Teaching of Phonics to Japanese Learners of English:
A Theoretical Analysis
Teaching of Phonics to Japanese Learners of English: A Theoretical Analysis

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Abstract

The instruction of literacy is not organized systematically in second language classrooms (Cook, 2008). English teachers in Japan tend to rely largely on the "look-say" method when teaching learners to read English words (Lewis, 2007). The acquisition of vocabulary depends largely on repetition, but regrettably, no systematic teaching of literacy is being carried out. This MA thesis focuses on phonics, the rules of the relationship between spelling and pronunciation in English, and discusses possible applications of phonics in English language teaching in Japan.

This thesis consists of seven chapters. Chapter 1 describes the current situation of teaching literacy in English in Japan and introduces phonics. This chapter also presents three sets of major phonics rules formulated in Japan: Takebayashi (1988), Matsuka Phonics Institution (2003) and Tajiri (2006).

Chapter 2 presents an outline of twenty phonics rules proposed by Takebayashi (1988). The basic rules of phonics are defined between Rule 1 and Rule 12. From Rule 1 to Rule 3, the rules for consonant letters are defined. The rules concerning vowels are dealt between in Rule 4 and Rule 6. Rule 7 describes the rules pertaining to diphthong letters. Sound changes under particular combinations of vowels and consonants are mentioned in Rule 8 to Rule 9. Between Rule 10 and Rule 12, the rules for combinations of vowel letters and <r> are demonstrated. Rule 12 to Rule 20 are regarded as advanced rules. Rule 13 to Rule 15 deal with additional rules of the basic rules. The pronunciation rules for grammatical morphemes are defined in Rule 16 and Rule 17. Finally, the rules concerning with weak vowels are defined from Rule 18 to Rule 20.

Chapter 3 analyzes the system of phonics rules stated by Takebayashi (1988) and
describes the deficiencies of phonics rules. Furthermore, it describes the relationships between phonics rules presented by the Matsuka Phonics Institution (2003) and those by Tajiri (2006), and the basic assumption behind organizing each set of rules. Firstly, the system of phonics rules has been proved to be fairly complicated: multiple rules are contained in one category of rules, some rules are concerned with conditions for rule application and the system of phonics rules is hierarchical. Letters to be given attention which refer to the pronunciations which are out of the twenty rules are also pointed out. Secondly, it is stated that the phonics rules presented by Tajiri (2006) and those by the Matsuka Phonics Institution (2003) have been found out to be almost the same as those of Takebayashi (1988). Thirdly, it has been confirmed that phonics cannot define the rules concerning with long vowels perfectly. Finally, it has been found out that these rules are organized based on the pronunciation frequency of each letter and combination.

Chapter 4 examines the applicability of phonics rules by Takebayashi (1988) in English language teaching in Japan. Four hundred and sixty-four vocabulary items in the list from Eigo Note 1 and 2 (Nakajo et al., 2006) were selected and were classified into two categories: the words following phonics rules and the words out of the ambit of phonics rules. The result shows that over 80 percent of words follow the phonics rules. The rest tend to be monosyllabic words and are likely to be included in the core vocabulary for English. This indicates that the phonics rules are fairly reliable and worth teaching to students when needed.

Chapter 5 discusses the teaching method for phonics in L1, focusing on Heilman (1981) and Whole Language. Heilman (1981) claims that reading is a complex process for children because both cracking the code and decoding the meaning are necessary for reading words and texts. The purpose of teaching phonics rules is to assist in the process
of cracking the code. On the other hand, Whole Language suggests an important idea that context and meaning are also necessary to read a text. In other words, phonics rules should not be taught independently. Hence, teachers are supposed to avoid too much reliance on phonics and excessive teaching of phonics rules. They should acknowledge that the purpose of teaching phonics is to help children read a text independently.

Chapter 6 discusses possible applications of teaching phonics rules in the L2 environment while describing the difference between L1 learners and L2 English learners. L2 English learners differ from L1 learners in the amount of knowledge about sounds of English words and in learning style. As L2 English learners have a smaller body of knowledge about English sounds, these learners have to learn pronunciation, spelling and meaning of words in English at the same time. Furthermore, L2 learners are supposed to learn English through formal instruction. As is mentioned previously, the system of phonics rules is so complex that excessive teaching of phonics rules could feel like a burden to a novice learner without knowledge of English pronunciation. Hence, the teaching of phonics rules should be conducted not in FonFS, which deliberately discusses the features of form of the language, but in FonF, which treats both meaning and form.

Students tend to just focus on the meanings of the words and to perceive the forms of words. Teachers are supposed to teach phonics rules in FonF and they are supposed to draw students’ attention to the forms of words since learners are supposed to consciously notice the features of forms in order to acquire language.

Chapter 7 concludes that phonics should be taught as Consciousness Raising to the relationship between letters and sounds in FonF. In order to draw the students’ attention to the features of English words, teachers should teach phonics rules relevant to the unknown words the students encounter.
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Chapter 1
Introduction

1.1 Teaching about the Links between Letters and Sounds They Represent

One of the greatest pleasures for novice language learners could be to obtain the literacy of his or her target language. It is difficult for a new student of a foreign language to read even a single word. However, it is important for all language learners, including native speakers, to learn vocabulary items and to obtain the literacy in the language.

Nevertheless, the instruction for literacy is not organized systematically in second language classrooms. Teachers in Japan seldom teach the system of orthography in English and rely largely on the “look-say” method, in which students are shown entire words and asked to repeat them (Lewis, 2007). Moreover, Cook (2008) claims that there is very little systematic instruction of the writing system in second language classrooms despite the need for this. Although acquiring each vocabulary item largely depends upon repetition, the absence of systematic instruction is hugely problematic.

1.2 Phonics Instruction for Literacy

One teaching method for literacy prevails in first language classrooms: the phonics method. Phonics is the study of the rules of the relationship between spelling and pronunciation (Takebayashi, 1988; Lewis, 2007). It is based on the principle that each letter of the alphabet and their combinations have particular pronunciations. The phonics method systematically teaches learners the links between spelling and pronunciation (Heilman, 1981).

While the phonics method prevails in first language classrooms, it is not very
popular among Japanese teachers of English. Lewis (2007) describes how teaching of literacy is conducted in Japanese junior high school; the teachers teach the name of each letter of the alphabet, the so-called “Magic E” and a few different consecutive consonant letters. They rarely teach vowel diphthong letters and depend on the “look-say” method. The Matsuka Phonics Institution (2003) claims that although phonics was imported in the Meiji period, the rules were so complicated that few teachers could understand them; consequently, phonics was not commonly used in Japan at that time.

On the other hand, some scholars are not in favor of using the phonics method. Smith (1985) claims that the teaching of phonics to novice learners is actually a potential burden for them; this is because phonics is so complex and includes so many exceptions. The complexity and the exceptional pronunciations to the rules are regarded as a deficit of phonics rules. Therefore, those who do not advocate the phonics method are likely to employ “Whole Language,” which is a whole-to-part teaching method, while phonics is a part-to-whole.

While some teachers advocate counterparts of phonics, others do use phonics in second language classrooms. Tajiri (2003) asked high school students who had graduated from his junior high school which items were the most useful in the literacy of English. It was found out that, in the students’ opinions, the most useful knowledge was that relating to word order and that the knowledge of phonics was the second most useful. Matsuhata and Nago (2000) taught four elementary students phonics rules and found out that this helped develop their literacy. Lewis (2007) also conducted a study on junior high school students in Japan to examine the feasibility of using the phonics method; he also found that the development of literacy was also marked in the students who had been taught more advanced phonics rules. In this way, the phonics method
seems to be useful even in Japan, where the language is taught as a foreign language. However, it seems to be necessary to discuss the structure of phonics rules and the applicability of phonics and Whole Language, no matter which of them we may advocate.

1.3 Phonics in English Language Teaching in Japan

Although instruction in phonics is not so popular in Japan in spite of its feasibility, three major versions of phonics rules have been proposed by Japanese educators: Takebayashi (1988), the Matsuka Phonics Institution (2003) and Tajiri (2006). Each version is designed for a different kind of learner; Takebayashi (1988) is for high school students and experts, the Matsuka Phonics Institution (2003) is for elementary school students or those that are even younger and Tajiri (2006) is for junior high school students.

This MA thesis mainly focuses mainly on the set of rules proposed by Takebayashi (1988). This work discusses the system of phonics rules and the applicability of these rules to vocabulary items in *Eigo Note 1 and 2*. This thesis then proceeds with a theoretical study of the feasibility of the phonics rules in Japan. It will be concluded that phonics rules should be used as a method for Consciousness Raising toward the links between spelling and pronunciation.
Chapter 2
Phonics Rules by Takebayashi (1988)

Takebayashi (1988) defines twenty rules of phonics. These rules are divided into two categories: basic rules (Rule 1 – Rule 12) and advanced rules (Rule 13 – Rule 20). This chapter outlines the phonics rules of Takebayashi (1988) and presents several examples. The rules in their complete form are available in the appendix to this thesis.

2.1 Twelve Basic Rules

The basic rules are described from Rule 1 to Rule 12. These twelve rules are used in order to read monosyllabic words. When learners acquire all these rules, they can read most monosyllabic words.

2.1.1 Rule 1 to Rule 3: Rules about Consonant Letters

Rule 1 pertains to the pronunciations of eighteen individual consonant letters. For instance, the letter <d> for "dog" is pronounced /d/; the letter <r> for "rat" represents /r/; and so forth. This rule does not describe the pronunciations of the consonant letters <c>, <g> and <q>. The letter <q> is dealt with in Rule 2, and <c> and <g> in Rule 9.

Rule 2 defines the pronunciations of two or three different consecutive consonant letters. Ten combinations are discussed in the rule. For instance, the combination of <c> and <h> as is used in "child" represents the sound of /tʃ/. The letter of <q>, which was not dealt with in the previous rule, is used in the combination <qu>, which is pronounced as /kw/.

Rule 3 describes the conditions of the elision of pronunciation of consecutive consonants in particular positions and combinations. For example, in the combination of
<k> and <n> as in “knight,” <k> is not pronounced. Elision is supposed to occur with particular combinations of letters in a final position as well. Looking at the example of “bomb,” we can see that the <b> at the word end after <m> is not pronounced.

2.1.2 Rule 4 to Rule 6: Rules about Vowel Letters

Rule 4 describes the pronunciation of vowels in terms of both short duration sounds and long duration sounds. The pronunciations of six individual vowel letters are demonstrated: <a>, <e>, <i>, <o>, <u> and <y>. Significantly, the pronunciation of each long duration vowel is same as that of each name of the relevant letter of the alphabet (Takebayashi, 1988; Tajiri, 2006). Thus, the learner seems to acquire the pronunciation easily.

Rule 5 explains the condition under which vowel letters become short duration vowels; when a consonant letter comes after a vowel letter in the final position in the word, the vowel letter is pronounced as a short duration vowel. For instance, the word “fat” has three letters. As the consonant letter <t> follows the vowel letter <a> in the word-final position, it is pronounced as /æt/.

On the other hand, Rule 6 describes the condition for vowel letters to become long duration vowels. When one consonant letter follows a vowel letter and <e> follows the consonant at the end of the word, the vowel is supposed to be pronounced as a long duration vowel and <e> in the word-final position is not pronounced. The minimal pair “fat” and “fate” are examples of Rule 6. As <e> is not at the end of the word “fat,” <a> in the word is pronounced as a short duration vowel, /æ/. As the word “fat” does not contain <e> at the end of the word, <a> in the word is pronounced as a short duration vowel, /æ/. On the other hand, “fate” has <e> in the word-final position. Therefore, the <a> in this word is supposed to be pronounced as /æt/, i.e., the long duration vowel
pronunciation of <a>. The silent letter <e> is called the “Fairy E” for teaching the rule to children (Cook, 2008). In the Japanese context, Tajiri (2006) explains this rule using the term “Magic E.”

2.1.3 Rule 7: Rules about Diphthong Letters

The combination of particular vowel letters into diphthong letters represents certain sounds. Seventeen diphthong letters are described in Rule 7. For example, the combinations of <ea>, <ie> and <ee> are all pronounced as /i:/ as in “team,” “field” and “knee.”

2.1.4 Rule 8 to Rule 9: Sound Changes under Particular Combination of Vowels and Consonants

Rule 8 refers to the change of pronunciation of the long vowel /ju/ when followed by particular consonants. When /ju/ is followed by /fl, /yl, /l/ or /r/ and /s/, the pronunciation shifts from /ju/ to /u/. For example, the word “chew” is not pronounced /flju/ but rather /flu/.

On the one hand, Rule 9 describes the rule of the pronunciation of the letters, <c> and <g>. These consonant letters are associated with two patterns of pronunciation. When the vowel letters <a>, <o> and <u> or consonant letters follow the letters <c> and <g>, each of them is pronounced as /k/ and /g/. On the other hand, when they are followed by <e>, <i> or <y>, their respective typical pronunciations are supposed to shift to /s/ and /ʃ/. For instance, the letters of <c> and <g> in “cat” and “gas” are pronounced as /k/ and /g/ respectively because of the following letter <a>. In contrast, <c> and <g> in the words “cymbal” and “gym” are not pronounced as /k/ and /g/ but as /ʃ/ and /ʃ/. This is because <y> comes after <c> or <g> in the words in question.
According to Takebayashi (1988), some basic words such as "get," "begin" and "give" are not governed by Rule 9. This is because English, which is categorized as Germanic, originally had only the /k/ and /g/ sounds. The words containing the exceptions to this rule were derived from Old English. Over time, English began to borrow a lot of words from Latin and French, which are categorized as the Romance languages. The phonological system of the languages in this group had /c/ and /g/ rules as is in Rule 8. As a result of a large amount of loanwords from the Romance languages, the original English words were overwhelmed. Therefore, these /c/ and /g/ rules are generally applicable in the contemporary English language (Takebayashi, 1988).

2.1.5 Rule 10 to Rule 12: Combinations of Vowel Letters and <r>

The last three rules refer to the combinations of vowel letters and the letter <r>. The combinations have regular pronunciations.

Firstly, Rule 10 refers to the pronunciation of the short duration vowels combined with <r>. When <r> follows a short duration vowel in the word-final position or precedes consonants, the vowel and <r> are combined and pronounced regularly; <ar> is pronounced as /aər/, the three combinations, <ir>, <er> and <ur> are pronounced as /ər/, and <or> is /oər/ or /ɔr/. For instance, since the word "car" finishes itself with <r>, the set of <a> and <r> in it is pronounced as /aər/. The combination of <ar> in “farm” is also pronounced in the same way as the consonant letter <m> follows it at the word’s end.

Rule 11 describes the combination of long duration pronunciations and <r>: when <r> follows a vowel and <e> follows them both as at the end of a word, the vowel and <r> are combined and pronounced regularly. The letter of <e> in the word-final position
is not pronounced. This rule is similar to Rule 6, which referred to the silent <e> letter and long duration sound. In actual fact, the vowel is pronounced as a long duration sound and the pronunciation of <r> is combined with it. For example, <ire> in the word "fire" is pronounced as /faɪər/, which is a combination of the long duration sound of <i> and <r>.

Finally, the combinations of diphthong letters and <r> are mentioned in Rule 12. Seven combinations are described in this rule. For example, <ear>, which is the combination of the diphthong letter <ea> and <r>, is pronounced as /ɪər/ as in "hear."

2.2 Eight Advanced Rules

The advanced rules are described from Rule 13 to Rule 20. These rules are more complicated than the basic rules because learners are required to understand the concepts of syllable and stress in order to read multisyllabic words. Furthermore, grammatical morphemes such as the plural and the present "-s" are also referred to.

2.2.1 Rule 13 to Rule 15: Additional Rules of the Basic Rules

Rule 13 describes the sound changes of particular vowels when preceded by <w>, <wh> or <qu>: /æ/ shifts to /ə/, /əər/ changes to /ər/, /ə/ changes to /ɜ/ and /əər/ to /ər/. Taking the word "work" as an example, we can see that <or> is supposed to be pronounced not as /ɔr/, whose pronunciation is defined in Rule 10, but as /ɻər/. Other examples include "wander" (/wɒndər/), "won" (/wɔn/), "war" (/wɔr/) and so forth. This rule can be regarded as an additional to Rule 8 and Rule 9, which deal with the pronunciation change described previously.

Rule 14 demonstrates the treatment of double consonants, with one repeated letter. When the same letter is used twice in succession, the combination is pronounced as one
consonant. For example, in the word “letter,” <t> follows the other <t>. These two <t>’s are pronounced as one consonant /tl/. A combination which uses the same letter twice is called a “double consonant letter” in Takebayashi (1988). This rule is an additional to Rule 2, which describes the pronunciation of different consecutive letters.

Rule 15 is additional to Rule 5 and sets the condition under which vowels become short duration sounds: when there is a stressed vowel before a double consonant within a word, the vowel is pronounced as a short duration vowel. For example, with the minimal pair “late” and “latter,” <a> in the former word becomes a long duration vowel. In contrast, the word “latter” is pronounced as such because it has a double consonant <tt> and the vowel letter <a> is before the double consonant letter. The vowel is supposed to be pronounced as /æ/ in this case.

2.2.2 Rule 16 to Rule 17: Pronunciation Rules about Grammatical Morphemes

Rule 16 and Rule 17 refers to the pronunciation of grammatical morphemes. In Rule 16, the pronunciation of “-s,” which is used as the grammatical morphemes indicating the present tense, the plural and the possessive. Rule 17 describes the pronunciations of “-ed” for the past tense and the past participle. These rules are frequently taught in English language teaching in Japan.

2.2.3 Rule 18 to Rule 20: Rules of Weak Vowels

The last three rules in the set of advanced rules pertain to the rules of weak vowels. The pronunciations of the vowels described from Rule 4 to Rule 7 and from Rule 10 to Rule 12 depend on the assumption that they have a primary or secondary stress. An unstressed vowel is called a weak vowel (Takebayashi, 1988). These last rules deal with the pronunciations of the weak vowels and sound changes effected by them.
Rule 18 describes the pronunciations of weak vowels. For instance, <a>, <e>, <i>, <o>, <u> and <ou> without a stress are pronounced as /a/, which is called the "schwa sound": sofa, moment, April, contain, August and dangerous. These words consist of two or more syllables. Since the underlined letters are unstressed, they are pronounced as /a/.

Rule 19 describes the pronunciations of certain combinations of letters followed by weak vowels. When <ti>, <ce> and <ci> are followed by a weak vowel, they are pronounced as /ʃ/, such as in "station." The combination <si> when followed by a weak vowel is pronounced as /ʃ/ or /dʒ/; "mansion" and "decision." Furthermore, <ge> and <gi> under the same condition are pronounced as /dʒ/, as in "pigeon."

Rule 20 describes a rule similar to Rule 19. The combination <su> within a weak syllable is pronounced as /ʃu/ or /dʒu/, <tu> is as /tʃu/ and <du> is as /dʒu/. Additionally the combination <ture> is pronounced as /tʃər/, such as in "nature." For instance, the word "sensuous" has three syllables. The letter <u> in the underlined part is unstressed. Thus, the syllable is regarded as a weak syllable. Therefore, the combination <su> is pronounced as /ʃu/. This is different from Rule 19 in that the pronunciation of weak vowels remains in the syllable. In Rule 19, the combinations of consonants and weak vowels are treated entirely as consonants with the deletion of the weak vowels. For example, <ti> is treated as one consonant with the deletion of the pronunciation of the weak vowel <i> and pronounced as /ʃ/. Thus, the sound of the weak vowel disappears. In contrast, those in Rule 20 have the pronunciation of the weak vowels.
Chapter 3
Analyses of Phonics Rules by Takebayashi (1988)

The structure of phonics rules is fairly complicated. This chapter analyzes the features of phonics rules as stated by Takebayashi (1988) and points out exceptional pronunciations, which is called “letters to be given attention.” This chapter also discusses the deficiencies of phonics rules and the assumption on which each rules is based.

3.1 Features of the Rules by Takebayashi (1988)

One of the features of the phonics rules proposed by Takebayashi (1988) is that multiple rules are contained in one category: Rule 1, Rule 2, Rule 3, Rule 4, Rule 7, Rule 10, Rule 11, Rule 12 and Rule 18. For example, Rule 1 discusses the pronunciations of 20 letters, and Rule 2 discusses the pronunciations of 10 consecutive letters. In addition to the two rules, Rule 3 lays down six rules about the letters not pronounced when in particular positions. Furthermore, students also have to acquire the rules of vowels, which also define the pronunciations of multiple letters.

The second feature is that there are some rules concerned with conditions for rule application. These include two types. One is the rule which defines the conditions under which the pronunciation to be applied is selected (Rule 5, Rule 6 and Rule 15). The other is the rule concerned with pronunciation changes. The assumptions on which employment of rule is based are Rule 8, Rule 9, Rule 13, Rule 14, Rule 18, Rule 19 and Rule 20. Rule 4, which concerns itself with vowel pronunciations, discusses both short duration sounds and long duration sounds. And then, Rule 5, Rule 6 and Rule 15 demonstrate the conditions for determining which sound to choose. Moreover, when
vowel letters are not stressed, they become weak vowels, as is defined in Rule 18. Figure 1 summarizes the feature.

Rule 4 (Rules about Strong Vowels)

<table>
<thead>
<tr>
<th></th>
<th>Short Duration</th>
<th>Long Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>/a/</td>
<td>bag</td>
</tr>
<tr>
<td>E</td>
<td>/e/</td>
<td>bed</td>
</tr>
<tr>
<td>I</td>
<td>/i/</td>
<td>big</td>
</tr>
<tr>
<td>O</td>
<td>/o/</td>
<td>box</td>
</tr>
<tr>
<td>U</td>
<td>/u/</td>
<td>cut</td>
</tr>
<tr>
<td>Y</td>
<td>/i/</td>
<td>gym</td>
</tr>
</tbody>
</table>

To short sounds
Rule 5
Rule 15

To long sounds
Rule 6

Rule 18 (Rules about Weak Vowels)

<table>
<thead>
<tr>
<th></th>
<th>Without Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>/a/</td>
<td>a about, sofa</td>
</tr>
<tr>
<td></td>
<td>e gentleman, moment</td>
</tr>
<tr>
<td></td>
<td>i April, possible</td>
</tr>
<tr>
<td></td>
<td>o common, contain</td>
</tr>
<tr>
<td></td>
<td>u album, August</td>
</tr>
<tr>
<td></td>
<td>ou dangerous, famous</td>
</tr>
</tbody>
</table>

Figure 1 Features of Vowel Rules

As is shown in Figure 1, Rule 4 defines the assumption on which vowel pronunciations are based, and Rule 5, Rule 15 and Rule 6 are used to decide whether the vowel becomes a short duration sound or a long duration sound.

Moreover, Rule 18 looks at the changes in a weak vowel. As is mentioned previously, when a vowel is stressed, Rule 4, which defines the pronunciations of vowels, is employed. In contrast, when a vowel is not stressed, Rule 18 is applied, not Rule 4. In short, the pronunciations of strong vowels shift to those of weak vowels.

As the third feature, phonics rules are hierarchical. Take the example of the word
"June." Four rules are used in order to read this word: Rule 1, Rule 4, Rule 6 and Rule 8. Readers are supposed to know the pronunciations of the consonant letters <j> and <n> from Rule 1. The second assumption is that they must know the pronunciation of the vowel letter <u> as in Rule 4 and apply Rule 6 to the letter because <e> is in the word-final position. Moreover, they are supposed to pronounce <u> as /ʌ/ since it follows /dʒ/, which is the pronunciation of <j> based on Rule 8.

Although "June" is a monosyllabic word which consists of only four letters, the process of reading it is fairly complicated due to the hierarchal structure of the rules and the multiplicity of each rule. Readers are supposed to read words in general based on several rules, some of which contain several pronunciation rules for individual letters or combinations. As can be seen from the example of the process of reading this simple word, phonics rules are fairly complicated.

3.2 Treatment of Vowels in Multisyllabic Words

The assumption applied to the pronunciations of vowels in the words dealt with in the basic rules (Rule 1 – Rule 12) is that the words are supposed to be monosyllabic words. These rules are also applicable to multisyllabic words, but the vowels are supposed to have a primary or secondary stress (Takebayashi, 1988). If the vowel is not stressed, Rule 18 applies, which describes the pronunciations of weak vowels.

3.3 Features of Weak Vowels

Takebayashi (1988) points out that the pronunciations of weak vowels take on the features of the original strong vowels. This can be seen in the examples, "photograph," "photographic" and "photography." The <a> in the third syllables of "photograph" and "photographic" is pronounced as /æ/ as the letter is stressed. On the other hand, that in
"photography," which does not have a stress at the third syllable, is pronounced as the weak vowel /a/. The pronunciation is similar to that of the strong vowel /æ/, which is pronounced more weakly than the strong vowel normally is. Moreover, the <o> in the second syllables of “photograph” and “photographic” is pronounced as /a/, while that in “photography” is pronounced as /a/. Compared with the /a/ from <a>, this pronunciation is closer to the strong pronunciation (of <o>), even though it is pronounced much more weakly.

In short, although the schwa sound is represented by only one symbol /a/ in the International Phonetic Alphabet (IPA), weak vowels are pronounced as different sounds. Thus, weak vowels are sounds taking on the features of the original pronunciation of strong vowels.

Takebayashi (1988) also claims that when learners have acquired all the weak vowels, they can theoretically read all the words that do not have any exceptional pronunciations by following phonics rules, regardless of the number of syllables. In short, the rules of weak vowels are more consistent than other rules, with fewer or no exceptions. Therefore, the exceptions to weak vowels seem to be much fewer than the exceptions to other rules. The applicability of Rule 18 to Rule 20 will be examined in Chapter 4.

Rule 18 includes so many rules for weak vowels that it seems to be a difficult task for learners to acquire all of them. Understanding the nature of weak vowels, however, is very simple if the learners acquire the basic rules. The teachers have only to teach students to pronounce weak vowels influenced by the rules of strong vowels. Thus, teachers can treat them implicitly. In fact, Tajiri (2006) does not make a special reference to weak vowels. In this way, instruction of weak vowels seems easy despite the existence of a number of rules applicable to them.
3.4 Relationship between Stress and Phonics

Importantly, phonics rules do not define the rules of stressing syllables. Although each set of phonics rules and the stress systems are mutually independent, stresses affect phonics rules. Therefore, teachers are supposed to introduce both phonics rules and information about the stress positions in words to their learners.

3.5 Letters to be Given Attention

Takebayashi (1988) demonstrates not only twenty phonics rules but also the exceptional pronunciations not covered in these twenty rules. They are called "letters to be given attention." For instance, the combination <sch-> in the word-initial position, as is in "school," is frequently pronounced as /sk/. The letter <o>, which is pronounced as /o/ or /ou/ according to Rule 4, is sometimes pronounced as /ʌ/, such as in "Monday" and "front." Although these pronunciations are exceptions to the twenty rules described in Chapter 2, they appear more frequently than the other exceptional pronunciations do.

The frequency of these "letters to be given attention" causes Takebayashi (1988) to make special reference to them in addition to his twenty phonics rules. These pronunciations can be regarded as governed by "sub-rules" on each letter and their combination. Moreover, Takebayashi (1988) also describes sub-rules which are less frequently used, such as the <p> elision rule of the combination <psy->, as can be seen in "psychology." Since this rule governs the pronunciation of only a few difficult terms, Takebayashi (1988) did not include it in Rule 3, which deals with the consonant elision rule.

These pronunciations, however, appear item by item, and thus the number of them is fairly large. Therefore, the pronunciations seem difficult for learners. Figure 2 summarizes the relationships among the twenty rules, letters to be given attention and
exceptional pronunciations.

Figure 2 Relationship between Phonics Rules, Letters to be Given Attention and Exceptional Pronunciations

As can be seen in Figure 2, letters to be given attention are shown under the twenty phonics rules. Some rules include several sub-rules for each letter or combination. Some letters or combinations have different pronunciations not covered in the twenty rules; they are regarded as “sub-rules” of the letter or the combination. Moreover, one larger rule sometimes contains sub-rules, such as the p-deletion rule when <ps> is in the word-initial position under Rule 3. The exceptional pronunciation
which is completely different from what is covered in the twenty rules and the sub-rules, such as <u> in “bury,” is regarded as a completely independent phenomenon.

3.6 Relationships between Other Major Phonics Rules

Other phonics rules are also described by the Matsuka Phonics Institution (2003) and Tajiri (2006). These phonics rules, however, do not differ very much from Takebayashi (1988). The descriptions in the two sets of phonics rules are the same as those in Takebayashi (1988) though they differ in the mode of categorization and the order of presenting the rules. Importantly, although Matsuka Phonics Institution (2003) adds the rules about consonant clusters such as <str>, learners who have acquired Rule 1 in Takebayashi (1988) can easily identify them since they are nothing but gatherings of individual consonant letters.

These two phonics rules seem to have originated in the set of Takebayashi (1988). The phonics rules of Takebayashi (1988) were originally proposed in 1981. In 1988, the rules were partly revised for the second edition of his publication. Thus, Takebayashi (1988) is the oldest phonics rule set of the three. The other phonics rules may have been the revised versions of Takebayashi (1988) in order to introduce phonics to their respective learners.

The phonics rules presented by the Matsuka Phonics Institution (2003) are the same as from Rule 1 to Rule 12 by Takebayashi (1988) except for the definition of the consonant clusters. As is mentioned before, the phonics rules from Rule 1 to Rule 12 can be applied to most monosyllabic. These phonics rules seem to be designed for students in elementary school or even students younger than that, to help them read basic monosyllabic words.

On the other hand, Tajiri (2006) uses simplified terminology that was employed by

3.7 Problems in Decision about Long Vowels

Phonics rules have a significant deficiency: the problems in making decisions about whether to use short duration vowel sounds or long duration vowel sounds in monosyllabic words. As is mentioned in Chapter 2, Rule 4 defines the pronunciation rules for the six vowel letters. This rule defines both short duration and long duration sounds. Rule 5, Rule 6 and Rule 15 are concerned with which sound has to be employed. Figure 3 represents the relationship among the rules.

```
<table>
<thead>
<tr>
<th>Short Duration</th>
<th>Long Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>A   /æ/ bag</td>
<td>/ei/ date</td>
</tr>
<tr>
<td>E   /e/ bed</td>
<td>/i/ eve</td>
</tr>
<tr>
<td>I   /i/ big</td>
<td>/ai/ ice</td>
</tr>
<tr>
<td>O   /o/ box</td>
<td>/ou/ home</td>
</tr>
<tr>
<td>U   /u/ cut</td>
<td>/ju/ cute</td>
</tr>
<tr>
<td>Y   /i/ gym</td>
<td>/ai/ fly</td>
</tr>
</tbody>
</table>
```

Figure 3 Relationship among Strong Vowel Rules
However, these three rules do not work perfectly. When a single consonant letter follows a stressed single vowel letter, except for <u> in the middle of a word, it is not decided clearly enough whether the pronunciation of the vowel has to be a short duration sound or a long duration sound (Takebayashi, 1988). The stressed <u> is pronounced as a long duration sound /juː/, such as in “rubric.” However, the other vowel letters are not so simple. For example, both the words “Saturday” and “Satan” have the same combination of consonant letters and the vowel letter <a> and have a primary stress in the first syllable. Despite of this, the <a> in the former word is the short duration sound while that of the latter word is the long duration sound. Furthermore, while the minimal pair “polish” and “Polish” are both stressed at the same vowel <o>, the <o> in the former word is the short duration sound /ə/; on the other hand, it is the long duration vowel /ou/ in the latter word. Although the spelling is identical, the choice of the pronunciation is completely different.

This phenomenon will confuse learners. They are supposed to check the pronunciation with a dictionary when they meet multisyllabic words fulfilling this condition. Thus, phonics rules do not explain all the phenomena of pronunciation.

3.8 Basic Assumption of Each Rule

This chapter has considered the features of phonics rules. Yet, one issue has not been discussed: how did Takebayashi (1988) organize the phonics rules? Phonics rules seem to be organized based on the assumption that one letter or combination of letters has several pronunciations; the pronunciations that most frequently occur are dealt with in the twenty rules. In short, phonics rules are organized based on the pronunciations most frequently employed for each letter and combination of letters. For example, <ch> is most likely to be pronounced as /ʃ/, while it is also pronounced as /k/ or /ʃ/ under
particular conditions; therefore, the pronunciation for the combination <ch> is /ʃ/, as is described in Rule 2. The other pronunciations also appear often, if not frequently. So, they are treated in “letters to be given attention,” which can be regarded as the “sub-rules” for these combinations.

This assumption can also be applied to the rules for vowels. For instance, there are two kinds of short duration sounds of <u>: /ʌ/ and /u/. Though the letter is pronounced as /u/ in basic words such as “put,” /ʌ/ is more frequently used as is in “up”; therefore, it is /ʌ/ that is pinpointed as the pronunciation rule of <u> as is described in Rule 4.

Interestingly, Takebayashi (1988) defines the rules based on his subjective judgment in situations when two different pronunciations appear with equal frequency. For instance, according to Takebayashi (1988) the pronunciation of <ow> can have two patterns: /au/ and /ou/. These pronunciations appear equally often, as in “how” and “cow” and “low” and “below.” In this case, Takebayashi (1988) regards /au/ as the pronunciation of <ow> based on his own judgment, as is described in Rule 7.

In fact, Takebayashi (1988) is one of the editors of English-Japanese dictionaries in Japan, and he seems to have come up with the categorization of his phonics rules while editing the dictionaries. In this way, it is evident that the phonics rules are not organized based on linguistic principles of any kind. They are generalized by the pronunciation frequency. The generalization based on frequency may be problematic for people who are studying linguistic theories; they will doubt whether phonics rules are useful and feasible. Chapter 4 will examine the applicability of phonics rules.
Chapter 4
Examination of the Applicability of Phonics Rules

4.1 Previous Studies

Several studies on the applicability of phonics rules have found that high applicability is marked for the words in junior high school textbooks. Nazumi (1995) examined 1000 words in the New Horizon junior high school textbook series (first year thorough third year) and found that 90% of the words could be read using phonics rules (as cited in Lewis, 2007). According to Nago (1998), more than 90% of the words in New Crown for the first year students could be read with advanced phonics rules. Takeda (2002) also found that students could read 87.9% of the words in One World with advanced rules (as cited in Lewis, 2007). These studies imply that phonics rules can be applied to most of the words in the textbooks for junior high school students in Japan.

While several studies in Japan examined the applicability of phonics rules in textbooks used in Japan, Abott (2000) examined a corpus in America. In this study, 17000 words in the corpus organized by Hanna et al. (1966) were examined with 45 phonics generalizations proposed by Cox (1971). These generalizations were organized based on letter-sound correspondence, positional effects (syllable or orthographic structure) and syllable stress from a spelling perspective. Forty-three out of 45 generalizations were shown to have 75% or greater applicability (Abott, 2000). Although this study examined a much larger vocabulary than that presented in Japanese textbooks, the high applicability of phonics rules was remarked.

This MA thesis will examine the applicability of phonics rules proposed by Takebayashi (1988), which are also organized based on letter-sound correspondence,
position effects (syllable or orthographic structure) and syllable stress as in Cox (1971). This study is also concerned with “letters to be given attention” and the problems in making the decisions about long vowels, which were first claimed by Takebayashi (1988).

4.2 Methodology

Four hundred and sixty-four vocabulary items in the list of Eigo Note 1 and 2 were selected (Nakajo et al., 2006), and they were classified into two categories: the words following phonics rules and the words with exceptions. The syllables in each word were counted in order to examine the applicability of the rules by the number of syllables as well.

The words with exceptions refer to the words including pronunciations which do not fall in the purview of the twenty rules by Takebayashi (1988). Hence, “letters to be given attention,” which are also discussed by Takebayashi (1988), are regarded as exceptions as well. Furthermore, the words with stressed vowels occurring before single consonant letters, which are pronounced as long vowels such as “idea,” “nation” and so forth are also regarded as exceptions.

4.3 Results

4.3.1 Total Percentage of the Words Following Phonics

Figure 4 represents the total percentage of the words following phonics. As can be seen from Figure 4, three hundred and ninety-two words followed phonics rules. With over eighty percent of the words following the rules, the number of the words containing exceptions was much smaller. Only seventy-two words did not follow the rules, less than twenty percent. This result implies high applicability of phonics rules.
4.3.2 Applicability Percentage of Words Classified by the Number of Syllables

The words were classified into five types in terms of the number of syllables: words with one syllable (228 words), two syllables (161 words), three syllables (66 words), four syllables (8 words) and six syllables (one word).

A large percentage of words following phonics rules was marked for every number of syllable. Among the words with one syllable, words following phonics rules were eighty-six percent of the total. The percentage of those with two syllables was eighty-one percent. Furthermore, eighty-six percent applicability of phonics rules was also seen for the words with three syllables. Significantly, for the words with four or more syllables, there was no exception. This suggests that regardless of the number of syllables, phonics rules can be applied to words. Moreover, the more the syllables the words contain, the fewer the exceptions they included.
4.3.3 Words with Exceptions

Figure 5 describes the number of exceptions to each rule of phonics. The item “Others” represents the words which have the following characteristics: the loan words whose pronunciation remains that of the original words (i.e., croissant); the words including the combinations which are not contained in the rules (i.e., people, beautiful, juice); and the words which include the letters which are not pronounced (i.e., Wednesday, two). Except for those in the category of “Others,” each word includes up to two exceptions. This fact indicates that the other parts can be pronounced regularly even though words include some exceptions.

The majority of exceptions are concentrated around vowels. Rule 4, which defines the pronunciation of vowels, has the most exceptions. Examples of these exceptions are “brother,” “busy” and “ball.” In “brother,” the pronunciation of <o> changes from /ɔ/ into /ʌ/. In “busy,” <u> is pronounced as /i/ despite its regular pronunciation /ʌ/. The pronunciation of <a> in “ball” also changes from /ei/ to /ɔ/. Although these exceptions are referred to in “letters to be given attention” in Takebayashi (1988), the extraordinary number of exceptions to Rule 4 implies that the treatment of vowel rules in class would be difficult.

On the other hand, the number of exceptions among consonant rules is much smaller than that for vowels. Moreover, no rule for weak vowels was out of the purview of the rules discussed by Takebayashi (1988) and in Chapter 3. Therefore, phonics describes the structure of consonant and weak vowels very well.
4.3.4 Features of Words with Exceptions

The words containing exceptions tend to be words in the “core vocabulary” of English. Stockwell and Minkova (2001) operationalized the definition of the “core vocabulary” by separating the 10,000 most frequently used words based on frequency per 1,000 words. The most frequent 1,000 words are regarded as the “core vocabulary.” It contains “to,” “you,” “have,” “get” and so forth. Actually, they are frequently used as well in Eigo Note 1 and 2.

According to Stockwell and Minkova (2001), eighty-three percent of these words originated in the period of Old English. In other words, the majority of these words were created before the introduction of printing and the Great Vowel Shift. The correspondence between sounds and letters was not as fixed as it is today until printing was introduced by William Caxton to England in 1476 (Knowles, 1997). The Great Vowel Shift, which dramatically changed the pronunciation of vowels, also took place in the fifteenth century and sixteenth century. The orthography fixed by the introduction of printing, however, was not changed despite the significant change in pronunciation.

Figure 5 Number of Exceptions to Each Rule
Some oddities of or occasions of discord between pronunciations and spellings ended up occurring in the “core vocabulary” list; these are typically words created before the introduction of printing (Knowles, 1997).

The fact that frequently used words contain many exceptions seems to be problematic. However, the structure of these words is not complicated because these words consist of only one syllable. Hence, the number of letters is much smaller than that of a multisyllabic word.

Actually, native speakers of English recognize some of the short monosyllabic words which are frequently used based not on sounds but on their meaning. According to Cook (2008), people who use English as their mother tongue recognize “the” as a whole. This caused them to fail to delete “e” in an e-deletion test more often than non-native speakers did. These words whose letters are not recognized one by one are called “sight words.”

This implies a possibility of applying the notion of “sight words” to second language acquisition. As these words are frequently used in the textbook, students are supposed to use these words frequently as well. Thus, the frequency is likely to enable them to associate the pronunciations and the spellings fairly easily. Moreover, the simple constructions of these words would not make it difficult for students to pronounce them despite their exceptionality. In this way, teachers can compensate for the exceptionality by emphasizing the simple structure of these words.

4.4 Summary

This thesis regards “letters to be given attention” as those with exceptional pronunciation. They appear complex to novice students due to the multiplicity of possible letter-sound correspondences. However, the majority of words can be read with
the twenty phonics rules. In other words, the letters to be given attention are less likely to appear in the words in *Eigo Note 1 and 2*. It is recommended that teachers should be careful of the letters to be given attention and teach them when students are supposed to face the words containing them.

Moreover, the vowel pronunciation rules should also be dealt with carefully when teaching. The exceptional pronunciations concentrate on the rules concerning vowels. In particular, 19 words have a stressed vowel letter pronounced as a long duration sound before one consonant letter. Teachers are supposed to teach students whether the vowel becomes a long duration sound or a short duration sound, as it is hard under the circumstances to determine the pronunciation.

Nevertheless, the phonics rules proposed by Takebayashi (1988) displayed high applicability as they did in the previous studies of the applicability of phonics rules. Some of the previous studies looked at the textbooks for junior high school students and found that high applicability of phonics rules to the vocabulary. The phonics rules presented by Takebayashi (1988) displayed more than 80% applicability to vocabulary in *Eigo Note 1 and 2*. Significantly, this percentage is calculated including letters to be given attention and uncertainty in decisions about long duration sounds, both of which are problems of phonics rules. This result implies that teaching of phonics rules seems to be feasible for elementary school students learning English in Japan.

In this way, the link between spelling and pronunciation of English words is said to be inconsistent in general. However, the applicability of phonics rules proposed by Takebayashi (1988) is over 80% in *Eigo Note 1 and 2*. This percentage indicates that phonics rules are worth teaching to students of English when required.
Chapter 5
Teaching Methods for Reading in L1

This MA thesis has mainly focused on the phonics rules themselves. However, the teaching methods for literacy in English have not been discussed yet. Chapter 5 focuses on the use of the phonics method in L1 while discussing Whole Language, which is a counterpart of the phonics method.

5.1 Phonics Method

The phonics method refers to the teaching method that teachers directly teach the letter sound-correspondence (Heilman, 1981; Kuwabara, 1996). The goal of this method is to help students read words independently. Teaching letter-sound correspondence helps students read alone.

Heilman (1981) regards reading as a complex process. Firstly, students are required to articulate the sounds of written letters. Heilman (1981) calls this process “cracking the code.” Phonics assists in the process of cracking the code. Not only must they crack the code, but students are also supposed to decode the meaning of words. When these two processes are accomplished, students are regarded as being able to read independently.

5.1.1 Order of Teaching Phonics Rules

The order in which phonics rules should be taught is also proposed in the phonics method. Heilman (1981) recommends that the rules of consonant letters should be taught prior to those of vowel letters. The first reason for this is the necessity for the analysis of words students do not know. Since English texts are read from left to right,
they need to analyze the pronunciation of the left side of the word or the word-initial sounds. Moreover, the majority of English words begin with a consonant. When students read a text trying to understand the meaning, they can obtain hints to understand unknown words by analyzing contexts and the first syllables of the words. In this way, the knowledge of consonant rules contributes to cracking the code of words (Heilman, 1981). The consistency among consonant letter rules is also proposed as a reason for teaching consonants first (Heilman, 1981). As is shown in Chapter 4, the rules of consonant letters have fewer exceptional pronunciations than those of vowel letters. Therefore, students are not confused by the inconsistency of phonics rules when they learn consonant letters. Due to the consistency of the rules and their significant roles in cracking the code, consonants should be taught first.

The order of teaching consonant letters is proposed by Heilman (1981). First of all, teachers are to teach the sounds of single consonants which come at the beginning of words. In the second stage, the consonant clusters in the word-initial positions should be taught. After that, consecutive consonant letters in the word-initial position are presented. After teaching all the three, teachers should teach those in the word-final position. Note that this order is not necessarily to be strictly followed. Teachers can change the order of teaching the rules in order to fit the level of their students (Heilman, 1981).

Heilman (1981) claims that after teaching the rules about consonants, the rules about vowels should be taught. As is shown in Chapter 2, vowel letters have two patterns of pronunciation: long duration sounds and short duration sounds. A question arises as to which sounds are to be taught first. Some teachers teach short duration sounds initially as the majority of words children are to face contain short duration sounds; others start from long duration sounds as the pronunciations are the same as the
names of corresponding alphabet. Heilman (1981) does not care about the order; teachers can start with the sounds they like. Moreover, teachers can teach both sounds at the same time (Heilman, 1981).

### 5.1.2 Principles of Teaching Phonics Rules

Heilman (1981) proposes nine principles to be maintained when teaching phonics rules. The first principle describes the condition of students. It is required that students can identify both sounds they listen to and letters they read. This means that even if students can distinguish the sound of “dee” and “bee,” teaching phonics rules is not effective when they can not distinguish the letter of <b> and <d>.

The second principle and the third principle caution teachers not to have children rely too much on one reading style. The second is that teachers must not inculcate one fixed idea concerning what it means to read into children. The early teaching of reading can implant a fixed reading style in them. Children are likely to regard reading as memorization of words visually, articulation of letters or interpretation depending on the contexts (Heilman, 1981). Although all of these are required, children often depend excessively on one such notion. The third principle is that education that biases children toward only one reading method should be avoided. Overconfidence with regard to one reading method and indifference to other methods are very ineffective in combination; students end up being prevented from reading.

The fourth to the eighth principles discuss how phonics rules are treated. The fourth principle asserts that teachers should teach phonics rules to the degree that children require in order for them to read independently. The reading proficiency of each child in one class is different. As the majority of teaching materials for phonics rules do not cope with the difference, teachers are required to teach the rules to students
flexibly according to students' level (Heilman, 1981). The fifth principle is that teachers in elementary school are supposed to know every phonics rule. They must teach phonics rules that are needed for students in every grade, and let the students review the rules when needed. Hence, the teachers are supposed to know every phonics rule. However, the number of phonics rules students are to learn is not necessarily the same for all, according to the sixth principle. Therefore, the seventh rule claims that teachers are supposed to comprehend the present state of children to confirm what rules are needed for them in order to gain literacy.

The eighth principle cautions that the rules which apply to few words do not necessarily have to be taught. The variability in the English spelling system limits the applicability of phonics rules. Therefore, it is not effective to teach rules that incorporate a number of exceptional pronunciations.

The final principle discusses how to make teaching materials for phonics rules. Even if children can memorize the phonics rules, it does not mean they can apply the rules to words. Teachers are supposed to organize teaching materials so that students can apply the phonics rules when they read. Phonics is like a "crutch" for students to read. The purpose of phonics is to help students to pronounce unknown words when they encounter them.

5.1.3 Limitation of Phonics

As is shown in 5.1.2, the purpose of teaching phonics rules is restricted. It merely focuses on the relationship between letters (or their combinations) and their pronunciations; the meanings of words are not highlighted. Consequently, the teaching materials for phonics rules do not focus on the meanings of words either; a majority of drills about phonics rules tell students just to fill in a blank, to practice orally and so
forth (Heilman, 1981).

As learning phonics rules cannot lead to learning meanings of words, too much emphasis on teaching the rules results in disconnecting the relationship between forms and meanings of words. This disconnection is fairly problematic; Goodman (1987) asserts that language learning becomes hard when language is separated from contexts and meanings. Moreover, Heilman (1981) cautions teachers about overdependence on phonics; students are actually supposed to combine several skills, including, for instance, reliance on the context, when they read a text. It should be noted that phonics cannot cover all of the processes of reading and teachers are supposed to teach both forms and meanings of words and texts. Whole Language, which is discussed in 5.2, concerns itself with both of these factors.

5.1.4 Risks of Cramming-oriented Teaching of Phonics Rules

Heilman (1981) points out that teachers sometimes forget that phonics should be a "crutch" for students to read a text. Although a student might be able to read a word without analysis with phonics, they teach the phonics rules of the words the student already knows. Moreover, in spite of the threshold of literacy, such teachers tend to excessively teach phonics rules as if they were attempting to make their students into little linguists (Heilman, 1981).

The cramming-oriented teaching of phonics rules is not the aim of the phonics method. As described in the seventh principle of teaching phonics, teachers are required to confirm what rules are to be taught, checking the teaching materials they are using, the reading skills of individual students, and so on. Moreover, merely memorizing the rules is not the purpose of phonics.

Teachers are supposed to be conscious about the complexity of phonics rules as
well. As is described in Chapter 3, the system of phonics rules is so complex that excessive teaching of the rules can be burdensome for novice learners due to their complexity. As is mentioned previously, Heilman (1981) regards reading as a complex process and phonics should work in order to help students to crack the code. Nonetheless, some teachers teach too many rules without considering the state of their students. Excessive reliance on teaching the rules makes an already complex reading process more complex and prevents students from acquiring reading skills.

5.2 Whole Language

As is described before, both cracking the code and decoding the meaning are required for reading a text. As the phonics method focuses only on cracking the code, decoding the meaning is often not accomplished. Thus, teachers are supposed to teach how to decode the meaning of words.

Whole Language emphasizes the meaning of language (Goodman, 1987; Kuwabara, 1996; Yokota, 1997a). This method emphasizes authenticity, which means that students can use language in real situations (Yokota, 1997a). The method also stresses the relationship between students and their language life (Goodman, 1987; Kuwabara, 1996). Moreover, basic skills of language use --reading, writing, listening and speaking-- are not treated as separated skills but as an integrated set of skills (Kuwabara, 1996). Whole Language treats language as a whole; it considers that form, meaning and context are necessary for language learning and they cannot be separated in language learning (Goodman, 1987). As the phonics method just focuses on the relationship between sounds and letters and separates meaning from language, it is in opposition to the idea of Whole Language in this point of view.
5.3 Debate between Whole Language and Phonics

Whole Language was criticized by the media in America based on the claim that it does not teach phonics (Kuwabara, 1996; Yokota, 1997b). However, Yokota (1997b) argues that this criticism misses the point. Whole Language actually teaches the relationship between words and sounds in its language activity. Whole Language differs from the phonics method in emphasizing contexts of words. Whole Language proposes that words should not be taught without contexts. The teaching of the relationship between sounds and letters is conducted in realistic contexts in Whole Language (Yokota, 1997b). Goodman (1987) also claims that Whole Language does not ignore phonics. Rather, teaching of the phonics rules takes place through the whole perspective in which students actually read and write a text (as cited in Kuwabara, 1996: p. 148). Thus, Whole Language embeds phonics in its abundant language activities (Kuwabara, 1996).

Thus, while Whole Language was criticized in America, the criticism is not valid. Whole Language does emphasize phonics. The teaching of phonics rules is conducted in real situations while phonics method tends to be used in the decontextualized situations. Whole Language emphasizes both meanings and forms of language and regards both of them as essential factors in order to obtain literacy.

5.4 Essential Factors for Teaching Phonics in L1

In this manner, Whole Language proposes that phonics rules should be taught in situations that also teach meaning. Phonics rules just focus on forms of language and do not consider the meanings. As a result, teaching materials of phonics rules do not consider meaning and contexts of words either. Moreover, some teachers forget the complexity of the rules and force students to memorize the complex system without
taking the level or understanding of their students into consideration. As Heilman (1981) proposes, phonics should be an assistance for students to read a text. Hence, excessive emphasis on phonics rules should be avoided. Phonics rules should not be an independent factor for reading as it just focuses on the form of language. As both cracking the code and decoding the meaning are necessary for reading a text, phonics rules should be taught along with meanings in a context as Whole Language does.
Chapter 6
Possible Application of Phonics in SLA

Chapter 5 has described the method used for teaching phonics rules in the L1 environment. However, this discussion does not focus on the difference between L1 learners and L2 learners. As the learning process is different in L1 and in L2, the application of a teaching method for L1 learners would be impossible without considering this difference. This chapter discusses the application of teaching phonics rules in the L2 environment.

6.1 Differences between L1 Learners and L2 Learners

The assumption of the discussion in Chapter 5 is that the children are native speakers of English; the method does not focus on L2 learners. As is mentioned in Chapter 5, phonics assists children in cracking the code. The method utilizes the characteristics of native speakers; since L1 children are exposed to their native language, they have already known a larger vocabulary than non-native speakers who have never learned English. At the least, they know the sounds of words which they frequently use, even though they are illiterate. Hence, they have only to apply letters to the knowledge of sounds they already have (Heilman, 1981).

On the one hand, L2 learners have significantly less knowledge of English than L1 learners do. Moreover, in terms of English language teaching in Japan, in what is categorized as an EFL environment, most students do not know English words. They are supposed to learn the sounds, spellings and meanings of words all at the same time. The phonics method requiring learners to connect the pre-existing knowledge of sounds to written letters cannot be applied to novice L2 learners. In order to apply the phonics
method for L2 learners, they must first obtain knowledge of the sounds of words prior to acquiring the writing system of English. As the Whole Language perspective states, it is not effective to just teach phonics rules without meanings of words to novice learners who know little vocabulary.

The learning styles evinced for L2 are also different from those for L1. In L1 learning, no formal instruction is necessary. Learners can increase their vocabulary in daily life. On the other hand, most L2 learning is likely to occur under formal instruction in educational institutions. In particular, most students in Japan begin to learn English in junior high school. Hence, instruction to teach form and meaning of the target language in the foreign language learning context is required to be discussed.

6.2 FonF and FonFS

As is demonstrated in Chapter 5, phonics rules should not be taught independently, but with contexts and meanings. This idea can be also applied in Second Language Acquisition (SLA). Long (1991) proposes a distinction in grammar teaching in SLA: Focus-on-Forms (FonFS) and Focus-on-Form (FonF). FonFS refers to grammar instruction in which students are supposed to focus on form rather than meaning (Long, 1991; Ellis, 2003). This instruction style deliberately discusses grammatical features of the target language without reference to meaning (Cook, 2008). On the other hand, FonF refers to instruction that focuses learners' attention on form while also discussing message, content, and meaning (Long, 1991; Ellis, 2003). This instruction relates the form to the meaning that arises from language in the classroom (Cook, 2008). In short, students just focus on grammar of language in FonFS, while they focus on both meanings and grammar of language used in classrooms in FonF.

FonF and FonFS are the terms used to refer to general grammar teaching. They are
used in order for students to draw attention to the features of forms of the target language. As is mentioned previously, phonics rules also deal with forms of the English language: the link between letters and sounds. Therefore, the concepts of FonF and FonFS can be also incorporated into phonics.

Teaching of phonics rules should not be conducted in FonFS. As is described in Chapter 3, the system of phonics rules has so many rules that it is a burden for students to memorize them. Moreover, novice students have no knowledge of English pronunciation and words. As is mentioned in Chapter 5, the principle is not to teach the rules excessively. Hence, phonics rules should not be dealt with at length and separated from meaning, in FonFS, but in FonF, which deals with both meanings and forms.

6.3 Consciousness Raising

Though teaching phonics rules should be done in FonF, too much reliance on meaning should be avoided as well. Schmidt and Frota (1986) claim that learners are required to consciously notice the features of forms in order to acquire them. However, while learners are aware of the content of what they read, they pay less attention to syntactic structures and other forms of language. Thus, forms of language need to be noticed (Schmidt, 1990). Hence, Schmidt (1995) claims that a teaching approach that focuses just on meaning is misguided: teachers are supposed to have students pay attention to the features of forms consciously. In this manner, learners are supposed to focus on form of language in order to acquire language as well as its meaning.

Thus, teachers should have students focus on the forms of language as well as the meaning. Rutherford and Sharwood Smith (1985) propose Consciousness Raising. Consciousness Raising refers to deliberate attempts to specifically draw the learner’s attention to the formal properties of the target language (Rutherford and Sharwood
Smith, 1985). As teachers cannot teach the features of form of the target language, they are required to draw students' attention to forms and have them notice the features. Consciousness Raising works as a shortcut to learning. Significantly, Consciousness Raising is not a purpose of learning but an aid to learning; it helps students learn the formal features of language. Thus, conscious attention to forms can help learners acquire grammar.

6.4 Phonics as a Method for Consciousness Raising

Phonics rules seem to play a significant role in Consciousness Raising when reading. As is described previously, both decoding the meaning and cracking the code are necessary for reading a text. Learners, however, tend to pay attention to the meanings of texts without focusing on the forms of texts. Hence, teachers are supposed to help students focus on the forms of words in the texts. In order to accomplish this purpose, teachers should teach the phonics rules relevant to the unknown words the learners encounter.

Note that the purpose of teaching phonics rules is to assist students to read unknown words. As is discussed in Chapter 3, the system of phonics rules is so complex that teachers cannot directly teach all of them. Moreover, sheer memorization of phonics rules is not the principle of teaching of phonics as is discussed in Chapter 5. Hence, phonics rules can not be used in FonFS but should be used in FonF in grammar teaching. In this manner, teaching of phonics rules should be used for Consciousness Raising with regard to the relationship between letters and sounds in FonF.
Chapter 7

Conclusion

This thesis has analyzed phonics rules in terms of their system and applicability. The system of phonics rules contains multiple rules in each category. The rules are also hierarchical. Moreover, the rules are understood based on the frequency of pronunciations; the pronunciations that most frequently occur are dealt with in the twenty rules. Although phonics is not based on any kind of linguistic principles, the applicability exceeded 80 percent in Eigo Note 1 and 2. This result indicates that phonics rules are fairly reliable and worth teaching to students.

This thesis has also discussed theories of teaching phonics rules in L1, referring to Heilman (1981) and Whole Language. According to these theories, phonics rules should not be treated without meaning and context, and excessive teaching of and dependence on phonics should be avoided. Phonics rules are like a crutch for novice learners; they should be taught in order for the learner to crack the code independently.

Considering the features of phonics and the teaching method in L1, this thesis has suggested the possible applications of phonics in the L2 English environment incorporating the method in L1 into L2 teaching. First of all, teachers should acknowledge the difference between L1 and L2 learners; L2 learners have much less knowledge of English sounds than L1 learners do. L2 learners are supposed to learn the sounds, spellings, and meanings of words at the same time through formal instruction. Secondly, excessive teaching of phonics rules should be avoided in the L2 environment as well. In short, phonics rules should be treated not in FonFS but in FonF. Note that learners are likely to just focus on the meanings of words. Thus, learners are supposed to notice the features of the English language as well as meanings in order to acquire
language. Phonics should be used to draw students’ attention to the forms of the language. Therefore, this thesis suggests that phonics should be used as a way to raise learners’ consciousness to the relationship between letters and sounds in FonF.
References


APPENDIX List of Phonics Rules by Takebayashi (1988)

Rule 1: Consonant letters b, d, f, h, j, k, l, m, n, p, r, s, t, v, w, x, y and z are pronounced regularly.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>/b/</td>
<td>boy, job</td>
</tr>
<tr>
<td>d</td>
<td>/d/</td>
<td>day, sad</td>
</tr>
<tr>
<td>f</td>
<td>/f/</td>
<td>five, golf</td>
</tr>
<tr>
<td>h</td>
<td>/h/</td>
<td>hall</td>
</tr>
<tr>
<td>j</td>
<td>/dʒ/</td>
<td>jet</td>
</tr>
<tr>
<td>k</td>
<td>/k/</td>
<td>kiss</td>
</tr>
<tr>
<td>l</td>
<td>/l/</td>
<td>large, feel</td>
</tr>
<tr>
<td>m</td>
<td>/m/</td>
<td>make, room</td>
</tr>
<tr>
<td>n</td>
<td>/n/</td>
<td>night, coin</td>
</tr>
<tr>
<td>p</td>
<td>/p/</td>
<td>park, ship</td>
</tr>
<tr>
<td>r</td>
<td>/r/</td>
<td>rice</td>
</tr>
<tr>
<td>s</td>
<td>/s/</td>
<td>six</td>
</tr>
<tr>
<td>t</td>
<td>/t/</td>
<td>time, hat</td>
</tr>
<tr>
<td>v</td>
<td>/v/</td>
<td>very</td>
</tr>
<tr>
<td>w</td>
<td>/w/</td>
<td>way</td>
</tr>
<tr>
<td>x</td>
<td>/ks/</td>
<td>box</td>
</tr>
<tr>
<td>y</td>
<td>/j/</td>
<td>yes</td>
</tr>
<tr>
<td>z</td>
<td>/z/</td>
<td>zoo, quiz</td>
</tr>
</tbody>
</table>

Rule 2: The following two or three different consecutive consonant letters are also pronounced regularly.

<table>
<thead>
<tr>
<th>Consonant Combination</th>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>ch</td>
<td>/tʃ/</td>
<td>child, inch</td>
</tr>
<tr>
<td>ck</td>
<td>/k/</td>
<td>back</td>
</tr>
<tr>
<td>dg</td>
<td>/dʒ/</td>
<td>bridge</td>
</tr>
<tr>
<td>ng</td>
<td>/ŋ/</td>
<td>thing</td>
</tr>
<tr>
<td>ph</td>
<td>/f/</td>
<td>photo, graph</td>
</tr>
<tr>
<td>qu</td>
<td>/kw/</td>
<td>queen</td>
</tr>
<tr>
<td>sh</td>
<td>/ʃ/</td>
<td>ship, cash</td>
</tr>
<tr>
<td>tch</td>
<td>/tʃ/</td>
<td>match</td>
</tr>
<tr>
<td>th</td>
<td>/ð/</td>
<td>think, bath</td>
</tr>
<tr>
<td>wh</td>
<td>/w/</td>
<td>white, where</td>
</tr>
</tbody>
</table>

Rule 3: The following consonant letters are not pronounced.

Word Head: k in kn-, g in gn-, w in wr-
Word Last: b in -mb, n in -mn, g in -gn, gh in -ght
Rule 4: Vowel letters have two kinds of pronunciations: short duration sound and long duration sound.

<table>
<thead>
<tr>
<th>Short duration sound</th>
<th>Long duration sound</th>
</tr>
</thead>
<tbody>
<tr>
<td>A /æ/ bag /ei/ date</td>
<td></td>
</tr>
<tr>
<td>E /e/ bed /i/ eve</td>
<td></td>
</tr>
<tr>
<td>I /i/ big /ai/ ice</td>
<td></td>
</tr>
<tr>
<td>O /ɔ/ box /ou/ home</td>
<td></td>
</tr>
<tr>
<td>U /u/ cart /ju/ cute</td>
<td></td>
</tr>
<tr>
<td>Y /ju/ gym /ai/ fly</td>
<td></td>
</tr>
</tbody>
</table>

Rule 5: When a consonant letter comes after a vowel letter at word final, the vowel letter is pronounced as a short duration vowel.

e.g. kit, fat

Rule 6: When one consonant letter follows a vowel letter and <e> follows the consonants at the end of the word, the vowel is supposed to be pronounced as a long duration vowel and <e> at the end is not pronounced.

e.g. kite, fate

Rule 7: The following diagraph letters are pronounced regularly.

<table>
<thead>
<tr>
<th>/æ/</th>
<th>/æ/</th>
<th>/ɔ/</th>
<th>/ɔ/</th>
</tr>
</thead>
<tbody>
<tr>
<td>ea</td>
<td>team</td>
<td>au</td>
<td>autumn</td>
</tr>
<tr>
<td>ie</td>
<td>field</td>
<td>aw</td>
<td>law</td>
</tr>
<tr>
<td>ee</td>
<td>green</td>
<td>eu</td>
<td>feud</td>
</tr>
<tr>
<td>/ei/</td>
<td>/æ/</td>
<td>/ɔ/</td>
<td>/ɔ/</td>
</tr>
<tr>
<td>ai</td>
<td>sail</td>
<td>ay</td>
<td>day</td>
</tr>
<tr>
<td>al</td>
<td>euw</td>
<td>ew</td>
<td>new</td>
</tr>
<tr>
<td>ei</td>
<td>rem</td>
<td>ey</td>
<td>they</td>
</tr>
<tr>
<td>/ei/</td>
<td>/æ/</td>
<td>/ɔ/</td>
<td>/ɔ/</td>
</tr>
<tr>
<td>ey</td>
<td>they</td>
<td>ow</td>
<td>now</td>
</tr>
<tr>
<td>/oi/</td>
<td>/ɔ/</td>
<td>/aʊ/</td>
<td>/aʊ/</td>
</tr>
<tr>
<td>oi</td>
<td>oil</td>
<td>oa</td>
<td>boat</td>
</tr>
<tr>
<td>/oi/</td>
<td>/ɔ/</td>
<td>/aʊ/</td>
<td>/aʊ/</td>
</tr>
<tr>
<td>oy</td>
<td>boy</td>
<td>/u/</td>
<td>oo</td>
</tr>
</tbody>
</table>
Rule 8: When /ju:/ is followed by /q/, /dz/, /U/, /r/ and /sl/, the pronunciation shifts from /ju:/ to /u:/.

e.g. chew, June, rule, super

Rule 9: When the vowel letters <a>, <o> and <u> or consonant letters follow the letters <e> and <i>, each of them is pronounced as /k/ and /g/. On the other hand, when they are followed by <e>, <i> or <y>, their regular pronunciation is supposed to shift to /s/ and /z/.

<table>
<thead>
<tr>
<th></th>
<th>c</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before a</td>
<td>cat, came</td>
<td>gas, game</td>
</tr>
<tr>
<td>Before o</td>
<td>cock</td>
<td>go, gown</td>
</tr>
<tr>
<td>/k/, /g/</td>
<td>Before u</td>
<td>cut</td>
</tr>
<tr>
<td>Before consonants</td>
<td>clock, cry</td>
<td>glad, grow</td>
</tr>
<tr>
<td>Word Last</td>
<td>bloc, disc</td>
<td>bag, leg</td>
</tr>
<tr>
<td>Before e</td>
<td>cent, cell</td>
<td>gem, gentle</td>
</tr>
<tr>
<td>/s/, /dz/</td>
<td>Before i</td>
<td>city, cite</td>
</tr>
<tr>
<td>Before y</td>
<td>cymbal</td>
<td>gym</td>
</tr>
</tbody>
</table>

Rule 10: When <r> follows a short duration vowel at the word final or precedes before consonants, the vowel and <r> are combined and pronounced regularly.

<table>
<thead>
<tr>
<th>/ar/</th>
<th>ar</th>
<th>car, farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>/er/</td>
<td>er</td>
<td>her, term</td>
</tr>
<tr>
<td>/ir/</td>
<td>ir</td>
<td>sir, first</td>
</tr>
<tr>
<td>/ur/</td>
<td>ur</td>
<td>fur, turn</td>
</tr>
<tr>
<td>/oar/, /or/</td>
<td>or</td>
<td>nor, corn</td>
</tr>
</tbody>
</table>
Rule 11: When <r> follows a vowel and <e> follows them as well at the end of word, the vowel and <r> are combined and pronounced regularly.

<table>
<thead>
<tr>
<th>are</th>
<th>/ɛər/</th>
<th>care</th>
</tr>
</thead>
<tbody>
<tr>
<td>ere</td>
<td>/iər/</td>
<td>here</td>
</tr>
<tr>
<td>ire</td>
<td>/aɪər/</td>
<td>fire</td>
</tr>
<tr>
<td>ure</td>
<td>/juər/</td>
<td>cure</td>
</tr>
</tbody>
</table>

Rule 12: The combinations of diphthong letters and <r> are pronounced regularly.

<table>
<thead>
<tr>
<th>ear</th>
<th>/iər/</th>
<th>hear</th>
</tr>
</thead>
<tbody>
<tr>
<td>eer</td>
<td>/iər/</td>
<td>deer</td>
</tr>
<tr>
<td>air</td>
<td>/aɪər/</td>
<td>hair</td>
</tr>
<tr>
<td>oar</td>
<td>/oər/</td>
<td>board</td>
</tr>
<tr>
<td>oor</td>
<td>/uər/</td>
<td>poor</td>
</tr>
<tr>
<td>our</td>
<td>/auər/</td>
<td>flour</td>
</tr>
<tr>
<td>ower</td>
<td>/auər/</td>
<td>power</td>
</tr>
</tbody>
</table>

Rule 13: The sound of the particular vowels preceded by <w>, <wh> or <qu> are supposed to shift: /æ/ shifts to /ə/, /ɑːr/ changes to /ɔər/, /ɔ/ changes to /ʌ/ and so does /ɔər/ to /ɔə/.

e.g. war, won, work

Rule 14: When the two same letters are used at the same time, they are pronounced as one consonant.

e.g. dell, kiss, press

Rule 15: When a stressed vowel before a double consonant with in the word, the vowel is supposed to be pronounced as a short duration vowel.

e.g. latter, better, dinner

Rule 16: The pronunciation rules concerning with grammatical morpheme “-s” for present tense, plural and possessive.

Rule 17: The pronunciation rules concerning with grammatical morpheme “-ed” for past tense and past participle.
Rule 18: Pronunciation of weak vowels

<table>
<thead>
<tr>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/a/</td>
<td>a about, sofa</td>
</tr>
<tr>
<td></td>
<td>e gentlemen, moment</td>
</tr>
<tr>
<td></td>
<td>i April, possible</td>
</tr>
<tr>
<td></td>
<td>o common, contain</td>
</tr>
<tr>
<td></td>
<td>u album, August</td>
</tr>
<tr>
<td></td>
<td>ou dangerous, famous</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i/</td>
<td>i artist, music</td>
</tr>
<tr>
<td></td>
<td>e roses, painted</td>
</tr>
<tr>
<td></td>
<td>a message, village</td>
</tr>
<tr>
<td></td>
<td>ai bargain, captain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/i(*/)</td>
<td>y city, happy</td>
</tr>
<tr>
<td></td>
<td>ie babies, Johnie</td>
</tr>
<tr>
<td></td>
<td>ey donkey, money</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ar/</td>
<td>ar calendar, particular</td>
</tr>
<tr>
<td></td>
<td>er butter, teacher</td>
</tr>
<tr>
<td></td>
<td>ir circumference</td>
</tr>
<tr>
<td></td>
<td>or actor</td>
</tr>
<tr>
<td></td>
<td>ur murmur, Saturday</td>
</tr>
<tr>
<td></td>
<td>yr martyr</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/u/</td>
<td>u beautiful, merciful</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sound</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>/ju/</td>
<td>u occupy, popular</td>
</tr>
</tbody>
</table>

Rule 19: When <ti>, <ce> and <ci> are followed by a weak vowel, they are pronounced as /ʃ/. The combination of letters <si> which is followed by weak vowel is pronounced as /ʃ/ or /dʒ/. Furthermore, <ge> and <gi> under the same condition are pronounced as /dʒ/.

E.g. station, ocean, official, mansion, decision, pigeon
Rule 20: The combination <su> within a weak syllable is pronounced as /ʃu/ or /dʒu/,
<tu> is as /ʃu/ and <du> is as /dʒu/. And the combination <ture> is pronounced as
/ʃər/.

e.g. sensuous, usual, habitual, gradual, nature