

Dependent words and dependent forms

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Dependent words and dependent forms

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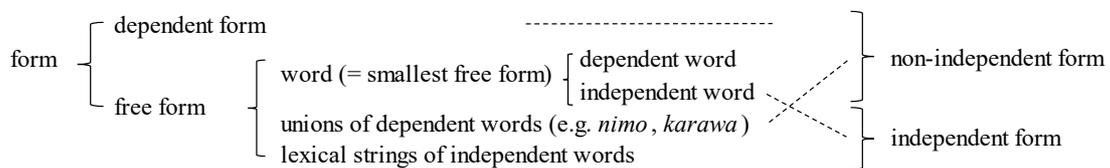
1. Terminology
2. Breaks in utterances and how they relate to wordhood
3. Recognizing wordhood and alternate forms of words
4. Changes in word forms
5. Three rules for distinguishing between dependent words and dependent forms: Dependent word criteria (1)
6. Hints for establishing wordhood from systematic changes
7. Meaning
8. Phonological structure
9. English - 's
10. Dependent word criteria (2)
11. A closer look at the definition of dependent form and free form

1

For definitions of the various technical terms¹ used in this paper – such as 発話 ‘utterance’, 発話段落 ‘utterance unit’, 単語結合体 ‘lexical union’, 言語作品 ‘linguistic composition’, 文 ‘sentence’, 形式 ‘form’ (自由形式 ‘free form’, 附属形式 ‘dependent form’, 自立形式 ‘independent form’, 非自立形式 ‘non-independent form’), 単語 ‘word’ (自立語 ‘independent word’, 附属語 ‘dependent word’), 単語連結 ‘lexical string’ (a 単語結合 ‘lexical union’ is simply a 堅い単語連結 ‘fixed lexical string’) or 形態素 ‘morpheme’ – see my paper, 具体的言語単位と抽象的言語単位 *Gutaiteki gengotan'i to chuŝhoŕteki gengotan'i*

¹ [Translator’s note: Throughout this paper, the author makes a conscious effort to avoid standard linguistic terminology, opting for more transparent and innovative terminology instead. While it is tempting to translate the author’s terminology using concepts more familiar to the reader (such as ‘clitic’ instead of ‘dependent word’ for 附属語, a translation that the author himself uses in the English abstract for this paper, but is not entirely accurate), I have opted for more direct translations wherever possible, as using more familiar terminology runs the risk of forcing my own interpretation on the content of the paper.]

'Concrete lexical units and abstract lexical units' in the journal *Kotoba*, vol. 2, no. 12 (December 1949). To briefly define just the terms directly related to the topic this paper, a 附属語 'dependent word' is a word which rarely or never appears as an utterance or utterance unit (that is, a unit of speech with a break before and after it) and is usually uttered in succession with another word or words; while a 附属形式 'dependent form' is a form that never appears as an utterance or utterance unit and is always uttered in succession with another form or forms. In opposition to these dependent units, 自立語 'independent words' are words that appear as utterance units of their own and can form a sentence-level utterance or utterance unit, while 自由形式 'free forms' are forms that appear as utterance units (or utterances). The smallest free form is a word. A combination of multiple independent words is called a 自立形式 'independent form', while the term 非自立形式 'non-independent form' will be used to cover all dependent units such as dependent words and dependent forms. The relationship between each of the abovementioned units can be summarized as follows.



2

There exist breaks in speech at various points in any given production of sounds comprising a linguistic composition. Putting aside slips of the tongue, there are cases in which a speaker may pause briefly between each syllable (or mora) in their speech. Such a style of speaking, however, is typically done in jest or to emphasize pronunciation without paying attention to meaning. Furthermore, when reciting poetry and other forms of verse, or when chanting sutras, there is a tendency to play around with the pronunciation itself (this tendency holds true for the reading aloud of difficult passages of text or books written in a foreign language as well), resulting in the insertion of long pauses in the middle of a sentence or the omission of pauses between two sentences. In typical speech, in which the speaker pays attention to the meaning of their utterances, however, breaks typically only occur between two sentences or two words.

While words are important linguistic units from various perspectives, the recognition of words is not always simple. This is because one type of word, the dependent word, which shows a low degree of independence and is regularly uttered in

succession with other words, is difficult to distinguish from dependent forms. To simply ask speakers if such dependent words can be uttered by themselves, without observing actual speech, would be a waste of time in most cases. No Japanese speaker, for example, could tell you that *sizuka na* 'quiet'² is a lexical string but that it can be broken into two separate utterances. It is said that uneducated speakers of French, English, and Russian often do not add spaces between dependent words and other words. As I will touch upon later, even with Japanese, for which there are established orthographic rules, there are examples of lexical strings being mistakenly written as a single continuous unit.

Depending on the language, it is sometimes difficult to tell the difference between compounds and strings of independent words, since the elements (i.e. dependent forms) comprising a compound, such as *hana-* 'flower' and *-kago* 'basket' in *hanakago* 'flower basket', may be similar to independent words both in form and meaning. Here, I will call such forms 'pseudo-dependent forms' to distinguish them from dependent forms proper.

The goal of this paper, rather than observing whether or not a certain form appears as an utterance unit, is to establish a practical linguistic procedure for distinguishing between dependent words and dependent forms. Before establishing this procedure, though, I would like to look at the question of what constitutes a word and how to recognize words.

3

3.1

We can presume that all utterances differ from each other. When we say that two or more utterances represent the same sentence (or linguistic composition), this is merely an assumption, even if this assumption does, many times reflect our everyday experience. We can presume that any units of speech representing the same word in the same sentence also differ from utterance to utterance. In reality, however, since the pronunciation and meaning – in particular the former – of these units of speech are extremely similar, we can assume that they represent a single word.

² Hereafter, all examples are given in italics. Examples using IPA symbols, however, will not be given in italics. Some examples may also be given in katakana. [Translator's note: All katakana examples have been transcribed in Roman alphabet following the author's phonemicization and rough translations have been provided directly after each Japanese example where necessary in quotes. Contrary to the author's note, there are a number of examples that are not given in italics as well. I have left these examples as is, except for when not adding italics would inhibit readability. I have restrained from adding morphological glosses to this translation as there are none in the original and because it would go against the intent of the author, who purposely avoids giving technical labels to any of the forms in this paper. See also footnote #1.]

3.2

It is often the case that each unit of speech recognizable as a word, when used in a different sentence, is pronounced slightly differently. Take the following sentences, for example.³

[hommotte]	“Hon motte.”	‘Hold the book!’
[hontotte]	“Hon totte.”	‘Take the book!’
[honkatte]	“Hon katte.”	‘Buy the book!’
[hoijonde]	“Hon yonde.”	‘Read the book!’
[houwasurete]	“Hon wasurete.”	‘Forget the book!’

These are merely phonetic differences, however, and from a phonological standpoint, [hom], [hon], [hon], etc. can all be interpreted as /ho`N/. Therefore, in this case, we can say that all of the forms of this word are technically the same.

Next, let us take the following examples from Tokyo dialect and the Kameyama dialect of Mie prefecture.

Tokyo:	[e`dapi`]	“Eda ni.”	‘Towards the branch.’
	[ko`noedapi`]	“Kono eda ni.”	‘Towards this branch.’
Kameyama:	[ka`ta`motsu]	“Kata mocu.”	‘Side with (lit. hold shoulders).’
	[kata`tataku`]	“Kata tataku.”	‘Tap on the shoulder.’

In each of the examples above, the units of speech *eda* ‘branch’ and *kata* ‘shoulder’ do not show the same accent; however, phonologically, each of the examples can be interpreted as /eda/ or /kata/ and are thus actually the same form.

In cases such as the above, in which the same form represents the same meaning (that is, it is within the scope of the common meaning), even if each form (or, in this case, word) appears in a different location in a different sentence, it is still easily recognizable as a single form. To give another example, each instance of *hon* in the following sentences is easily recognizable as the same form.⁴

<i>‘Kono hon wa omosiroi.’</i>	<i>‘This book is interesting.’</i>
<i>‘Omosiroi hon da.’</i>	<i>‘It is an interesting book.’</i>
<i>‘Hon ga yomitai.’</i>	<i>‘I want to read a book.’</i>

³ Example utterances are placed in double quotes (“ ”). When using kanji and kana, example utterances are placed in hook brackets (「 」). [Translators note: All examples of utterances using Japanese orthography are converted to Roman alphabet, with hook brackets (which are nearly absent throughout the paper) omitted. English translations are given in single quotes.]

⁴ Example sentences are placed in single quotes (‘ ’) and put in italics. When using kana, example sentences are placed in single hook brackets (「 」). [Translators note: All examples of sentences using Japanese orthography are converted to Roman alphabet and placed in single quotes. English glosses of sentences are given in double quotes.]

This is because each of the forms takes the shape of /ho`N/ and possesses the same meaning.

3.3

There are cases, however, in which the realization of a word varies (this mainly becomes an issue with dependent words). In order to recognize what is and is not a word, it is necessary to adequately explain this phenomenon.

3.3.1

First, there are cases in which the realization of a word may vary due to phonological constraints. In Russian, for example, there is a dependent word (a preposition) which takes the shape of /s°/.⁵

- /s°ló'sad̥'ju/ 'with a horse'
- /s°kóška'j/ 'with a cat'
- /s°sabá'ka'j/ 'with a dog'
- /s°makakóm/ 'with milk'
- /s°'útká'j/ [s-'utkəi] 'with a duck'

And while the forms

- /saštálóm/ 'with the meal'
- /sam̃nó'j/ 'with me'

are observed, we do not observe /s°štálóm, s°m̃nój/. In this case, /s°/ is replaced with /sa/ because the sequences of phones /s°st-, s°m̃n-/ are illicit in Russian. This substitution is possible because /s°/ and /sa/ are the same phone expressing the same meaning.

The forms

- /z°dóktaram/ 'with the doctor'
- /z°bó'gam/ 'with God'
- /z°zó'latam/ 'with money'

also exist, but not the forms

- /s°dóktaram,
- s°bó'gam,
- s°zó'latam/.

This is because, in Russian, /z°/ can come before /d, b, z/, but /s°/ cannot. As demonstrated above, /s°/ appears before voiced phones such as /l, m/ or the zero phone /'/, and while there is no form /za/ to replace /sa/, we can interpret /z°/ as a form that

⁵ All forms are given in phonemic transcription. Each individual character represents both a phoneme and, when not connected by an inverted breve ($\overset{\circ}{/}$), an individual phone as well. The symbols /°/ and /'/ both represent a zero phoneme. The former represents a zero phoneme appearing in a slot for a syllabic phone, with the latter representing one appearing in a slot for a non-syllabic phone.

appears in place of /s°/ (note that when placing a pause after the preposition, this is pronounced as [s^uˈdɔktərəm]). In this paper, I will refer to such forms that are substituted for another form of a word due to phonological restraints as 代り語形 ‘substitute forms’.

With the example given above, /s°/ is the 基本語形 ‘base form’ and /sa, z°/ are ‘substitute forms’.

In modern Russian, there are three vowel phones, /i, a, u/, that can appear in an unstressed location, and the fact that /sa/ appears instead of /si, su/ is due to diachronic reasons. Therefore, strictly speaking, /sa/ should be called a 選り代り語形 ‘chosen substitute form’. The reason that we cannot posit /sa/ as the base word form is because the forms /sasaba’kaj, samalakóm/ are not found. The same phenomenon is observed in other languages as well. For example, with the possessive -’s in English

/bésiz/ Bess’s, /tómz/ Tom’s, /díks/ Dick’s,

/z/ is the base form and /iz, s/ are substitute forms. Since /besz/ is phonologically illicit in English, the form /bésiz/ is used in its place. Bloomfield compared these forms with

/bésiz/ Bess is, /tómz/ Tom is, /díks/ Dick is,

stating that /iz/ is the base form; however, his analysis is incorrect.⁶ While *is* takes the form /tóm’íz/, -’s possesses no such form. If the form /bésiz/ ‘Bess’s’ were to appear in a dialect that distinguishes between unstressed [ə] and [i], this /iz/ would simply be a ‘chosen substitute form’.

3.3.2

Here, I will give some examples of words which change forms due to phonological constraints from the Turkish language.

et mi ‘Is it meat?’

balık mı ‘Is it fish?’

süt mü ‘Is it milk?’

su mu ‘Is it water?’

Each of the above examples consist of two words, with the second word being a dependent word expressing the same meaning as the interrogative particle *ka* in Japanese. In each of the examples, however, this word takes a different shape. Each variation consists of two phones, with the first phone /m/ remaining the same while the second phone changes. Upon further inspection, we find that this substitution stems from the fact that in Turkish, vowel phones in words and lexical units display vowel harmony with

⁶ [Translator’s note: The author provides no sources throughout this paper (and no bibliography). I have done my best to provide all referenced sources through the use of footnotes, where applicable. The analysis by Bloomfield referenced here can be found in Bloomfield, Leonard. 1933. *Language*. Henry Holt & Company, pg. 212.]

high frequency (there are a number of exceptions in foreign loanwords). This phenomenon can be summarized as follows:

- /e, i/ can only be followed by /e/ or /i/
- /a, ɪ/ can only be followed by /a/ or /ɪ/
- /ō, ū/ can only be followed by /e/ or /ū/
- /o, u/ can only be followed by /a/ or /u/

In other words, the vowel phones of the four variations *mi, mi, mi, mu* in the examples above change due to vowel harmony, and are, in fact, all substitute forms of the same word. Naturally, in such situations, it is impossible to determine which form is the base form.

3.3.3

There are examples of words with alternating accent patterns in languages with pitch accent as well. Take the following examples from Tokyo dialect.

- /ʼusima`de/ 'up to the cow' /ʼuma`made/ 'up to the horse'
- /torima`de/ 'up to the bird' /ʼinu`made/ 'up to the dog'
- /takema`de/ 'up to the bamboo' /kusa`made/ 'up to the grass'
- /ʼokama`de/ 'up to the hill' /jama`made/ 'up to the mountain'

Both the form /ma`de/ and the form /made/ are composed of the same sequence of phones and express the same meaning but have differing accent patterns. Since there are no words or lexical strings with two accent loci (and especially two loci on two adjacent moras) in Tokyo dialect, we can interpret /ma`de/ as a substitute form of /made/.

3.3.4

In stress accent languages, it is common for dependent words to possess an unstressed substitute form. The Russian prepositions /ʼa/ 'about' and /pa/ 'by, until' appear as /ʼó/ and /pó/ when stressed and in unstressed positions, /o/ replaces /a/.

3.4

Next, we will look at some English examples.

- /ðʌmán ~ ðimán/ *the man*
- /ʼʌtjúw ~ ʼátjuw/ *at you*
- /tómz ~ tóm'íz/ *Tom is*

In the examples above, the dependent word [translator's note: hereinafter, italicized] is usually unstressed. What is of particular interest here is that these unstressed word forms are reduced to an extent further than that which is required by English phonology. A form such as /tómiz/, for example is also licit. I will refer to such word forms as

/ðʌ, 'ʌ t, z/ as 弱まり語形 'weakened forms'. Such forms exist in Japanese as well. Take the following utterances, for example.

/'ikunodesu/ Iku *no* desu. 'go' (*emphatic*, polite, formal)

/'ikuNdesu/ Iku *n* desu. 'go' (*emphatic*, polite, slightly less formal)

Japanese phonology allows for both /no/ or /N/ in the above construction, and thus we should refer to /N/ not as a substitute, but as a 'weakened form' of /no/.

3.5

English has two types of indefinite articles:

a man, *a* boy, *a* girl /'ʌ/

an animal, *an* elm, *an* uncle /'ʌn/.

While *a* and *an* have the same meaning, they cannot be used interchangeably in the same environment. We can interpret /'ʌn/ as a form that emerges in place of /'ʌ/ because in English, the sequences /ʌ'a, ʌ'e, ʌ'ʌ/ only appear at the boundary of two free forms. Since /'ʌn/ is not phonologically illicit before consonant phones (with the exception of zero phone), we cannot interpret /'ʌ/ as a form that emerges in place of /'ʌn/. It is due to diachronic reasons that /n/, and not another phone, is inserted in order to avoid the ill-formed sequence of phones. To summarize its origin, [n] is a retention of a coda consonant that was lost in all environments other than intervocalically. Thus, in this case, *an* is the 連声語形 'liaison form' (or サンデー語形 'sandhi form') of *a*.

The same phenomenon is observed in French, where, in the following examples, [ʔ] appears in place of [ɔ̃].

ils *ont* donné 'they gave', ils *ont* trouvé 'they found' [ɔ̃]

ils *ont* acheté 'they bought', ils *ont* entré 'they entered' [ɔ̃t]

In theory, a consonant other than [t] (such as [n], for example) could be used to avoid a sequence of [ɔ̃] and another vowel, but [ɔ̃t] appears for diachronic reasons. To summarize its origin, [t] is a retention of a coda consonant that was lost in all environments other than intervocalically. Thus, [ɔ̃t] is the liaison form of [ɔ̃].

3.6

The words *uma* 'horse', *inu* 'dog', *kusa* 'grass' and *yama* 'mountain' in Tokyo dialect typically become /'umaʔ-, 'inuʔ-, etc./ when followed by a dependent word.

/'umaʔwa, 'inuʔwa, kusaʔwa, ʔamaʔwa/

/'umaʔmo, 'inuʔmo, kusaʔmo, ʔamaʔmo/

/'umaʔni, 'inuʔni, kusaʔni, jamaʔni/

The same words, however, take the form /'uma-, 'inu-/, etc. when followed by a small number of dependent words such as *no*, *dake* and *gurai*.

/'umano, 'inuno, kusano, ŷamano/
/'umaŋu'rai, 'inuŋu'rai, kusaŋu'rai, ŷamaŋu'rai/

This is not due to some phonological constraint that exists in Tokyo dialect. It just so happens that with a select number of dependent words, the forms /'uma-, 'inu-/, etc. emerge when forming a lexical union with the dependent word in question. Thus, we can call /'uma-, 'inu-/ the 結合語形 'unified forms' of /'uma`-, 'inu`-/. When looked at diachronically, this phenomenon can be largely attributed to assimilation.

4

There are instances in which one can connect multiple varying forms to a single word apart from those given above. Take the following utterances, for example.

Kodomo no yomu hon da.	'(It)'s a book that children read.'
"Hon o yomi nasai."	'Please read the book'
"Oi. Hayaku yome."	'Read the book!'
"Nakanaka yomanai."	'(He) rarely reads.'

The segments "yomu", "yomi", "yome", "yoma-" in the above utterances are all similar in form and meaning, but at the same time, are not identical. 'Hon o yomu.' 'read a book' and 'Hon o yome.' 'read the book!' each expresses a different meaning. We can analyze the morphology and meaning of the above forms, and similar ones, as follows (for the time being, we will leave accent out of consideration).

/ŷom|u jom|iŷom|e ŷom|a-/
/kak|u kak|i kak|e kak|a-/

Each of the groups of forms above share one part in common which expresses an identical meaning and another part which does not. We can thus recognize both of these parts as separate morphemes. At the same time, since one never pauses between each morpheme in [jom|u, jom|i, jom|e, jom|a-] when uttering these forms, we can recognize *yomu*, *yomi*, etc. in their entirety as words or parts of words. There are also social conventions dictating how one may use each of these forms together with others. All of the following sentences, for example, are illicit.

'Kodomo no {yomi / yome} hon da.'
'Hon o {yomu / yome} nasai.'
'Nakanaka {yomu- / yomi-} nai.'

In each of these instances, *yomu*, *yomi*, *yome*, *yoma-* perform different functions. At the same time, they all form a single group, since they each possess the same base morpheme and meaning and there are typically rules governing where each of these forms can and cannot appear in a sentence. In other words, each of these forms may appear in place of

each other within a lexical union or sentence. The rules governing their appearance, however, are not based on phonotactic restrictions, accent, or liaison. In this case, we can call all of *yomu*, *yomi*, *yome*, *yoma-*, 変化語形 ‘alternating forms’ [translator’s note: a more appropriate, but not direct, translation would be ‘inflecting forms’ or ‘inflections’] of each other, and we can say that ‘this word (for example, *yomu*) has alternating forms’ or ‘this word displays morphological alternation’. In contrast to this, we can summarize the ‘(chosen) substitute forms’, ‘weakened forms’, ‘liaison forms’ and ‘unified forms’ discussed above as 非変化語形 ‘non-alternating forms’ [translator’s note: or ‘non-inflecting forms’]. In each of these cases, a different form of the same word is simply substituted for another without any change in meaning, but when the form of a word alternates, to certain degree, so does its meaning. (Note that strictly speaking, each of these examples are separate forms (or words) comprising a single group, and not simply a single form that ‘changes’.)

5

Now it is time to talk about the difference between dependent words and dependent forms. Different scholars have given different criteria for distinguishing between the two and these criteria also differ from language to language. It is necessary, however, to devise a set of fundamental criteria that can be applied to all languages. In the following discussion, I will attempt to establish such a set of rules.

5.1

Rule 1: If a form attaches to various types of independent forms with differing functions and morphology, then it is a free form (i.e. a ‘dependent word’).

5.1.1

Let us look at some examples from Japanese.

kodomo <i>no</i> (ga) <i>yomu no</i> ,	siroi <i>no</i> ,	sizuka na <i>no</i>		
‘the <i>one</i> the child drinks’	‘the white <i>one</i> ’	‘the quiet <i>one</i> ’		
kodomo <i>dake</i> ,	<i>yomu dake</i> ,	siroi <i>dake</i> ,	sizuka na <i>dake</i>	
‘children <i>only</i> ’	‘read <i>only</i> ’	‘white <i>only</i> ’	‘quiet <i>only</i> ’	
kodomo da <i>keredo</i> ,	sizuka da <i>keredo</i> ,	<i>yomu keredo</i> ,	siroi <i>keredo</i>	
‘(she) is a child, <i>but</i> ’	‘(it)’s quiet, <i>but</i> ’	‘(she) reads, <i>but</i> ’	‘(it)’s white, <i>but</i> ’	
kodomo da <i>to</i> (sureba),	sizuka da <i>to</i> ,	<i>yomu to</i> ,	siroi <i>to</i>	
‘if (she)’s a child’	‘if (it)’s quiet’	‘if (she) reads’	‘if (it)’s white’	
inu <i>no</i> ,	Tôkyô made <i>no</i> ,	Kyôto kara <i>no</i> ,	sukosi <i>no</i> ,	iroiro
<i>no</i>				

'of the dog' 'of (the trip) to Tokyo' 'of (the trip) from Kyoto' 'a little bit of'
 'different types of'
 hon *o*, kodomo no *o*, watasi dake *o*,
 'the book' (accusative) 'the child's (things)' (accusative) 'only me' (accusative)
 aru ka nai ka *o*
 'if it's there or not' (accusative)⁸
 hon *sae*, Tôkyô ni *sae*, Kyôto kara *sae*, yonde *sae*, sizuka de
sae
 'even books' 'even in Tokyo' 'even from Kyoto' 'even when reading' 'even if it's
 quiet'
 hon *wa*, Tôkyô ni *wa*, Kyôto kara *wa*,
 'as for books' 'as for (being) in Tokyo' 'as for (coming) from Kyoto'
 yonde *wa*, sizuka de *wa*
 'as for when reading' 'as for being quiet'
 hon *mo*, Tôkyô ni *mo*, Kyôto kara *mo*, yonde *mo*,
 'books too' 'in Tokyo too' 'from Kyoto too' 'even though (he) reads'
 sizuka de *mo*
 'even though (it)'s quite'
 hon *da zo*, sizuka *da zo*, yomu *zo*, siroi *zo*
 'it's a book!' '(it)'s quiet!' '(I'll) read (it)!' '(it)'s white!'
 hon *da yo*, sizuka *da yo*, yomu *yo*, siroi *yo*
 '(it)'s a book, you know!' '(it)'s quiet, you know!' '(I'll) read (it), you know!' '(it)'s white,
 you know!'
 hon *da ne*, hon ni *ne*, hon o *ne*,
 '(it)'s a book, right?' 'to the book, right?' 'the book, right?' (accusative)
 yomu *ne*, siroi *ne*
 'read (it), right?' '(it)'s white, right?'
 hon *ya nôto*, kodomo no *ya otona no*,
 'books and notebooks' 'the child's (things) and the adult's (things)'
 nimai *ya sanmai*, kôhuku *ya hukô*
 'two sheets (of paper) and three sheets (of paper)' 'happiness and unhappiness'

The words *no*, *dake*, *keredo*, *to*, *no*, *o*, *sae*, *wa*, *mo*, *zo*, *yo*, *ne*, *ya*, etc. in the examples above are all dependent words according to Rule 1. All of the forms to which they attach are free forms, with the exception of *inu* /'inu-/ in *inu no*, which is a liaison form of the independent word /'inu`-/.

hon *da*, yomu no *da*, siroi kara *da*, *iya da*, kirai *da*,

⁸ [Translator's note: These are each examples of the accusative case marker particle *o*. As there is no equivalent in English, I have added the tag '(accusative)' to each example. Elsewhere, where there are not English equivalents, I have done the same.]

'(it)'s a book' '(you should) read (it)''because (it)'s white' '(it)'s unfavorable' '(I) hate (it)'
 sizuka *da*
 '(it)'s quiet'
 hon *rasii*, yomu *rasii*, siroi *rasii*, iya *rasii*,
 '(I) hear (it)'s a book' '(I) hear (she) reads' '(I) hear (it)'s white' '(I) hear (it)'s unfavorable'
 kirai *rasii*, sizuka *rasii*
 '(I) hear (she) hates (it)''(I) hear (it)'s quiet'
 hon *ka*, yomu *ka*, siroi *ka*, iya *ka*, kirai *ka*,
 'is (it) a book?' 'do (you) read?' 'is (it) white?' 'is (it) unfavorable?' 'do (you) hate it?'
 sizuka *ka*
 'is (it) quiet?'
 hon *nara*, Kyôto kara *nara*, kôhuku *nara*, citeki *nara*,
 'if (it)'s a book' 'if (it)'s from Kyoto' 'if (you)'re happy' 'if (you)'re intelligent'
 iroiro *nara*, iya *nara*, kirai *nara*, sizuka *nara*
 'if (it)'s varied' 'if (it)'s unfavorable' 'if (you) hate (it)''if (it)'s quiet'
 hon *de* (atte), Kyôto kara *de*, kôhuku *de*, citeki *de*, iroiro *de*,
 'being a book' 'being from Kyoto' 'being happy' 'being intelligent''being varied'
 iya *de*, kirai *de*, sizuka *de*
 'being unfavorable' 'being (full of) hate' 'being quiet'

We can also recognize the words *da*, *rasii*, *ka*, *nara* and *de* from the above examples as dependent words. Likewise, *na* and *ni* from the following examples should be called dependent words as well.

kôhuku *na*, citeki *na*, iroiro *na*,
 'happy' (adnominal) 'intelligent' (adnominal) 'different' (adnominal)
 iya *na* kirai *na*, sizuka *na*, haruka *na*
 'unfavorable' (adnominal) 'detested' (adnominal) 'quiet' (adnominal) 'far away' (adnominal)
 kôfuku *ni*, citeki *ni*, iroiro *ni*, iya *ni*,
 'happily' (adverbial) 'intelligently' (adverbial) 'variably' (adverbial) 'unfavorably'
 (adverbial)
 kirai *ni*, sizuka *ni*, haruka *ni*
 'detestably' (adverbial) 'quietly' (adverbial) 'distantly' (adverbial)

This is because *kôhuku* 'happiness', *citeki* 'intelligent', *iroiro* 'varied', *iya* 'unfavorable', *kirai* 'hated', *sizuka* 'quiet' ("Umi wa *sizuka*, kaze was odayaka." 'the sea is *quiet*, the wind is calm', "Sizuka wa *sizuka da ga*....." '(it)'s *quiet* for sure, but.....', "Totemo *sizuka yo*." '(it)'s very *quiet*, you know'), *haruka* 'far away', etc. are all independent words with different functions. Below, I will give some examples of words (in brackets) which are functionally identical to *kôhuku*, *citeki*, etc.

kôhuku 'happiness' (kenkô 'health') o, ga, to, ya
 [translator's note: in order: accusative, nominative, comitative, 'and']
citeki sagyô 'intelligent operations' (kagakuteki kenkyû 'scientific research')

iroiro aru ‘have varied (things)’ (*tailhen yorokobu* ‘be very happy’)
haruka enpô ni ‘in a far away (place)’ (*wazuka 10 en no koto de* ‘over an issue of just
 10 yen’)

Similar to *kôhuku*, *citeki*, etc., all of the bracketed forms can take *na* and *ni*. Next, let us take a look at the following examples.

hon na no da, *kodomo na no da*, *kirai na no da*,
 ‘(it)’s a book’ (emphatic) ‘(it)’s a child’ (emphatic) ‘(I) hate (it)’ (emphatic)
sizuka na no da, *yomu no da*, *siroi no da*
 ‘(it)’s quiet’ (emphatic) ‘read (it)’ (emphatic) ‘(it)’s white’ (emphatic)

All four instances of *na* and all six instances of *no da* are the same form, respectively, and this *na* is the same *na* as that in the previous examples. The view that *sizuka na*, *sizuka ni*, etc. are each single words arises from the fact that the form *sizuka* (as well as *na* and *ni*) very rarely appears as an isolated utterance or utterance unit (while it is safe to say that *na* and *ni* never appear as isolated utterances) and from the influence of Western linguistics on Japanese grammarians. When we take the characteristics of the Japanese language into account though, as we indicated above, *na*, *ni*, and *sizuka* are each individual words.

In the examples

kôhuku ni kurasu ‘live in happiness’, *kôhuku ni cuite* ‘about happiness’,

while the form *kôhuku ni* expresses a different meaning in each example, in both cases, it is comprised of two words. The view that the first instance of *kôhuku ni* is a single word (equivalent to English ‘happily’), while the second is comprised of two words, arises from a false comparison with Western languages.⁹

The forms *ni*, *nasai* and *nagara* in the following examples, should also be treated as dependent words.

kurihiroi ni (iku), *sôdan ni (iku)*, *hanasiai ni (iku)*, *hon o yomi ni*
(iku),
 ‘(go) to gather chestnuts’ ‘(go) to consult with’ ‘(go) to discuss with’ ‘(go) to read a
 book’
benkyô nasai, *goran nasai*, *sô nasai*, *oyomi nasai*, *yomi nasai*

⁹ It is thus incorrect to distinguish these forms as *kôhukuni* and *Kôhuku ni* in segmented transcriptions. In the case that this could lead to confusion, one should write the second form as *Kôhuku ni cuite* or ‘*kôhuku*’ *ni cuite*. [Translator’s note: The author is explaining how the practice of treating *kôhuku ni* in *kôhuku ni kurasu* as a single word arises from a false comparison with English ‘happily’, where in actuality it should be treated as two distinct words: *kôhuku* ‘happiness’ and *ni* (adverbial particle). At the same time, the *kôhuku ni* in *kôhuku ni cuite* is treated as two words, since here *kôhuku* can be translated as ‘happiness’ and *ni cuite* as ‘about’. In segmented transcriptions, *kôhuku ni kurasu* and *kôhuku ni cuite* should be treated the same, but if one wants to emphasize that, in the second example, *kôhuku ni* is not being used an adverb, but as a noun, they could either capitalize *kôhuku* or place it in italics.]

'please study' 'please look' 'please do' 'please read' (super polite) 'please read'
 kowagowa *nagara*, iyaiya *nagara*, yomi *nagara*, gomendô *nagara*,
 'with caution' 'with reluctance' 'while reading' 'even though (it)'s troubling'
 sô itte oki *nagara*, komatte i *nagara*
 'even though (you) say that' 'even though (you)'re having trouble'

There are also examples such as the following.

ware *nagara*, sikasi *nagara*, kodomo *nagara* (mo), ciisai *nagara* (mo)
 'in spite of myself' 'however' 'despite being a child' 'despite being small'

Since the form *yomi* is realized as /jo`mi/ in hon o *yomi*, zi o kaku 'read books and write characters', *yomi wa suru ga* 'although (I) do read' and *yomi mo sinaide* 'without even reading', etc., but as /jomi-/ in *yomi nasai* 'please read' and *yomi nagara* 'while reading', *yomi* could be analyzed as a dependent form instead of an independent form. Just as /'inu-/ can be interpreted as the liaison form of /inu`-/ , though, /jomi-/ can be interpreted as the liaison form of /jo`mi/.

5.1.1.1

The ability to attach to independent forms alone is not enough to recognize a form as a dependent word. The /z/ in English *dog*, *dogs* or in *sing*, *sings* and the final /e/ in Latin *puella* 'girl', *puellae* 'the girl's' only attach to independent words of the same function [translator's note: the author is seemingly referring to 'word class' here, but has opted to use the more ambiguous term 機能 'function' instead], and are thus recognized as dependent forms (see 5.4 and 10 for further discussion).

The Japanese forms *-mai*, *-na*, *-masu*, *-tai*, etc. found in *yomumai* 'probably won't read', *yomuna* 'don't read!' (prohibitive), *yomimasu* 'read' (polite) and *yomitai* 'want to read' are also dependent forms.¹⁰ In the Kameyama dialect of Mie prefecture, the accent of a form changes when in the nonpast and when taking the prohibitive /na/: /'iku, 'i`kuna'; jomu, 'yomu`na/ 'go, don't go!; read, don't read!'.

5.1.1.2

It goes without saying that forms that attach to dependent forms are also themselves dependent forms. The form *-na* that follows *ôkina* 'big (thing)' and *ciisana* 'small (thing)' in Japanese is identical in shape and meaning to the *na* in *sizuka na* 'quiet (thing)'; while the forms *-ni* and *-no* in *sudeni* 'already' and *honno* (sukosi) 'a tiny (little bit)' are identical in shape and similar in meaning to the *ni* and *no* in *sizuka ni* 'quietly' (*adverbial*), *haruka ni* 'distantly' (*adverbial*), *sukosi no* 'a little' (*adnominal*) and *iroiro no* 'varied' (*adnominal*); but at the same time, *ôki-*, *ciisa-*, *sude-* and *hon-* are all dependent

¹⁰ The view that these forms should be segmented as *yomi masu* or *kaki masu* in transcriptions arises from reasons of practicality.

forms, so, in this case, the *-na*, *-ni* and *-no* following these forms must also be dependent forms.

One must careful not to mistake a pseudo-free form for a free form (independent form). The forms *kai-*, *tot-*, *toi-*, *yon-* and *-te*, *-de* in

*kai*te 'write, and', *tot*te 'take, and', *toi*de 'sharpen, and', *yond*e 'read, and'

for example, are all dependent forms. The *-te* and *-de* in these forms, as well as the *-te* in the following forms, which is identical in meaning and function (as well as shape), should all be treated as dependent forms.

okite, *ukete*, *site*, *kite*; *sirokute*
'wake up, and' 'receive, and' 'do, and' 'come, and' 'is white, and'

At the same time, *oki-*, *uke-*, *si-*, *ki-*; *siroku-* should all be treated as pseudo-free forms [translator's note: since each possesses an identical form that may be used independently] and there is no problem with this classification. Likewise, *-nai* and *-ba* in

kakanai, *yomanai*, *okinai*, *ukenai*, *sinai*, *konai*,
'don't write' 'don't read' 'don't wake up' 'don't receive' 'don't do' 'don't come'
akeba, *yomeba*, *ukereba*, *kureba*; *sirokereba*
'if (you) write' 'if (you) read' 'if (you) receive' 'if (you) come' 'if (it)'s white'

are all dependent forms.

5.1.2

Next, we will look at some examples from Turkish.¹¹ (I will give the meaning of the dependent word first, followed by the forms to which the dependent word attaches.)

question marker: *ev mi* 'a house?', *evin mi* 'your house?', *evden mi* 'from the house?',
uzun mu 'is (it) long?', *gördü mü* 'did (he) see?', *yok mu* 'is (it) not?'
'also, too': *ev de* 'a house too', *evin de* 'your house too', *evden de* 'from the house
too', *uzun da* '(is) long too', *yok ta* '(is) not too'
'be': *evdir* 'is a house', *evindir* 'is your house', *evdendir* 'is from the house',
uzundur 'is long', *yoktur* 'is not', *gelecektir* 'should come'
'you are': *talipsin* 'you are a student', *uzaktansin* 'you (came) from far away',
güzelsin 'you are pretty', *seviyorsun* 'you love' (emphatic)

All of the forms to which *mi*, *de*, *-dir* and *-sin* attach in the examples above are independent forms (all are accented on the final syllable, with the exemption of *seviyor-*, which can be accented either as *seviyór-* or *seviyór-*), thus making *mi*, *de*, *-dir* and *-sin* all dependent words. Although Turkish orthography prescribes that *-dir* and *-sin* be written

¹¹ [Translator's note: Examples from languages other than English and Japanese are given Japanese translations in the original paper. I have done my best to render these Japanese translations in English here, without retranslating the actual examples, even though some of the translations may not be entirely accurate.]

together with their hosts as a single word as if they were dependent forms, such a treatment is incorrect from a linguistic standpoint.

5.1.2.1

The forms *-m* and *-n*, on the other hand, only attach to verbs, and are therefore dependent forms and not dependent words.

geldim 'I came', geldin 'you came'
gelsem 'if I come', gelsen 'if you come'

The forms *-im*, *-in*, *-den* and *-e* in the following examples are also dependent forms, typically only attaching to nominals.

evim 'my house', evin 'your house'
evden 'from the house', eve 'to the house'

There are a small number instances of these forms attaching to nominalized forms. For example, *-im* can follow the adjective *güzel* 'beautiful' to form the nominalized expression *güzelim* 'my beautiful person'; however, it is improper to suggest that this dependent form can also follow adjectives from such examples. This is simply an example of a temporary nominalization, or what Bloomfield referred to as 'class-cleavage'¹² – what we could call a homonym or an offshoot [translator's note: lit. 'sprout'; it's not entirely clear what the author means by this].

5.1.3

Moving on, let us look at some examples from Russian. The form /*ži*/ (же) attaches to a variety of forms, making it a dependent word.

štó'ži slúč'las 'what in the world happened?'
já'ži pa'jdú' 'I'll go'
kudá'ži ŋa' pa'jdú' 'where in the world shall (we) go?'
támžl '(it)'s there!'
tjibjé' gavarjátžl '(I)'m talking to you!'
nu' 'atvjíčá'ŋtjži 'well, please respond'

The form /*ta*/ (-то), on the other hand, only attaches to a specific type of form (namely, interrogatives), making it a dependent form and not a dependent word.

štó'ta slúč'las 'something happened'
któ'ta tám ždjót vás 'someone's waiting for you over there'
kudá'ta 'on pašól 'he went somewhere'
kaká'jata ženščina ták skazá'la 'some woman said that'

Thus, Russian orthography is correct in separating же /*ži*/ from its host, but segmenting -то /*ta*/ with a hyphen.

¹² [Translator's note: Bloomfield (1933: 204).]

5.1.4

Now, we will look at some examples from Mandarin. The form /la'/ in the following examples is a non-independent form.

lǎj'²-la' 'came', cǐwǎ'⁴-la' 'went'
 shuǐwēi'³ kāi'¹-la' 'the water boiled'
 hē'¹-la' cǐrǎ'¹-la' 'drank tea'
 hóng'²-la' 'got red, ripened'
 mǎi'²-la' 'disappeared'
 bā'¹-sūwǎi'⁴-la' 'turned eight years old'

Since /la'/ attaches to various types of other forms, we can recognize it as a dependent word. The form /zi'/ in the following examples, however, only attaches to select types of forms, including dependent forms such as /ji'²-/ which are not pseudo-independent forms, making it a dependent form and not a dependent word.

zhuōwǎ'¹-zǐ' 'table', 'wǎi'¹-zǐ' 'room', 'jǐ'³-zǐ' 'chair', 'jǐ'²-zǐ' 'soap', kwǎi'⁴-zǐ' 'chopsticks',
 mǎwǎ'⁴-zǐ' 'hat', mǐàn'⁴-zǐ' 'face (honor)'

5.2

Rule 2: When a word can freely appear between two forms, both of the forms are free forms, and the form in question [translator's note: the wording here is not entirely clear; this could also be translated as 'the problematic form' and is apparently referring to a form that seems to be dependent in some aspect] is a dependent word.

5.2.1

Let us look at some examples from English.

the man, the tall man, the old man
 a man, a tall man, an old man
 of houses, of tall houses, of old houses
 the apple is, the apple on the table is
 the dog has, the dog of this house has

English prepositions have a strong degree of independence, as can be observed from such examples as 'of, for, and by the people', in which prepositions modifying the same word can be strung together.

Applying Rule 2 to Russian prepositions reveals that these are also dependent words.

sⁿ sabá'kaŋ' 'with the dog', s^o majé'ŋ' sabá'kaŋ' 'with my dog'
 v^o gó'radŋi' 'to the town', v^o má'ljinkam gó'radŋi' 'to the small town'
 'a knj'gŋi' 'about the book', 'a xaró'saŋ' 'a knj'gŋi' 'about the good book'

French *tu as laissé* 'you left behind', *il a aimé* 'he loved' each contain three words. This is apparent from the following examples (note that *aimé* and *aimés* are both pronounced [e:me]).

tu ne l'as pas laissé 'you didn't leave him behind'
tu ne l'as pas encore laissé 'you still won't leave him behind'
il nous a toujours aimés 'he always loved us'

The words *encore* and *toujours* both appear as independent utterances and, according to Rule 3 (further below), *tu as* and *il a* are both lexical unions.

On the contrary, Greek *léloinas* 'you left behind' or Latin *amāvit* 'he loved' always occur as single units, without taking any words in between, and are thus each a single word of their own.

While it is possible to question the wordhood of Japanese *sono* 'that' or *kono* 'this' in *sono hito* 'that person', *kono kata* 'this person (respectful)', from expressions such as

sono se no takai hito 'that tall person'
kono oicisai kata 'this small person (respectful)',

it is apparent that *sono* and *kono* are free forms (words).

English *don't* /dɒw'nt/ is a combination of two forms, /dɒw'/ and /nt/, and possesses almost the same meaning as *do not* /dūw' nɒt/; however, /dūw'/ can appear as an independent utterance and /nɒt/ can combine with various different words, making *do not* definable as a lexical union. Since *don't* always appears as a single, inseparable unit, as in the following examples, and no words can come in between /dɒw'/ and /nt/, *don't* is definable as a single word.

You *don't*....., *Don't* you.....
 They *don't*....., *Don't* they.....
 The boys *don't*....., *Don't* the boys.....

5.2.2

The examples from Turkish that I gave in §5.1.2 are dependent words according to Rule 2 as well.

question marker + 'be': *ev midir* 'is (it) a house?', *evin midir* 'is (it) your house?', *uzun mudur* 'is (it) long?', *yok mudur* 'is (it) not?', *gelecek midir* '(you) should come'
 'you'question marker + 'be': *talip misin* 'are you a student?', *uzaktan misin* 'did you (come) from far away?', *güzel misin* 'are you pretty?', *seviyor musun* 'do you love?'

Turkish orthography dictates that a space be put between *ev* and *dir*, and *mi* and *sin*, in the above examples: *ev mi dir*, *talip mi sin*. The forms *-den* and *-e*, on the other hand, can take various other forms in between each other when attaching to *ev*, but since all of the intervening forms are dependent forms, this alone is not evidence that *-den* and *-e* are dependent words.

‘from’: evden ‘from the house’, evlerden ‘from the houses’, evinden ‘from your house’, evlerinden ‘from your houses’
 ‘to’: eve ‘to the house’, evlere ‘to the houses’, evine ‘to your house’, evlerine ‘to your houses’

On further inspection, we see that the question marker *mi* can follow *-den* and *-e*, revealing that these are dependent forms and not dependent words. The fact that both of these forms are always accented also supports this conclusion.

evden *mi*, evlerden *mi*, evinden *mi*, evlerinden *mi*,
 eve *mi*, evlere *mi*, evine *mi*, evlerine *mi*

The form /səŋ ~ seŋ/ in Tatar is cognate with Turkish *-sun* in *seviyorsun*. Since it can be followed by the question marking dependent word /mə ~ me/, we can classify it as a dependent form.

-jazásəŋ ‘you write’, kiläseŋ ‘you come’
 -jazásəŋ mə, kiläseŋ me

Japanese *nai* in *siroku nai* ‘is not white’, *akaku nai* ‘is not red’, etc. and *nai* in *yomanai* ‘do not read’, *kakanai* ‘do not write’, etc. have the same shape and meaning, but while with the former, it is possible to insert *wa* and *mo* in between the host and *nai*, this is not possible with the latter. Thus, the *nai* in *siroku nai* and *akaku nai* is a dependent word, while the *nai* in *yomanai* and *kakanai* is a dependent form.

siroku wa nai ‘not exactly white’, *siroku mo nai* ‘not even white’
akaku wa nai ‘not exactly red’, *akaku mo nai* ‘not even red’
 **yoma-wa-nai*, **yoma-mo-nai*

The following expressions, in which *yoma-* and *kaka-* alternate to *yomi* and *kaki*, are equivalent in meaning to*wa nai* and*mo nai* above.

yomi wa sinai ‘don’t exactly read’, *yomi mo sinai* ‘don’t even read’
kaki wa sinai ‘don’t exactly write’, *kaki mo sinai* ‘don’t even write’

Some scholars consider expressions such as *benkyô suru* ‘study (lit. do study)’ or *sanpo suru* ‘go for a walk (lit. do walk)’ to be single words; however, since such expressions can take *wa* and *mo* in between each element, they should be treated as lexical unions of two words.

benkyô wa suru ga ‘(I) do study, but’, *benkyô mo suru si* ‘(I) also study, and’
sanpo wa suru ga ‘(I) do go for walks, but’, *sanpo mo suru si* ‘(I) also go for walks, and’

Expressions such as *aisuru* ‘love (lit. do love)’ and *zokusuru* ‘belong to (lit. do belong to)’, on the other hand, cannot take *wa* or *mo* in between each element without alternating their form, and are thus single words.

aisi wa suru ga ‘(I) do love, but’, *aisi mo suru si* ‘(I) also love, and’
zokusi wa suru ga ‘(I) do belong to, but’, *zokusi mo suru si* ‘(I) also belong to, and’

5.2.3

The following types of examples are abundant in written language [translator's note: lit. 'letter language'].

これらの地方（ただし、甲と乙を除く）の
korera no cihô (tadasi, kô to ocu to o nozoku) no
 'these regions' (excluding A and B)
 その団体（即ち、丙に属する方）に関しては
sono dantai (sunawaci, hei ni zokusuru hô no) ni kansite wa
 'concerning that organization (that is, the one belonging to C)'
 この種の問題（それについては後に再び詳しく論ずるが）を取扱う
kono syu no mondai (sore ni cuite wa noci ni hutatabi kuwasiku ronzururu ga) o toriacukau
 'we will deal with this type of problem (which we will explain in more detail
 further below)'

Similar utterances may be observed in spoken language [translator's note: lit. 'sound language'] as well and this is another piece of evidence that forms such as *no, ni, o*, etc. are dependent words (free forms).

5.3

Rule 3: When two forms which are linked together can be reversed in their order of appearance, both of these forms are free forms.

5.3.1

The best examples of Rule 3 are from English.

He has, Has he
It is, Is it
They are, Are they

Examples can be found in French as well.

Tu as, As-tu
Il a [ila], A-t-il [ati(l)]
Ils ont [izô], Ont-ils [ôti(z)]

The forms [il-, at-, iz-, ôt-] are the liaison forms of [i, a, i, ô].

Examples from Japanese include the following.

watasi ni dake 'only to me', *watasi dake ni* 'to me only'
hito o bakari 'people only' (accusative), *hito bakari o* 'only people' (accusative)
doko e ka 'where to?' (interrogative), *doko ka e* 'to somewhere' (indefinite)

Separable verbs in German, such as *anfangen* 'begin' are written as a single unit according to German orthography, but in addition to being able to take other words in between each other, *an* and *fangen* can also be reversed in order.

Wir fangen unsere Arbeit an. 'We begin our work.'

There is thus no doubt that *anfangen* is two words and German orthography should require it to be written as *an fangen*.

5.4

In order for a non-independent form to be a dependent word, it is necessary for the form to have regular morphology [translator's note: lit. 'shape'] and function. That is, it must be able to combine with the same type of word without exception, and there must not be any irregular alternations in its form when combining with other words.

The forms recognizable as noun endings in Latin completely lack wordhood from this perspective and should be classified as dependent forms. The forms in italics below, for example, are all dependent forms.

	'girl'	'boy'	'enemy'	'corner'	'day'
nominative:	puella	puer	hostis	cornū	diēs
genitive:	puellae	puerī	hostis	cornūs	diēī
dative:	puellae	puerō	hostī	cornū	diēī
accusative	puellam	puerum	hostem	cornū	diem

The same holds true for Latin verbs.

	'love'	'was loving'	'will love'	'loved'	'am loved'	'will be loved'
'I'	amō	amābam	amābō	amāvī	amor	amābor
'you'	amās	amābās	amābis	amāvistī	amāris	amāberis
'he'	amat	amābat	amābit	amāvit	amātur	amābitur

In contrary to the examples from Latin, the various examples of dependent words given above do not alternate form and are regular in regard to how they merge with other forms. The Japanese copula [translator's note: lit. 'auxiliary verb'] *desu* changes form to *desi-* and *desyoō*, but this change in form is related to the meaning of *desu* itself and not a result of the word it attaches to (or the lexical union it forms). Take the following forms for example.

hon <i>desu</i> ,	sizuka <i>desu</i> ,	iku no <i>desu</i> ,	siroi kara <i>desu</i>
'(it)'s a book'	'(it)'s quiet'	'(I) do go' (emphatic)	'because (it)'s white'
hon <i>desita</i> ,	sizuka <i>desita</i> ,	iku no <i>desita</i> ,	siroi kara <i>desita</i>
'(it) was a book'	'(it) was quiet'	'(I) did go'	'because (it) was white'
hon <i>desyoō</i> ,	sizuka <i>desyoō</i> ,	iku no <i>desyoō</i> ,	siroi kara <i>desyoō</i>
'(it) must be a book'	'(it) must be quiet'	'(I) do most likely go'	'(it) must be because (it)'s white'

We must not define such presence of regular morphology and function as a fourth rule for recognizing dependent words, however. While Rules 1–3 are each adequate

criterion for defining a form as a dependent word, the presence of regular morphology and function – while a necessary criterion for dependent words – is not adequate for defining a form as a dependent word. The forms *-in* (genitive), *-i* (accusative), *-e* (dative), *-de* (locative) and *-den* (ablative) in Turkish¹³, for example, are all dependent forms which possess largely regular morphology and function. There are only a small number of irregularities when attaching to pronouns (*ben* ‘I’, *benim* ‘mine’, *bana* ‘to me’, *biz* ‘we’, *bizim* ‘our’; *sen* ‘you’, *sana* ‘to you’).

6.

6

It is dangerous to ascribe the label of word to an alternation [translator’s note: or, more accurately, ‘an inflection’] of another form simply because that other form can be used as an independent word. Japanese *yomu* and *yome*, for example, are both independent words, but this does not mean that *yoma-* is a free form as well. Bloomfield states that French *je*, *me* and *il*, *le* are all recognizable as words since they are alternate forms [translator’s note: or, ‘inflections’] of the independent words *moi* and *lui*, but this claim lacks evidence.¹⁴ If we are to such make a claim for the wordhood of such forms, however, we should make the following claim instead.

As illustrated in the paradigm below, each of these forms possesses a system of alternations, but *nous* and *vous* never alternate form (note, however, that the dependent words [nu] and [vu] may take the liaison forms [nuz-] and [vuz-]), making the possibility high that *je*, *me*, *tu*, *te* etc., all of which possess the same functions as *nous* and *vous*, are words as well.

	‘I’	‘you’	‘he, she’	‘we’	‘you’	‘they’
(independent word)	<i>moi</i>	<i>toi</i>	<i>lui</i>	<i>nous</i>	<i>vous</i>	<i>eux</i>
nominative	<i>je</i>	<i>tu</i>	<i>il, elle</i>	<i>nous</i>	<i>vous</i>	<i>ils, elles</i>
accusative	<i>me</i>	<i>te</i>	<i>le, la</i>	<i>nous</i>	<i>vous</i>	<i>les</i>
dative	<i>me</i>	<i>te</i>	<i>lui</i>	<i>nous</i>	<i>vous</i>	<i>leur</i>

It is only by running the tests laid out in Rules 1 (*á elle, á elles*), 2, and 3 that we can firmly establish that the above forms are indeed words.

¹³ [Translator’s note: Here and elsewhere, the author simply provides the equivalent case marker particles in Japanese for each of these forms and does not give them names. Since there are no equivalents to case marker particles/suffixes in English, hereinafter, when necessary, I provide the standard names for each of the cases in question in brackets.]

¹⁴ [Translator’s note: Bloomfield (1933: 179).]

7

A form's semantic relationship with other words can be a rough measure for determining whether the form in question is a dependent form (for example, a 'suffix') or a dependent word. For example, with

watasi no ototo no 'my younger brother's'

ciisai ototo no 'the small younger brother's'

we can say that the final *no* is not a suffix but a dependent word, since, semantically speaking, it is *ototo* and not *ototo no* that is modified by *watasi no* and *ciisai*. We cannot use such semantic relationships as a criterion for defining dependent words, however. The form *dyggiin* 'younger brother's' in Khalkha Mongolian, for example, can be analyzed as being comprised of the two parts *dyy* 'younger brother' and *iin* (genitive), but since each of the parts take the union phoneme /g/ in between, we can say without doubt that this is a single word (we can also say so from a functional stance). In the expression *zaluu dyggiin* 'the young younger brother's', it is *dyy* and not *dyggiin* as a whole that is modified by *zaluu*, similar to the Japanese examples above. The accusative of 'younger brother' and 'my younger brother' in Khalkha Mongolian are *dyggiig* and *dyggiim*, respectively, and, unlike Turkish *evim* (*ev* 'house' + *-im* 'my') which can take *-i* to form the accusative *evimi* (*evim* 'my house' + *-i* (accusative)), *dygmini* 'my younger brother' cannot take the accusative *-iig*.

Generally speaking, it is not uncommon for dependent words to combine with a lexical union of two or more independent words in a sentence. This is the case with the dependent words *ni* (dative), *o* (accusative), and *ga* (nominative) in Japanese.

'Uma to usi ni yatta.' '(I) gave (it) to the horse and the cow.'

'Uma to usi o katte iru.' '(I) keep a horse and a cow.'

'Tarō to Ziro ga kita.' 'Taro and Jiro came.'

In the above examples, *ni*, *o*, and *ga* combine with the lexical unions 'Uma to usi' 'horse and cow' and 'Tarō to Ziro' 'Taro and Jiro'. (In the example of the lexical string *ciisai ototo no* above, the reason that it is *ototo* and not *ototo no* that is modified by *ciisai* is that *no* is combining with the lexical union 'ciisai ototo' 'small younger brother'. It is also possible for *ciisai* to not directly combine with *ototo*.) While it is possible to insert a pause between the lexical unions 'Uma to usi' and 'Tarō to Ziro' and the particles *ni*, *o*, and *ga*, lexical unions are formed based on semantic relationships, and this must not be used as a criterion for distinguishing dependent words from dependent forms. This is evident from the following examples from Tatar containing the forms /ya ~ ga/ (dative), /nə / (accusative), /ta/ (locative), each of which are dependent forms according to Rules 1-3.

át	belæn	sijə	ryá	birdém.
horse	and	cow	(dative)	(I) gave

'I gave it to the horse and the cow.'¹⁵

át belæn sijə rnó aʃatá.
horse and cow (accusative) (he) is giving feed

'He is giving feed to the horse and the cow.'

apúʃ belæn azattá bár
Apush and Azatta (locative) (that which) exists

'It is at Apush and Azatta's place.'

From a semantic sense, we must say that /ʃa/ and /nə/ attach to /át belæn sijə r/, and that /ta/ attaches to /apúʃ belæn azattá/, but we cannot classify /ʃa, nə, ta/ as dependent words based on semantic relationships alone. Regardless, the fact that one cannot say

*átqá belæn sijə rʃá birdém.

horse and cow (dative) gave

*átnóbelæn sijə rnó aʃatá.

horse and cow (accusative) is giving feed

*apúʃtá belæn azattá bár.

Apush and Azatta (locative) exists

shows that these forms are similar to Japanese particles. The same three sentences in Russian, on the other hand, become

ʃa dál lóʃadʃi 'i karóʋji.

I gave horse (dative) and cow (dative)

'I gave it to the horse and the cow.'

'on kórmʃit lóʃatʃ 'I karóʋvu.

He is giving feed horse (accusative) cow (accusative)

'He is giving feed to the horse and the cow.'

'u 'ivá'na c° nʃí'naʃ

(exists) at Ivan (genitive) and Nina

'It is at Ivan and Nina's place.'

where it is clear beyond a doubt that /lóʃadʃi/ and /kórmʃit/ are each independent words (and, therefore, /-i/ and /-u/, etc. are dependent forms).

It is common for one language to use two or more words to express the same meaning that another language expresses with just one word, so we must not determine whether a given form is a dependent word or a dependent form based on semantic relationships alone. As I explained above, just because English *happily* and *naturally*, or Mongolian *dygyiin*, are all single words, we cannot use this as evidence to state that Japanese *kohuku ni*, *sizen ni* or *otooto no* are each single words too.

¹⁵ [Translator's note: The author only gives morpheme level glosses for these examples, which I have roughly translated to English. In addition, I have provided English translations on the third line of each example for clarity. The same applies to the next two sets of examples as well.]

8

Phonological structure is also not always sufficient for determining whether a form is a dependent word or a dependent form, since dependent words often display similar characteristics phonologically to dependent forms.

8.1

In Japanese dialects that possess the sounds /g/ and /ŋ/, /g/ is observed only at the beginning of independent words and some types of pseudo-free forms, while /ŋ/ is observed everywhere else. Since the particle *ga* is pronounced /ŋa/, it is impossible to distinguish this form that is a dependent word from the dependent form /-ŋa/ in the word *waga* 'mine, our' based on phonology alone.

Forms such as English /'ʌ, ðʌ/ (a, the) cannot be used as independent words and are no different from dependent forms in their appearance.

The dependent forms from Turkish given above, *-di, -se; -im, -in; -den, -e*, undergo vowel harmony when attaching to a pseudo-free form, alternating to *se ~ sa, im ~ ım ~ uım ~ um*, etc. The dependent words *mi, de, -dir, -sin* possess the same type of substitute forms.

In the Kameyama dialect of Mie prefecture, as a general rule, all independent words consist of two or more moras (Standard Japanese /ga/ 'moth' and /no/ 'field' become /'gaa/ and /noo/); however, dependent words such as *ga* (accusative), *no* (genitive), *o* (accusative), *wa* (topic), *mo* (inclusive topic), *to* (comitative) are pronounced as single moras. (When these forms are uttered with a pause after their hosts, the vowels are elongated).

8.2

A phonological boundary [translator's note: lit. 'juncture point'], at the very least, marks the boundary between two morphemes and can even mark the boundary between two words.

In Turkish, for example, it is usually the ultimate syllable of a word that is stressed, so we can determine that *-niz* in the following examples is a dependent form, while *-siniz* is a dependent word.

geldin^{niz} 'you (plural) came', gelsen^{niz} 'if you (plural) come'
gelirsiniz 'you (plural) come', geleceksiniz 'you (plural) will come'

There are exceptions, however, such as *gelmediniz* 'you (plural) didn't come' and *gelince* 'when comes, while comes', so we can't use stress as the only guideline.

In the Kameyama dialect, there are non-independent forms, such as *yor* (ablative), *made* (terminative), *demo* 'even', which become accented when following a word that is accented on the first mora.

[u`majo`ri], [u`mama`de], [u`ma`de`mo]
'from the horse' 'up to the horse' 'even the horse'

This shows that each of these forms possess their own accent and can thus be classified as dependent words. At the same time, while all words with the accent pattern /' - ' - - / can also be accented as /' - - ' - / in this dialect, *uma* 'horse' and *usi* 'cow' are always accented as follows when taking *mo*.

[u`mamo], [uʃi`mo]
 'as for the horse, too' 'as for the cow, too'

From this, we see that there is a phonological boundary between /'u`ma, 'ʃi/ and /mo/, serving as evidence that *mo* is a dependent word. On the other hand, there are dependent words such as *no* (genitive) and *yori* (ablative) that form a single accent phrase when combining with a noun.

[u`mano] 'the horse's', [uʃi`no] 'the cow's'
 [u`makara] 'from the horse', [uʃi`kara] 'from the cow', [gamaka`ra] 'from the toad'

9

As we can see from the many exceptions above, the three Rules that we laid out in §5 are crucial for determining whether a form is a dependent word or a dependent form. There are cases, however, that re-quire caution when applying the three Rules. Namely, there is problem of whether or not English -'s in expressions such as

the king of England's
 the man I saw yesterday's

should be considered a dependent word based on Rule 2. Bloomfield avoided such an interpretation, calling such lexical strings as the ones above 'a single long word'.¹⁶ It is apparent that Bloomfield's interpretation is inaccurate, however, since such strings possess two or more stressed syllables and the forms within such strings can be replaced with similar forms.

the queen of England's
 the boy you saw yesterday's

Eugene A. Nida recognizes such examples as lexical strings, while defining -'s as a 'bound-form' (dependent form) and 'inflectional formative' (a formative component of a word's alternations).¹⁷ Three reasons can be given as to why scholars tend to not treat -'s

¹⁶ [Translator's note: Bloomfield (1933: 179).]

¹⁷ [Translator's note: It is unclear to which source the author is referring to here. Nida talks about the formation 'the King of England's' in Nida, Eugene. 1973. *A synopsis of English syntax*, 3rd ed. The Hague: Mouton, pg. 73 (originally published as his doctoral dissertation in 1943) but does not call it a 'bound form' or 'inflectional formative'. Nida uses the term 'inflectional formative' in Nida, Eugene. 1949. *Morphology: The descriptive analysis of words*, 2nd ed. Ann

as a dependent word, even though there are many indications that it is. First, dependent words in English can typically be pronounced independently. While there are weakened forms such as [-m, -z, -d] that cannot be pronounced independently, all of these possess basic forms that can be (in this case, /'ám, 'íz, hád/), while -'s does not. Second, as I demonstrated under Rule 2 in §5.2.1, while it is common for English and Russian prepositions to take other words in between the host noun and the preposition, examples such as the ones given above of -'s following a lexical string are not exactly common. Finally, there are no other postpositions in English.

10

10.1

Now I would like to reevaluate one of the main criteria I laid out above for distinguishing dependent words from dependent forms.

Earlier, in §2, I stated that dependent words are *regularly* uttered in succession with other words. I used the word *regularly* here because there do exist instances in which a dependent word corresponds to an utterance unit.

In fact, in order to be called a dependent word, the form in question must be able to be pronounced as its own utterance unit. I already explained above how English prepositions can be pronounced independently, and the same holds true for Russian prepositions as well. This is even the case with the preposition /°s/, which can be realized as either [z'dɔ ktə rə m] or as an independent utterance (unit) [s^m 'dɔ ktə rə m]. Even with French pronouns, while an expression such as *je te le donne* 'I give you that' is usually pronounced as [ʒ tldɔ n], this can also be pronounced in the sequence [ʒə təlɛ dɔ n], in which each of the dependent words are separated from each other. Japanese *iku n desu* 'go' (emphatic) can also be pronounced as [iku | n | desu], where the basic form of /N/ is /no/.

10.2

It is the duty of linguists to observe actual speech to confirm whether or not a dependent word can be pronounced as an independent utterance unit. The *na* (adnominal marker) in Japanese *sizuka na* 'quiet' (adnominal) and *odayaka na* 'calm' (adnominal) rarely forms an utterance unit; however, it is not rare for *kagakuteki na* 'scientific' (adnominal) or *bunkateki na* 'cultural' (adnominal) to be pronounced as [kaŋakuteki | na] or [buŋkateki | na]. Since the *na* in all of these forms has the same shape, meaning, and function, we can assume that this is the same form, and, while it is rare, we can find examples of *sizuka na* and *odayaka na* being pronounced as [ʃizuka | na] and [odajaka | na]. Through such observation, we can confirm that *na* is a dependent word. Contrary to these

Arbor: The University of Michigan Press, pg. 109 (1st ed. published in 1946), but does not define -'s as an inflectional formative.]

examples, English [z] and [s] are rarely pronounced separated from their preceding vowel or consonant and thus we can say that English -'s does not occur as an utterance unit. When Bloomfield called the examples of lexical strings with -'s at the end in §9 'single long word[s]', he was most likely referring to the fact that these strings regularly occur as lexical unions.

According to Jespersen, H. Bradley once told him that his son used to say, "who is that -'s", with a pause before the "-'s" to express the meaning 'Whom does that belong to?'; however, I believe this is a unique case. In order to verify whether or not a pause can be inserted before "-'s" in normal conversation, we must observe actual speech.¹⁸

10.3

According to Bloomfield, Fox, a language of the Algonquian language family in North America, possesses the following word with the meaning 'we have come to see him (her, them)'.¹⁹

[ne-pjɛ:tʃi-wa:pam-a:-pena]

The word consists of the following forms: [ne-] 'I (but not thou)', [-pjɛ:tʃi-] 'hither', [-wa:pam-] 'see (an animate object)', [-a:-] 'him, her, them' and [-pena] (plural of first person). Words and even lexical strings can come between the two main elements of this compound, [-pjɛ:tʃi-] and [-wa:pam-]. For example, one can say

[ne-pjɛ:tʃi-keta:nesa-wa:pam-a:-pena],

which means, 'we have come to see her, thy daughter'. Since [ne-], [-a:-] and [-pena] are all dependent forms indicating a change in word form (inflectional prefixes and inflectional suffixes), Bloomfield states that despite its length, the above example is without doubt a single word. If the different forms comprising this 'word' can be arranged in various combinations with regularity in shape (even if they are not independent words), and if pauses can be inserted between the different forms when trying to make one's pronunciation clear (this is easily conceivable with longer examples such as the second one), then it is possible to interpret the examples above as lexical unions of dependent words. In this case, [ne-], [-a:-] and [-pena] are all forms (dependent words) that come at the beginning and the end of this lexical union.

11

Bloomfield defines bound forms and free forms as follows.

'A linguistic form which is never spoken alone is a *bound* form; all others are *free* forms.'²⁰

¹⁸ [Translator's note: This anecdote can be found in Jespersen, Otto. 1992. *Language: It's nature, development and origin*. New York: Henry Holt & Company, pg. 129. The 'H. Bradley' Jespersen is referring to is Henry Bradley (1845–1923), a British philologist and lexicographer.]

¹⁹ [Translator's note: Bloomfield (1933: 232).]

If we take ‘spoken alone’ to mean ‘appears as an utterance (unit) equivalent to a sentence’, then since there are dependent words that can appear as utterance units, but never as full sentences, we should revise ‘spoken alone’ to ‘uttered separately (by means of pauses) from other forms’ and rewrite the definition as follows.

A linguistic form which is regularly uttered in sequence with other forms is a bound form
[translator’s note: lit. ‘dependent form’]; all others are free forms.

11.1

The *hi-* ‘non-’ in Japanese *hi-sinkaronteki* ‘non-evolutionary’, etc. is recognizable as a dependent form according to all of Rules 1–3. Regardless of its status as a dependent form, however, it is normal to insert a pause after *hi-* when pronouncing such words. With dependent words such as *ga*, *no*, *ni*, or *o*, etc., there are both instances in which a pause is inserted after the preceding form (independent word) and instances in which one is not, and when a pause is present, its length is not fixed. With *hi-*, though, there is almost always a pause of a fixed length inserted between *hi-* and its following form. We can view this pause as being similar to the pause found between sequences of the same vowel when uttering words such as *kataasi* ‘one leg’ and *oôtoko* ‘giant man’. That is, we can say that this pause is part of the form *hi-sinkaronteki* itself and that it serves the purpose of giving the impression that *hi-* cannot be separated from its following element. This phonetic pause does not give *hi-* wordhood status. Even if similar phenomena were to be found in other languages, I believe that it still would not be necessary to revise the definitions of dependent forms and free forms presented above.

I recommend reading the following papers by the author in the following order in order to gain a better concept of the concepts outlined in the current paper.

服部四郎 Hattori, Shiro. 1949. 言語 *Gengo* ‘Language’. In 社会科辞典 *Shakaikajiten* [Dictionary of social studies], vol. 3. Heibonsha.

服部四郎 Hattori, Shiro. 1949. 具体的言語単位と抽象的言語単位 *Gutaiteki gengotan’i to chushoteki gengotan’i* [Concrete lexical units and abstract lexical units]. コトバ *Kotoba* ‘Words’ 1949.12.

服部四郎 Hattori, Shiro. 1949. 「文節」とアクセント *Bunsecu to akusento* [Phrases and accent]. 方言と民族 *Hôgen to minzoku* [Dialects and folklore] 1949.1, 1949.2.

For more information on the phonological terminology used in this paper, see my paper in the next volume of this journal [Translator’s note: 言語研究 *Gengo kenkyû* vol. 16, 1950.12]:

Phoneme, Phone, and Compound Phone.

²⁰ [Translator’s note: Bloomfield (1933: 160).]

Addendum

In §4, I said that the forms of the verb *kaku* ‘write’, /ka`ku, ka`ki, ka`ke/ etc., can all be analyzed as consisting of two morphemes (= smallest units); however, there is a problem with this statement.

If we are to say that each of the above forms consist of two morphemes, then we must also say that English /sin, san, sʌŋ/ each consist of the two morphemes /s°ŋ/ and /'i, 'a, 'ʌ'/, and that Arabic /hadama/ ‘(he) broke’ and /hudima/ ‘(that) was broken’, or /daraba/ ‘(he) hit’ and /duriba/ ‘(he) was hit’, each consist of the two morphemes /h°d°m°, d°r°b°/ and /'a'a'a, 'u'i'a/. Not many scholars would agree with this statement, though. The difference between English /sin, san, sʌŋ/ and Japanese /ka`ku, ka`ki, ka`ke/ is that with the latter we can separate each form into two sequential parts as follows: /ka`k|u, ka`k|i, ka`k|e/. The fact still stands true, however, that just as one cannot say /s°ŋ/ in English or /h°d°m°, d°r°b°/ in Arabic, one cannot say /ka`k/ in Japanese.

On the other hand, with /ka`keba, nore`ba; 'oki`reba, 'akere`ba/ ‘if (you) write, if (you) ride; if (you) wake up, if day breaks’, we are able to extract the form /-ba/ from each example, and with

/'oki`nai, 'oki`ru, 'oki`ro, 'oki`reba/
 ‘don’t wake up’, ‘wake up’, ‘wake up!’, ‘if (you) wake up’
 /'akenai, 'akeru, 'akero, 'akere`ba/
 ‘don’t break day’, ‘break day’, ‘break day!’, ‘if day breaks’

we are able to extract the forms /'oki`-, 'ake-/ and /-nai, -ru, -ro, -re`ba ~ -reba/ from each example. In other words, we can analyze /'oki`reba/ as consisting of the three forms /'oki`|re|ba/ and in the sense that each of these forms can be pronounced separated from each other, this example differs from /ka`k|u, ka`k|i, ka`k|e/. At the same time, all three of the forms in /'oki`reba/ are without a doubt dependent forms.

We can say that the level of dependency in the forms /-re, -ro, -re-ba/ is stronger than that of /-ma`su, -ta`i/ in /'okima`su, 'okita`i/ ‘wake up (polite), want to wake up’ because the latter two forms attach to /'oki`-/ (and not /'oki`-/), which is identical to the liaison form /'oki/ that /naŋara, na`sai/ attach to (both of which I recognized as ‘dependent words’ in §5.1.1), while the former three forms attach to the dependent form /'oki`-/. With /-ma`su/ and /-ta`i/, while the former regularly takes the shape of /-ma`su/ when attaching to other forms (/okima`su, 'akema`su/, etc.), the latter alternates its accent depending on which form it attaches to (/okita`i, 'aketai/), making its level of dependency higher.

Moving on to further examples, we can analyze /huka`i, hu`kaku; 'asai, 'asaku/ ‘deep, deeply; shallow, shallowly’ as being comprised of the following parts: /huka`- ~ hu`ka-, 'asa-/ and /-i, -ku/. Furthermore, looking at the following examples, we see that /-ku/ can be analyzed as /-k|u/.

/hu`kaku, hu`kakereba, hu`kaka`ta, hukakaro`o/

‘deeply, if it’s deep, was deep, must be deep’
 /‘asaku, ‘asa`kereba, ‘asa`ka`ta, ‘asakaro`o/
 ‘shallowly, if it’s shallow, was shallow, must be shallow’

The forms /-i/ and /-ku/ could be said to have a higher level of dependency than /-re, -ro, -re-ba/ above because, while the forms /‘oki`-, ‘ake-/ to which the latter attach possess the free-standing equivalents (putting aside the difference in accent) /‘o`ki, ‘ake/ ‘waking, breaking dawn’, /huka`- ~ hu`ka-, ‘asa- ~ ‘asa`-/ possess no free-standing equivalents.

Furthermore, while it is possible to pronounce /-ku/ in isolation in Japanese, /-i/ does not exist as an isolated segment (the closest isolated segment is /‘i/). In Standard Tokyo Japanese, the /ai, oi, ui/ (note that these are not /a`i, o`i, u`i/) in /huka`i, ‘asai; kuro`i, huru`i/ ‘deep, shallow; black, old’, etc. are typically pronounced as diphthongs ([ai̯, oi̯, ui̯]) and in Nagoya dialect, they are pronounced as diphthongs or long vowels ([æã, ø:, y:]). In other words, /-i/ is, in all aspects, a dependent form.

If I were to arrange all of the forms (and other elements that cannot quite be called forms) that I just talked about in order from the most dependent to the least dependent (and, at the same time, from the most morphologically opaque to the most morphologically transparent), the results would be as follows.

- (1) /‘i, ‘a, ‘ʌ / in English /siŋ, saŋ, sʌŋ/
- (2) /‘a`a`a, ‘u`i`a/ in Arabic /hadama, hudima/
- (3) /u, i, e/ in Japanese /ka`ku, ka`ki, ka`ke/
- (4) /i/ in Japanese /huka`i, ‘asai/
- (5) /-ku/ in Japanese /hu`kaku, ‘asaku/
- (6) /-ru/ in Japanese /‘oki`ru, ‘akeru/
- (7) /-ba/ in Japanese /ka`keba, ‘oki`reba/
- (8) /-ta`i ~ -tai/ in Japanese /kakita`i, ‘aketai/
- (9) /-ma`su/ in Japanese kakima`su, ‘akema`su/
- (10) /naŋara/ (also /na`ŋara) in Japanese /kakinara, ‘akenara/

I have ordered the English examples (1) above the Arabic ones (2) because in English, vowel alternation is only observed in a small number of verbs, while in Arabic, vowel alternation in verbs is common. The difference between (2) and (3) is simply that the forms /u, i, e/ in (3) could be said to be ‘suffixed’ to their host. The difference between (3) and (4) is that in the former, /ka`k/ cannot be pronounced in isolation, while in the latter, the part of the form that remains when removing /i/ can be. Also, while /u, i, e/ in (3) only form part of a mora, /i/ in (4) forms an entire mora. The difference between (6) and (7) is that while /-ba/ in the latter attaches to the same range of forms as /-ta`i ~ -tai/ and /-ma`su/ in (8) and (9), /-ru/ in the former attaches to a narrower range of forms. Furthermore, while the forms /ka`ke-, no`re`-, ‘oki`re, ‘akere`-/ that /-ba/ in (7) attaches to are all forms that result as ‘alternations in word form’ [translator’s note: or, ‘inflections’] of the independent words /ka`ku, noru, ‘oki`ru, ‘akeru/, /-ru/ in (6) is a composing factor of independent words.

In this paper, I drew a line in between (9) and (10), calling (10) a dependent word and (9) a dependent form, but there still remains the problem of which elements in (1) – (9) should be called linguistic forms in the first place.

Surely all scholars would agree with the statement that all elements that can be pronounced in isolation and that attach to other elements that can be pronounced in isolation are linguistic forms. Therefore, (5) – (9) can be recognized as dependent forms. The elements in (4) are slightly more problematic, but they are largely similar to so-called infixes [translator’s note: it is unclear what comparison the author is trying to draw here] and since infixes are generally held to be linguistic forms, we can call the elements in (4) linguistic forms as well. The elements given in (1) – (3) should not be called linguistic forms.

In the past, I considered the [ɯ] and [e] in such examples as [kauɯ] ‘buy’, [kae] ‘buy!’, [süuɯ] ‘suck’, [süe] ‘suck!’ to be linguistic forms, due to the way that they are pronounced, but upon further consideration, such examples should be analyzed as

/ka’u, ka’e; su’u, su’e/

or, when compared to /ka`ku, ka`ke/, etc.,

/ka’ | u, ka’ | e; su’ | u, su’ | e/.

Thus, we should not consider /u, e/ to be linguistic forms. The fact that the pronunciations [kauɯ] [kae] [süuɯ] [süe] exist arises from the systematicity of the consonant-stem verb [translator’s note: lit. ‘quadrigrade verb’] class, and since the sequences /kau, kae/ are illicit, they must be realized as /ka’u, ka’e/.²¹

ORIGINAL PAPER

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²¹ [Translator’s note: The author provides two short paragraphs of errata for previous papers he wrote at the end of this article. I have omitted these as they are not related to the current paper.