Case Notion in English: From Morphological to Syntactical

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English has experienced such a great change in vocabulary and struc-
ture that the following is hard to comprehend with the knowledge of
modern English:

> Fæder, sele mē mīnne dæl mīnre æhte þe mē tō gebyreþ. Þā
> dælde hē him his æhte. (Luke 15: 12) (Father, give me the
> portion of goods that falleth to me. And he divided unto them
> his living.)

The greatest difference in the structure between O(ld) E(nglish) and
Mod(ern) E is that, though the significance of word order in OE can-
not be neglected, the case (form) of nouns plays the crucial role as a
a syntactical function, whereas, in Mod E, word order assumes the
function. This is obvious in the following:

> Sē hund bāt þone man: Þone man bāt sē hund.
> The dog bit the man: The man bit the dog.

If a language which relies on case as a syntactical basis is called a
case-language, OE can be so categorized, like such languages as Greek,
Latin, Sanskrit, German and so forth. A pure case-language, however,
in which the relation of nouns or noun equivalents to the other elements

in a sentence are expressed entirely in the case forms, not depending on word order, prepositions, postpositions, or whatever else is probably only a hypothetical possibility. Even Classical Latin has several prepositions.

To consider what case is like, it will be useful to take a look at several case languages familiar to us :

Vir bonus mē librōs cōmiter dedit.

Sē gōda man frēondlīce mē sealde þā bēc.

Der gute Mann freundlich gab mir die Bücher.

(The good man friendlily gave me the books.)

The deep structure of Mod E equivalence to them is shown in terms of Fillmore's case grammar as follows :
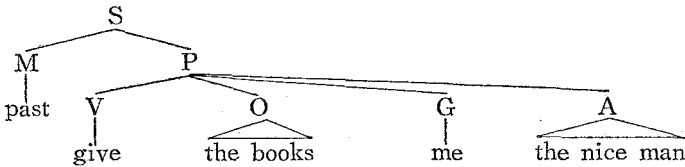
(S(entence), M(odality), P(roposition), V(erb), O(bjective), G(oal), A(gentive))

Such nouns as " vir," " man " and " Mann " are all nominative ; pronouns " mē," " mē " and " mir " are dative ; " librōs," " bēc " and " Bücher " are accusative. The nouns in the nominative in each language function as the so-called grammatical subjects (as givers—Agentive in Fillmore's term), the pronouns in the dative are receivers (as Goal), and the nouns in the accusative are the objects of the giving-receiving activity. In the above languages, as already mentioned, case

plays such an important role that, even though word order is changed, the underlying relations between nouns or pronouns and other elements remain unchanged as shown in the deep structure diagram above (though the so-called topic-comment or theme-rheme pattern is changed) :

Librōs vir bonus mē dedit (The books the good man gave me).
Mir gab der Mann die Bücher (To me the man gave the books).

Since these case forms are different from one another (though not completely), the function of each noun does not fail to be recognized. This is the very function of case forms.

The case system is different in its kind or number according to each language. Sanskrit has eight cases; Russian six; Latin five; Greek five; German four; Arabic three, etc., and the largest number is fifteen in Finnish. H. Izui says that wherever nouns or any equivalents to them function, the phenomenon of case never fails to take place, even though potentially.... It is not the primary concern whether or not that phenomenon is indicated in the overt form.[1] According to him, the phenomenon of case is not concerned with case forms, but with case function (which realizes case notion), for this function is not necessarily performed by overt forms as he mentions. Hence he proceeds to say that there is no language which does not know case.[2]

In this connection, Fillmore's basic idea of case grammar is thought to have a similar ground. That is, to him case is something like an elementary pattern of judgment of any event happening in the environmental world as he says that "... there is a small number of elementary case notions, universal in scope, capable of being extended to the whole vocabulary of predicating words in any language."[3] His

case notions are derived from the belief that any situation or event in this world can be analyzed as a particular relation between nouns and verbs. Therefore, they are notional categories unchangeable in any sentence as follows:

Tom (Agentive) opens the door (Objective) with this key (Instrumental).
This key (Instr.) opens the door (Ob.).
The door (Ob.) opens.

His ideas of case notions in the deep structure strike us as intuitively correct.

What has just been touched upon can be put forth as the problem of the criterion of case, that is, form or function (which realizes case notion) as a criterion of case. In traditional grammarians, some (Charles Butler, Ben Jonson, etc.) emphasized case form, acknowledging two cases—nominative and genitive; and the others (William Bullokar, Alexander Gill, Alexander Hume, etc.) put weight on case function, claiming five (or six) cases—nominative, genitive, dative, accusative, vocative, (ablative). The former are those who insist that case is that category which ought to be discussed on the basis of forms, and the latter give a basis not only to forms but also to function.[4] The reason for this dichotomy is due to the difference of each grammarian's concept of case.

An example of the latter is seen in C. T. Onions. He acknowledges five cases. His ground of these cases is not of positive nature, as is indicated by the following:

To speak of a Noun as being in the Nominative, Accusative,

or Dative Case, is equivalent to saying that the noun would have been in that case in the corresponding O. E. Construction, or that the meaning expressed is such as we associate with that Case in highly inflected languages.[5]

His definitions of accusative[6] and dative[7] are not clear enough to tell which is which in the following sentences:

I ran John a race.
I heard the boy his lessons.
I took the boy long walks.
I painted the wall a different color.

As shown in these sentences, it is pointless to try to define dative and accusative on the ground of the inflected language grammar. In this respect, Jespersen's words as to the impossibility of the distinction between them strike the point:

If we are to speak of separate datives and accusatives in English, I for one do not know where the dative goes out and the accusative comes in, and I find no guidance in those grammars that speak of these two cases.[8]

As P. Roberts says, "Latin and Old English grammarians do not name more cases than are distinguished by form."[9] The case system in inflected languages is constructed on the basis of case forms functioning differently in a sentence. Different verbs, for example, claim nouns in particular case forms. There arises no problem there. The German verb "berauben" claims accusative and genitive as in "Er beraubte mich meiner Freiheit" (He robbed me of my freedom). The Latin word "bōs" varies according to the different verbs governing it:

   Videt bovem (accusative) (He [or she] sees an ox).

   Nocet bovī (dative) (He harms an ox).

   Utitur bove (ablative) (He uses an ox).

   Meminit bovis (genitive) (He remembers an ox).

Those who emphasize the historical ground may claim that, because
OE " acsian " (ask) takes two accusatives, both " the boy " and " a ques-
tion " in " I asked the boy a question " are accusatives. This is not
appropriate, however, because, if the same discussion occurs concerning
nouns following prepositions, one would regard " foot " in " on foot "
or " inchmeal " in " by inchmeal " as dative, and would take as dative
" the ship " in " Many slaves were in the ship " (OE: " Micle þeowas
wǣron in ðam scype ") and as accusative in " They put many slaves in
the ship " (" Hīe legdon micle þeowas in ðæt scyp ").

   As has been seen so far, the ground for the recognition of several
cases in English is not free from weakness. Then is there no discus-
sion of case possible for English? No, in terms of case forms in the
sense of inflectional endings; but yes, in terms of case function real-
izing case notion, as H. Izui mentions above, i. e. in a sense not only
morphological but also syntactical.

   What is important with respect to English is the understanding that
this realization of case (notion) in various ways is the result of the
change English has undergone, the change in the realization of case
notion from morphological to syntactical. Thus the distinction should
be made clearly between case forms (inflections) and case functions in
analytic languages. As for the latter, in the sentence, for example,
" The boy gave the dog a bone," each noun can be said to have a dif-
ferent case notion realized by word order.

The problem regarding English, which has often been discussed among grammarians, is derived from the adoption of the case terminology originating in Latin. It can be said that such adoption is not appropriate if done in the same way that the traditional grammar uncritically adopted Latin grammar into English. In this connection, Jespersen is right in saying:

> The number of cases to be recognized in a language must be decided by the forms found in that language: Case-distinctions are not notional or logical, but exclusively grammatical categories. No purely logical analysis can lead to a distinction between nominative, accusative, dative, etc.[10]

To him case is a matter of morphological nature; therefore, he regards it as "a hopeless task ... to assign one definite ending or one definite function to each case in primitive Aryan,"[11] for, as mentioned above, there is no one-to-one correspondence between a particular case form and its function or notion.

	singular	plural
nom. voc.	rosa	rosae
gen.	rosae	rosārum
dat.	rosae	rosīs
acc.	rosam	rosās
abl.	rosā	rosīs

This character of case he takes as the cause and result of syncretism, and terms them "drawbacks ... inseparable from the structure of the highly flexional Aryan languages."[12] This is true not only within a given language, but among various languages:[13]

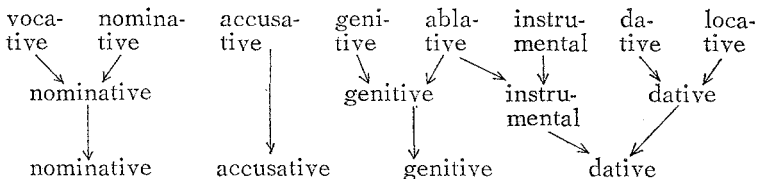Kana Zaidun *waladan* (Zaid was a child) (Arabic).

He is *en goden Mann* (He is a good man) (North German
   Dialect).

(The italics are accusatives.)

To sum up, the problem has arisen because of the very character of
case in which the same case may include more than one syntactic func-
tion, and because of the uncritical adoption of the terminology of in-
flected languages. This is the reason for the difficulty of the distinc-
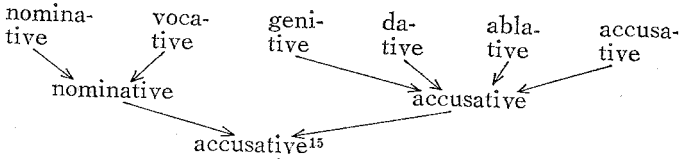tion between dative and accusative in English, for example.

At this point, what should be kept in mind, above all, is the attitude
that, because case is that which indicates the relation between nouns
and the other elements in a sentence, the case notion is realized not
only morphologically but syntactically. The point, then, can be put
in this way: the morphological way of the realization of case notion
cannot help undergoing a change in the process of reduction. The
German case system, for example, has experienced such syncretism as
follows:

Proto-Indo-European (eight cases); Old High German (five);
German (four):

voca-tive	nomina-tive	accusa-tive	geni-tive	abla-tive	instru-mental	da-tive	loca-tive
nominative			genitive		instru-mental		dative
nominative		accusative		genitive		dative	

The so-called Romance languages such as Portuguese, Spanish, French,
Italian, etc. retain only one case form, the accusative, which has be-
come the present common form of all nouns.

nomina-   voca-   geni-   da-   abla-   accusa-
tive   tive   tive   tive   tive   tive
        nominative   accusative

        accusative[15]

Vir bonus puellae pulchrae librōs iūcundōs dedit.
Le bon homme donna livres intéressants à la jolie fille.
El buen hombre dio libros interesantes a la muchacha bonita.
(The good man gave the pretty girl the interesting books.)

There might be some reasons for syncretism or the loss of case in
many languages : the loss of final consonants, the change of vowels,
the variety of meanings of a case, etc..[16] The following seems to be
very much connected with this matter. Jespersen writes of the reason
for a word becoming shorter and simpler as follows :

> ... what is essential to the understanding of a word is often
> already reached before one arrives at its end, which there-
> fore is of comparatively little value ; hence vowels are shortened
> and (or) made indistinct, often reduced to [ə] or finally drop-
> ped, and final consonants may likewise disappear altogether.[17]

These words show the importance of stem or root syllables in our
communication, as he states in other place :

> Here the speaker has felt assured that his hearer has under-
> stood what or who he is talking about, as soon as he has pro-
> nounced the initial syllable or syllables, and therefore does
> not take the trouble to pronounce the rest of the word. It has
> often been pointed out ... that stem or root syllables are gen-
> erally better preserved than the rest of the word : the reason
> can only be that they have greater importance for the under-

standing of the idea as a whole than other syllables.[18]

This is historically understood in the case of the communication be-
tween the Scandinavians (that is, the Danes, beginning to invade the
British Isles from the ninth century) and the English, in which " many
niceties of grammar were sacrificed, the intelligibility of either tongue
coming to depend mainly on its mere vocabulary." [19]

What has become most important to Mod E as the result of the loss
of case forms is that a noun which would be in the nominative (except
for that of predicative of a copula) in OE should be put before a fi-
nite verb as a grammatical subject; and other nouns (in oblique cases
in OE) after the verb.[20] This is historically shown in the following
process :

  Ðone man swā liste þæt gecnawan. ⟶ The man so liste knowe
  that. ⟶ The man so much likes to know that.

This C. C. Fries calls " the pressure of the position " : " The functional
pressure of the position before the verb as subject territory was so strong
that dative-accusative pronoun forms were changed to accord with the
pattern."   (E. g. Me lakketh nothing. Hem lacked a ladder. Hem
nedede no help. Me wæs gegiefan an boc.)[21]

Concerning the linear nature of language which underlies the impor-
tance of word order, F. Saussure says that " . . . Principle II [the linear
nature of the signifier] is obvious, . . . it is fundamental, and its conse-
quences are incalculable. . . . the whole mechanism of language depends
upon it." [22] " Since the words of a sentence must be arranged in some
order, it is a matter of economy to make the order significant." [23] Un-

like other syntactic devices (like prepositions, relatives, auxiliary verbs, etc.), word order is peculiar in that it is not a tangible element but an invisible grammatical factor operating on the arrangement of elements; in other words, the syntactical element which is of the least complexity has no form, and in this sense, word order typically fits this case.

OE, a case language (though not pure), is not entirely free in word order. E. C. Traugott mentions:

> In both OE and ME [Middle English], order is the prime signal of function; even if the OE case system allowed for relatively more freedom than was possible in ME, the functional load of order was very high. . . . there is no evidence to support the hypothesis that OE word order is incidental and merely a function of co-occurrence restriction, whereas ME order is functional.[24]

This is also true of Latin (more inflectional than OE) in which, since the subject of a sentence is most important, it occupies the initial position, and the predicative word (*i. e.* a finite verb), next important, occupies the final position. Other words are put between the two according to the degree of importance. One of the usual word orders is like the following:

> Subject + Adjective (of the subject) + Indirect Object + Direct Object + Adverb + Predicate Verb.[25]

Each word in "Vir bonus puellae pulchrae librōs iūcundōs benignē dedit" can theoretically be put in any position, so that the number of the sentences of different word orders is 8! (=40320). Despite this, particular (or favorite) word orders are more frequently witnessed than

others.

This is supposedly due to the easiness (for comprehension as well as speaking) we feel when elements having close relations to each other (as between modifying elements and modified) or some grammatical elements functioning as a unit, are put as close to each other as possible. Isn't the so-called *trennbares Verb* in German a nuisance?

> Das Mätchen tat die Kleider der Groß-mutter, die sie am Laden auf 2te Straße gekauft hatte, an. (The girl put on grandmother's dress which she had bought at the store in 2nd Street.)

One is not able to know whether she put on or took off the dress until "an" comes (for it could be "tan ... ab" [took off]). To the native speaker of German, such a separation of elements of a verb may not be a nuisance, but even he feels somewhat annoyed by the separation in the following:

> Puella pulchrum bona flōrem brevibus ā milititibus dābātur.
> (girl [nom.] beautiful [acc.] pretty [nom.] flower [acc.] brave [abla.] by soldiers [abla.] was given)

This is rather extreme, but it is not impossible to understand the meaning because of the distinct case forms as "Puella bona pulchrum flōrem ā brevibus militibus dābātur" (A kind girl was given a beautiful flower by the brave soldiers).

It is quite natural for one to feel such easiness, for our comprehension is supposed to proceed, step by step or by units, from some idea to other because of the linear nature. Therefore, when some idea or grammatically related element is separated and set apart from its part-

ner, one should pay more attention (for comprehension) than otherwise, for this might be the matter of energy paid by both the speaker and the hearer.

It can be said that the *raison d'être* of word order has much to do with the ability of recognition of man. The general trend of subject appearing early in a sentence must have much to do with this matter. Russian children, for example, are apt to misinterpret " papu ljubit mama " (mama loves papa) as " papa ljubit mamu " (papa loves mama).[26]

Such features of word order are due to the crucial restriction of language, *i. e.* the linear expression, produced in time and perceived by the ear in succession. It is not like such communication as of the pictorial type. A. Martinet explicates this as follows :

> ... the painter paints the elements of his composition succes-
> sively, but the spectator perceives the message as a whole or
> he may concentrate his attention on the elements of the mes-
> sage in this order or that without the content of the message
> thereby being affected. A visual system of communication such
> as that represented by the road signs is not linear but has two
> dimensions.[27]

Now clearly, this linear nature of language is responsible for the importance of word order.

Since " the spoken and heard word is the primary form for language," [28] oral expression, which cannot be free from this feature of language, should be made as effectively as possible ; and this is all the more true if an idea to be expressed is complicated. In this respect, the fixed word order as in English or French is very effective for easy communication (especially for comprehension) : The hearer can be sure

of what comes first and what follows it. In languages not so fixed in word order as English or French, on the other hand, one should still pay attention to whatever comes first and next.

As mentioned above, OE is not free in its word order. It seems natural that the smaller the number of case forms is, the more important word order is. In many languages, it is commonly seen that the accusative form is the same as nominative :

Latin :

nom.	proelium	proelia
gen.	proelī	proeliōrum
dat.	proeliō	proeliīs
acc.	proelium	proelia
abl.	proeliō	proeliīs
voc.	proelium	proelia

Russian :

nom.	вре́мя	времена́
gen.	вре́мени	времён
dat.	вре́мени	времена́м
acc.	вре́мя	времена́
instr.	вре́менем	времена́ми
pre.	вре́мени	времена́х

Old High German :

nom.	lamb	lembir
gen.	lambes	lembiro
dat.	lambe	lembirum, –un, –on
acc.	lamb	lembir
instr.	lambu, –o	

Nouns in the nominative and in the accusative are different in their functions in a sentence, so, ideally, they should be made distinct in

some way. The fact that this has not always been the case can be a proof of how important the word order is. In the following :

Dieses Bild, welches die Mona Lisa übertrifft (This picture, which surpasses Mona Lisa [or Mona Lisa surpasses]).

Two interpretations can be made : " welches " is nominative and " die " is accusative ; " welches " is accusative and " die " nominative. In English they can be expressed differently by the fixed word order :

This picture, which surpasses Mona Lisa.
This picture, which Mona Lisa surpasses.

From this, it follows that word order (as in English) becomes very useful if fixed effectively. As seen in the example of German, it is necessary for case notion to be expressed clearly by the effective word order. Here lies the importance of word order.

In *Language*[29] E. Sapir mentions the " drift " of language toward : leveling the distinction between the subject and the object, fixed position and the invariable word. In other words, they are changes in the direction of greater segmentation. In the movement in this direction, some merits have arisen. For example, English sentences are made up of independent units which may be easily detached from each other, whereas in some languages words are combined as a whole and mutually dependent for their form :

the old man :   the old men
sē ealda man :   þā ealde men
der alte Mann :   die alten Männer

In English the article and adjective do not change whether in the sin-

gular or plural, whereas in OE and German they are subject to change. From the standpoint of economy, English is most economical, for, logically, adjective has nothing to do with the concept of plurality which is indicated by noun.   In this respect, English avoids redundancy.

Such a feature of English can be discussed as an improvement in the efficiency of language as a medium of expression, for the theoretical might-be best language is that "which is able to express the greatest amount of meaning with the simplest mechanism ":[30]   a maximum of efficiency and a minimum of effort.   "Human behaviour is subject to the law of least effort, according to which man gives of himself only so much as is necessary to attain the end he has in view." [31]

In this connection, it seems not inadequate for Jespersen to say that "I still think that I was right in saying that on the whole the average development was progressive." [32]   Because, "instead of being encumbered with an involved grammatical structure he [any user of English] can express the same ideas in a comparatively much simpler and handier way." [33]   Thus he goes so far as to say that Mod E "stands higher than the oldest English, Latin or Hottentot." [34]

Such words by Jespersen must be derived from his strong belief in the necessity of an international language,[35] but it might be improper to discuss hierarchy of languages.   E. Sapir says:

> If . . . we wish to understand language in its true inwardness we must disabuse our minds of preferred "values" and accustom ourselves to look upon English and Hottentot with the same cool, yet interested, detachment.[36]

Some language might be able to explain some concept more briefly

than another language, but it is a matter of degree. Any language is self-sufficient: any concept or idea in a language can manage to be expressed in some way or other by another language (not by specific words, but analytical expressions). Languages are more or less different from one another, but "the underlying structure preserves its essential type over very long periods of time." [37]   Hence Sapir's following words are worth noting:

> It is exceedingly important to observe that whatever may be the shortcomings of a primitive society . . . , its language inevitably forms as sure, complete, and potentially creative an apparatus of referential symbolism as the most sophisticated language. . . .[38]

Hence it is not proper to discuss language in terms of hierarchy, value or progression, but it cannot be denied from the standpoint of language learning (not acquisition as a native tongue) that English is among the easiest languages (though difficult to use well). And yet English is not as oversimplified or over-regularized as an artificial language like Esperanto.[39]

As Jespersen mentions, "national languages tend to get rid of too great similarities between names of similar things which it is often important to keep easily distinct," [40] (as historically seen in the use of the term " port " instead of " larboard " against " starboard ").

To sum up: the English language has experienced the change in case notion from morphological to syntactical. The reason for that is in the case system itself, *i. e.* the limited number of case forms.   In addition, for communication the root syllable is so important that people

are prone to pronounce the rest of the word indistinctly, with the result
of syncretism or the loss of inflections. The importance of word order
functioning to indicate case notion increases according as inflections are
diminished in number or kind. It is very likely that word order will
become more and more fixed, for it is the least complex and economi-
cal way to indicate case notion. Above all, the fundamental *raison
d'être* of word order is attributed to the linear nature of language. In
this respect, English, it can be said, is an effective language which has
come to make the best use of this nature.

Two elements of linguistic change can be thought of : the tendency
of human indolence or laziness to make, if understood, as little effort
as possible to express what is in mind ; and the tendency " to make as
vivid and convincing an impression on the hearer as possible." [41] The
change in the " phenomenon of case " in English is a very interesting
one in this respect. The following words are right in pointing out an
important aspect of linguistic change in this connection :

> In general, the tendency of speakers to simplify must be bal-
> anced by the need of hearers to obtain information from the
> signal, and it has been suggested that the need to maintain an
> equilibrium between these two opposing forces may account
> for certain trends in change. [42]

NOTES

1 Hisanosuke Izui, *Gengo no Kōzō* (The Structure of Language) (Tokyo :
Kinokuniyashoten, 1967), p. 55.

2 *Ibid.*, p. 58.

3 Charles Fillmore, " Author's Preface " in *Kakubunpō no Genri* (The Prin-
ciple of Case Grammar) edited and translated by Harumi Tanaka and Michio
Funaki (Tokyo : Sanseido, 1975), p. 7.

4 This is because their grammatical view could not be free from that of Latin. See Shoichi Watanabe, *Eibunpō Shi* (The History of English Grammar) (Tokyo: Kenkyusha, 1960).

5 Charles T. Onions, *An Advanced English Syntax* (London: W. Jolly and Son, 1904), p. 90.

6 "Person or thing *with respect to* which an action takes place, or it [the object as accusative] serves to point out *how far, i. e. to whom* or *to what* the action of the Verb extends." *Ibid.*, p. 36.

7 As the Indirect Object, that is, "person *to* or *for* whom an action ... is performed." *Ibid.*, p. 39.

8 Otto Jespersen, *The Philosophy of Grammar* (London: Allen & Unwin, 1924), p. 174.

9 Paul Roberts, *Understanding Grammar* (New York: Harper & Row, 1954), p. 43.

10 O. Jespersen, *System of Grammar* (1933) in *Selected Writings of Otto Jespersen* (Tokyo: Senjo Publishing, 1962), p. 507.

11 O. Jespersen, *Efficiency in Linguistic Change* (Copenhagen: Ejnar Munksgaard, 1941), p. 50.

12 O. Jespersen, *Language, Its Nature, Development, and Origin* (London: Allen & Unwin, 1922), p. 343.

13 "In every language every case served different purposes, and the boundaries between these are far from being clear-cut." O. Jespersen, *The Philosophy of Grammar*, p. 179.

14 H. Izui, *op. cit.*, p. 66.

15 Shigeru Shimaoka, *Romansugo no Hanashi* (A Story of Romance Languages) (Tokyo: Daigakushorin, 1974), pp. 79–80.

16 Ablative in Latin stands for actor, instrument, means, accompaniment, distance, place, duration, price, and so forth. *Ibid.*, p. 77.

17 O. Jespersen, *Efficiency in Linguistic Change*, p. 27.

18 O. Jespersen, *Language, Its Nature, Development, and Origin*, p. 271.

19 O. Jespersen, *Growth and Structure of the English Language*, edit. with notes by Toshio Nakao and Taizo Hirose (Tokyo: Nan'un-Do, 1966), p. 66.

20 In OE, the pronoun almost always comes before verb, and subject sometimes follows verb when the sentence begins with adverbial elements: "Hiera

cyning him gesealde þæt īegland" (Their king gave him the island). "Hēr
nam Beorhtrīc cyning offan dohtor Ēadburge" (In this year king Boerhtric
took to wife Eadburh, daughter of Offa).

21   Charles C. Fries, *American English Grammar* (New York: Appleton-Cen-
tury-Crofts, 1940), p. 254.

22   Ferdinand de Saussure, *Cours de linguistique générale* (Paris: Payot, 1916),
trans. Wade Baskin, *Course in General Linguistics* (New York: Philosophical
Library, 1959), p. 70.

23   E. H. Sturtevant, *Linguistic Change* (Chicago: the University of Chicago
Press, 1917), p. 173.

24   Elizabeth C. Traugott, "Toward a Grammar of Syntactic Change," *Lingua,*
XXIII (1969), p. 6.

25   Hidenaka Tanaka, *Shin Raten Bunpô* (The New Latin Grammar) (Tokyo:
Iwanamishoten, 1929), p. 63.

26   Roman Jakobson, "Implication of Language Universals for Linguistics,"
 · in *Universals of Language*, ed. Joseph H. Greenberg (Cambridge, Mass.:
The M. I. T. Press, 1936), p. 269.

27   André Martinet, *Élements de Linguistique Générale* (Paris: Librairie Ar-
mand Colin, 1960), trans. Elisabeth Palmer, *Elements of General Linguistics*
(London: Faber and Faber, 1964), pp. 25-6.

28   O. Jespersen, *The Philosophy of Grammar*, p. 17.

29   Edward Sapir, *Language* (New York: Harcourt, Brace & World, 1921), ch.
VII.

30   O. Jespersen, *Language, Its Nature, Development, and Origin*, p. 324.

31   A. Martinet, *ibid.*, p. 169.

32   O. Jespersen, *Efficiency in Linguistic Change*, p. 8.

33   *Ibid.*, p. 87.

34   O. Jespersen, *Language, Its Nature, Development, and Origin*, p. 338.

35   He adovocated "Novial" (Novel International Auxiliary Language): a
language "expressive and efficient, though extremely simple in its grammati-
cal structure." (O. Jespersen, "Nature and Art in Language," in *Selected*
 Writings of Otto Jespersen [Tokyo: Senjoshobo, 1960], p. 738.)

36   E. Sapir, *Language*, p. 124.

37   Eric. H. Lenneberg, *Biological Foundations of Language* (New York: John

Wiley & Sons, 1967), p. 381.

38 E. Sapir, "Communication" in *Selected Writings of Edward Sapir*, ed. David G. Mandelbaum (Berkeley: University of California Press, 1949), p. 105.

39 It is difficult, for example, to recognize each of the following: *ĝojo* (joy), *ĝoja* (joyful), *ĝoje* (joyfully), *ĝoji* (joyousness), *ĝojas* (enjoy), *ĝojis* (enjoyed), *ĝojos* (will enjoy), *ĝojus* (may enjoy), and *ĝoju* (enjoy [as imperative]).

40 O. Jespersen, *op. cit.*, p. 723.

41 O. Jespersen, *Efficiency in Linguistic Change*, p. 16.

42 Franklin C. Southworth, *Foundations of Linguistics* (New York: The Free Press, 1974), p. 291.