/or homework assignments that involved hand writing, while later on the students were only tested on knowing on being able to read the characters. This was generally viewed as something positive as it ”wasn't of much use” or that it ”wasn't worth the time”. A point that was also raised is that if one wished to practice or learn how to write character there was no one stopping an interested person of doing so, which would alleviate the need to include that skill in the course work.
Discussion
Structure

A perceived lack of structure in teaching of kanji seems to be prevalent among the interviewed students, especially at the more advanced levels. This is especially true of the difference experienced between the approach to kanji instruction in the second and third term. This can be contrasted with how grammar is often treated. For example might there be a note warning to not confuse two similar sounding grammatical patterns, but similar looking kanji or exceptions in readings do not seem to get the same amount of care.

It can be argued that grammar is more conceptual complex and that after the introductory level, students ought to be equipped with the tools to indigently break down characters in a an analytical manner. This seems to be contradicted by the reflections of the informants and their want for a more structured approach. From the interview it seems that many of the informants seemed to not be very familiar with a basic principal governing the creation of the vast majority of characters, namely the phono-semantic principle. Thus, the fact that the students are equipped which such tools is in question. That having been said, perhaps this demand could be met in teaching materials that students can use on their on time if they want, as to not spend too much of the lesson time, which can be limited to a few hours per week.

Their might be a problem of using to use a ordering similar to that one proposed by Vorobeva, generally going from characters with fewer strokes to ones with more strokes. And that is that one might not be able to simply use a text book linearly from finish to end, but rather having to jump around, as characters might appear “out of order”.

Other learning resources

If the afore-mentioned want or even need for more structure is a real one, then the general lack of students seeking alternative sources might be considered notable. Perhaps doubly so considering that in general university students are from a generation that should very much be accustomed to search for things on the Internet themselves. An interesting research question might pertain to the willingness of students who are in some way displeased about the teaching and/or course materials to find resources they find more helpful on their own.

The mentioning of different forms of media instead of what are traditionally considered learning materials can be interpreted either as viewing them as on a equal footing as text books and the like. This is not unreasonable especially considering that they might provide insight in actual natural sounding Japanese produced for native speakers. Another major factor is that a student is probably more likely to want to spend more time with media he picked himself rather than a text
book. Another way of interpreting the same answers is the afore-mentioned possibility of a low inclination of seeking material outside those assigned by the teacher. This makes anything in Japanese that is not the text book(s) used in the course worth mentioning. More research, that might even have been done is of course to answer these kind of questions.

Related to this is the “Input Hypothesis” how Stephen D. Krashen\(^{30}\), which states the input should be comprehensible, but the listener/reader should also be “open” to the content. This is more likely to happen if the material, as it is in this case, is selected by the student in question.

**Spaced repetition**

From this kind of small sample size it is not possible to draw any statistical conclusions, but if the respondents are any indication, the use of SRS software is fairly widespread among JSL learners. This might very well be because of the (perceived or real) difficult of the language at hand and that this difficulty requires special tools to be conquered. That is not to say that this kind of software is not beneficial for learning e.g. European languages (for speakers of other European languages) or for retaining other kind of information as suggested by the ”Previous research” section.

However SRS efficient might or might not be, and judging by Cepeda, it seems to be efficient and consideration should be made. And that consideration is that such methods should not be foisted upon the students, but in a case where a large degree of self study is expected of the students such as studying Japanese at university It is hard to see a reason not to at least mentions this approach to the student also say that it has some scientific backing of being efficient.

**Mnemonics**

Though a thorough discussion of the viability of using and/or the encouraging of the use of mnemonics might be beyond the scope of this thesis, though the use of stories and association in order the aid in memorization should be known since antiquity. As Wang-Thomas' study seem to have some methodological shortcomings, their conclusion that mnemonics are do not make for better recall does not appear to be solid. Contrastingly, it is not reasonable to assume that all students stand to benefit using mnemonics. This is also true for a number of other study techniques.

The ability of creating your own mnemonic stories might be important, if not for creating a more vivid or otherwise more memorable image for the person in question, but also continuing to create stories after there is no longer any ready-made stories being presented. At that point in their studies, the student(s) are presumably at a more advanced level and are thus expected to be familiar

with a higher number of characters. The difference of between mnemonic stories that are made by a third party and the oneself is also discussed by Richmond.

The two examples that were given for incomplete stories might serve as a warning for unsystematic ad-hoc based story making, which might prove to be problematic as not all components are being mentioned. Interestingly, both stories that have been created by two different studies have the meaning, or perhaps more aptly the keyword\(^{31}\) assigned to the character in question. This suggests an effort that may or may not be conscious to keep the meaning of the character in the same place in all stories, which is some sort of systemization. Not doing so might cause confusion for the person trying to recall the character.

**Reading**

In a way the question of being able to read without having to look up things too frequently was a way to gauge how many characters the informant knew. This I knew would be very inaccurate if self reported. Not only is the raw number hard to know, but it's also hard to define what “knowing a character” would be. This number was however given occasionally, even though unprompted. This number was ranging from “I've no idea” to “maybe about a 1000”. To put into perspective, even 1000 is about half of the officially sanctioned 2136 character in the Jōyō list, the most frequent 1000 cover much more of the 50% that they would if all characters had the same frequency. However, depending on the type of text, there might still be a need to look up characters several times per page.

Of course another factor that is even more difficult to measure than the number of characters a person knows is how much this person is motivated to learn to read, which in turn should be largely related to what this person is interested in reading and that material's accessibility in Japanese and other languages. That is to say that something that is accessible only in Japanese, or at least more accessible could be a major motivational factor. The importance of the student being “open” as described by Krashen also plays a role here.

**On'yomi and phonetic components**

Judging from the results, having more problems with on'yomi seems fairly common, even though these readings are frequently shorter than kun'yomi and are according to Townsend (2011) suited for systematic study. This would suggest that using this aspect more in the teaching of kanji would make the learning of on'yomi easier than it is now for many students.

\(^{31}\) This is less of an issue with the two characters used in the examples as “dream” and “tooth” are easily translated between the two languages. But for characters that have a more abstract or multi faceted meaning/usage the word “keyword” might be better has it may or may not reflect (the whole) meaning of the character in question.
Looking back on the reflection of one student that the knowledge of the relationship between on'yomi and phonetic components might not be useful until a student reaches a more advanced level. However, the reverse might be argued that in order to reach a higher level when it comes to vocabulary and character knowledge quickly, one could learn a high number of characters early on, but not learning a lot about each character and then methodically study the on'yomi.

**Writing**

Even hand writing is no longer an essential skill that was once was before the time of word processors and other technologies, it might be argued that being able to write a character, i.e. knowing exactly what components make up the character and their position relative to each other reduces confusion of similar looking characters, but further research on this could probably be done. Since writing a character by hand generally requires both more conscious effort and is more time consuming than simply reading one, the extra energy being expended might also aid in memorization.

Being able to write and differentiate is very much the same skill when it comes to simpler characters with minor differences such as 未 (imada, not yet) and 末 (sue, end), where the only difference is the relative lengths of the two horizontal strokes. Having said that it more research might have to be done in order to ascertain the helpfulness of being able to write more complex characters.
Final conclusions

As have been mentioned in the previous chapter, due to the limited sample size not too many solid conclusions can be drawn from this study, but as also mentioned further research can be conducted within this field.

When it come to what extent the research questions were answered, maybe not to a large extent, as per the aforementioned scale of the study. As for the experience among the students, there seems to be a general desire for a more structured approach, at least among the informants. Also, the most common difficulty was that of having more trouble learning the on'yomi than kun'yomi. Regarding how the difficulties of learning on'yomi were tackled by the instruction, we run into somewhat of a chicken or egg situation. This is because the difficulty itself might not arisen because of some inherent aspect of on'yomi itself, but rather as a result of how little time was spent on this subject. Or at the very least, how little time the students felt were spent. In a similar manner, the desire of a more methodical approach can be viewed either as difficulties encountered. Alternately, it can indicate deficiencies in kanji instruction, regardless if they are only perceived or actual.

It should be noted that the testing of the effects of different forms of studying and/or teaching run in to the problem that students are still able to communicate with each other, both if they are attending the same institution, or even different schools. What follows is examples of research question going further in different aspects that has been touched upon in this thesis.

- How the retention of information pertaining to kanji changes if lectures change from a “reading of a vocabulary list” as one interviewee described it to focusing more on a more structured analytical approach can be studied. Here might even the fact how having the teaching style be more engaging be a major factor, as boredom can scarcely be a catalyst for learning.

- Related to structure, the effects of a consistent and systematic way of labeling the different parts of kanji can be explored. It is important to note here that the labels each part get do not necessarily have to be related to some ancient etymology that has largely been forgotten, but instead be something relating to the outward appearance of the component in question in order to aid in memorization for a modern day student.

- Judging from the conducted interviews, it does seem like the vast majority of students do have more difficulties with learning the on'yomi. Even if a larger scale study would reveal that so was not the case, the fact remains that on'yomi is suited to be approached in a more systematic way than has usually been the case in Japanese as a second language teaching. In other words, a study could be done to compare students recall of on'yomi with a group that
has been subjected to a teaching method that put emphasis on the use of phonetic components and a group that has not. It is possible that not too much time has to be put on this aspect for students to independently discover the patterns in on'yomi on their own after having been introduced to these concepts.

• If not much class time can be spent on the discussion of various study methods, the efficacy of actively encouraging students exploring different teaching materials and study methods might be researched. With the Internet, such resources should be widely accessible in many different subjects. This is also in line with what Richmond argued that one methodology is not likely to be beneficial for all students.

• As at least one university, namely Gothenburg mentions SRS on their web site, one research question might be if any difference of results by the students have been observed. Relating to this is how and if any difference in results can be observed after introducing SRS, which can be conducted in a wide variety of subjects.

• Since the reading question in the interviews let the informants self report their ability to unaided read authentic materials, it might be an interesting study to test this ability under controlled circumstances.
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Appendix

Interview questions

As the interviews were conducted as quite free-flowing conversations, there was not too many fixed questions. As the interviewee would relay their experiences it was not uncommon for them to unprompted bringing up the subjects that some fixed question was about. This was done on purpose, as having to overly steer the interview might have affected the answers. What follows are the questions that was answered in every interviews, even though they might not have been directly asked.

• **How and where have you studied Japanese?** A obvious question to get a general idea of the informant's study history etc. Would sometimes directly lead into talking about kanji learning, as the informants were aware that the interview was to concern that subject.

• **How would describe the teaching of kanji at the institutions you have attended?** A question that invited both the informant to give his/her view of the teaching, or a more neutral description.

• **What learning materials was used in the courses you took?** In some regards a simple continuation of the previous question.

• **Have you used materials outside the ones that was assigned to you for the course?** Not only is the question a straight-forward way of getting to know if the informant used anything else, it's also related to the following question which concern eventual problems. This is because if the informant is encountering problems, there might be a inclination to seek other material to learn with.

• **When it comes to kanji is it something in particular you have had more trouble with?** A rather general question as to not be too leading. Some informants found the question a bit too vague and wanting clarification and examples, which introduces some impact from the interviewer.

• **Out of on and kun'yomi have you had more trouble with one of those?** A simple question that also indicates what the answer to the next question might be.

• **Do you know that for many kanji there is a part that indicates what the on'yomi might be?** A obvious follow up to the previous question, if the answer was that *on'yomi* was thought to be more difficult. Also, the word “part” was used as to avoid using specialist jargon.
Would you say that you can read Japanese good enough to not have to look up things too often as to make it frustrating? The vagueness and immeasurability of the question might be argued to be a weakness. However, the question can be thought of a measure of the informants' personal satisfaction with their reading level. The objective levels might be different, but since personal goals and reading habits also differ, this subjective feeling of satisfaction, or lack thereof might be more important from an individual standpoint.