

A second kind of speculation on historical changes within case systems traces case systems of one kind back to case systems of another kind. Of particular interest here is the suggestion that the Indo-European case systems point back to an original 'ergative' system. Case typologies will be discussed in slightly greater detail below, but briefly we can characterize an 'ergative' system as one which assigns one case (the ergative) to the subject of a transitive verb and another to both the subject of an intransitive verb and the object of a transitive verb. An 'accusative' system, on the other hand, is one which assigns one case to the subject of either transitive or intransitive verbs and another (the accusative) to the object of a transitive verb. A common feature of ergative systems is that the 'genitive' form is the same as the ergative (or, put differently, that the ergative case has a 'genitive' function).

The connection of Indo-European \**s* with animateness (the subject of a transitive verb is typically animate), the original identity of the nominative singular \**s* with the genitive ending, and the identity of the neuter ending \**-m* with the masculine accusative form have led many investigators to the conclusion that our linguistic ancestors were speakers of an 'ergative' language.<sup>18</sup> It will be suggested below that, if such a change has taken place, it is a change which involves the notion 'subject'.

#### 1.4 Case in Current

##### Generative Grammar

A hitherto largely unquestioned assumption about case in the writings of generative grammarians has been made explicit by Lyons (1966, p. 218): "'case" (in the languages in which the category is to be found) is not present in "deep structure" at all, but is merely the inflexional "realization" of particular syntactic relationships'. The syntactic relationships in question may in fact be relationships that are defined only in the surface structure, as when the surface subject of a sentence (destined to assume, say, a 'nominative' form) has appeared as the result of the application of the passive transformation, or when the 'genitive' marker is

a later generation may have reinterpreted it as merely a marker for the subjunctival use of a particular set of words—to state the possibilities in the most simple-minded way. The change, in short, may well have been entirely in the economies of bringing to the surface underlying structural features which themselves underwent no change whatever.

<sup>18</sup> See particularly Uhlenbeck (1901), where the \**-m* ending was identified as a subject marker and the \**s* as the agent marker in passive sentences (a common interpretation of 'ergative' systems), and Váallant (1986). Lehmann (1958, p. 190) finds the arguments unconvincing, noting for example that evidence of an 'ergative' ending cannot be found in plural nouns or in *a* stem feminines.

introduced as an accompaniment to a nominalization transformation. One of Chomsky's few remarks on case occurs in a discussion of the peripheral nature of stylistic inversions; although case forms are assigned to English pronouns relatively late in the grammar, determined largely by surface-structure position, the stylistic inversion rules are later still. In this way it becomes possible to account for such forms as *him I like*; the shift of *him* to the front of the sentence must follow the assignment of case forms to the pronouns (see Chomsky, 1965, pp. 221 f.).

It seems to me that the discussion of case could be seen in a somewhat better perspective if the assignment of case forms were viewed as exactly analogous to the rules for assigning prepositions in English, or postpositions in Japanese.<sup>19</sup> There are languages which use case forms quite extensively, and the assumption that the case forms of nouns can be assigned in straightforward ways on the basis of simply defined syntactic relations seems to be based too much on the situation with English pronouns.

Prepositions in English—or the absence of a preposition before a noun phrase, which may be treated as corresponding to a zero or unmarked case affix—are selected on the basis of several types of structural features, and in ways that are exactly analogous to those which determine particular case forms in a language like Latin: identity as (surface) subject or object, occurrence after particular verbs, occurrence in construction with particular nouns, occurrence in particular constructions, and so on. The only difficulties in thinking of these two processes as analogous are that even the most elaborate case languages may also have combinations of, say, prepositions with case forms, and that some prepositions have independent semantic content. The first of these difficulties disappears if, after accepting the fact that the conditions for choosing prepositions are basically of the same type as those for choosing case forms, we merely agree that the determining conditions may simultaneously determine a preposition *and* a case form. The second difficulty means merely that a correct account will allow certain options in the choice of prepositions in some contexts, and that these choices have semantic consequences. Analogous devices are provided by the 'true' case languages, too, for example by having alternative case choices in otherwise identical constructions, or by having semantically functioning prepositions or postpositions.

The syntactic relations that are involved in the selection of case

<sup>19</sup> The suggestion is of course not novel. According to Hjelmslev, the first scholar to show a connection between prepositions and cases was A.-F. Bernhardt, in *Anfangsgründe der Sprachwissenschaft* (Berlin, 1803); see Hjelmslev, 1935, p. 24.

forms (prepositions, affixes, and so forth) are, in practice, of two types, and we may call these 'pure' or 'configurational' relations, on the one hand, and 'labeled' or 'mediated' relations on the other hand.<sup>20</sup> 'Pure' relations are relations grammatical constituents expressible in terms of (immediate) domination. Thus, the notion 'subject' can be identified as the relation between an NP and an immediately dominating S, while the notion 'direct object' can be equated with the relation that holds between an NP and an immediately dominating VP. Where the relation 'subject of' is understood to hold between elements of the deep structure, one speaks of the deep-structure subject; where it is understood to hold between elements of the (prestylistic) surface structure, one speaks of the surface-structure subject. This distinction appears to correspond to the traditional one between 'logical subject' and 'grammatical subject'.

By 'labeled' relation I mean the relation of an NP to a sentence, or to a VP, which is mediated by a pseudocategory label such as Manner, Extent, Location, Agent.

It is clear that if all transformations which create surface subjects have the effect of attaching an NP directly to an S, under conditions which guarantee that no other NP is also directly subjoined to the same S, and if it always turns out that only one NP is subjoined to a VP in the prestylistic surface structure, then these two 'pure' relations are exactly what determine the most typical occurrences of the case categories 'nominative' and 'accusative' in languages of a certain type. For remaining case forms, the determination is either on the basis of idiosyncratic properties of specific governing words, or on the basis of a 'labeled' relation, as when the choice of *by* is determined by reference to the dominating category Extent in the extent phrase of sentences like 17.

<sup>20</sup> The distinction would be more accurately represented by the opposition 'relations' versus 'categories', because when a phrase-structure rule introduces a symbol like *Manner* or *Extent*—symbols which dominate manner adverbials and extent phrases—these symbols function, as far as the rest of the grammar is concerned, in exactly the same ways as such 'intentional' category symbols as S or NP. This fact has much more to do with the requirements of the phrase-structure model than with the 'categorical' character of the grammatical concepts involved. In an earlier paper I discussed the impossibility of capturing, in a base component of a grammar of the type presented in Chomsky (1965), both such information that *in a clumsy way* is a manner adverbial (and as such represents an instance of highly constrained lexical selection, as well as a quite specific positional and co-occurrence potential which it shares with other manner adverbials) and that it is a prepositional phrase. See Fillmore (1966a).

The *intention* on the part of grammarians who have introduced such terms as *Loc*, *Temp*, *Extent*, and the like into their rules is to let these terms represent relations between the phrases they dominate and some other element of the sentence (that is, the VP as a whole); nobody, as far as I can tell, has actually wished these terms to be considered as representing distinct types of grammatical categories on the order of NP or preposition phrase.

17. He missed the target by two miles.

In my earlier paper (Fillmore, 1966) I pointed out that no semantically constant value is associated with the notion 'subject of' (unless it is possible to make sense of the expression 'the thing being talked about', and, if that can be done, to determine whether such a concept has any connection with the relation 'subject'), and that no semantically relevant relations reside in the surface subject relation which are not somewhere also expressible by 'labeled' relations. The conclusion I have drawn from this is that all semantically relevant syntactic relations between NPs and the structures which contain them must be of the 'labeled' type. The consequences of this decision include (a) the elimination of the category VP, and (b) the addition to some grammars of a rule, or system of rules, for creating 'subjects'. The relation 'subject', in other words, is now seen as exclusively a surface-structure phenomenon.

## 2. Some Preliminary Conclusions

I have suggested that there are reasons for questioning the deep-structure validity of the traditional division between subject and predicate, a division which is assumed by some to underlie the basic form of all sentences in all languages. The position I take seems to be in agreement with that of Tesnière (1959, pp. 103–105) who holds that the subject/predicate division is an importation into linguistic theory from formal logic of a concept which is not supported by the facts of language and, furthermore, that the division actually obscures the many structural parallels between 'subjects' and 'objects'. The kinds of observations that some scholars have made about surface differences between 'predicative' and 'determinative syntagms'<sup>21</sup> may be accepted without in any way believing that the subject/predicate division plays a part in the deep-structure syntactic relations among the constituents of sentences.

Once we have interpreted 'subject' as an aspect of the surface structure, claims about 'subjectless' sentences in languages which have superficial subjects in some sentences, or reports about languages which appear to lack entirely entities corresponding to the 'subjects' of our grammatical tradition, no longer need to be regarded as particularly disturbing. Unfortunately, there are both good and bad reasons for asserting that par-

<sup>21</sup> See, for example, Bazell (1949, esp. p. 8), where the difference is expressed in such terms as 'degrees of cohesion', 'liaison features' found within the predicate but not between subject and predicate.

ticular languages or particular sentences are 'subjectless', and it may be necessary to make clear just what I am claiming. A distinction must be drawn between *not having* a constituent which could properly be called 'subject', on the one hand, and *losing* such a constituent by anaphoric deletion, on the other hand.<sup>22</sup> Robins (1961), in his review of Tesnière (1959), accuses Tesnière of failing to isolate the subject from the rest of the sentence. To Robins, Tesnière's decision to allow the subject to be treated as merely a complement to the verb must be related to the fact that the subject is omissible in such languages as Latin. If it is true that the *omissibility* of subjects is what convinced Tesnière that they are subordinated to verbs, and if the nonomissibility in any language of the subject constituent would have persuaded him that there *is* a special status for 'subject' *vis-à-vis* 'predicate' in the underlying structure of sentences in all languages, then that, it seems to me, is a bad reason for coming up with what might be a correct analysis.

It seems best to have a place in linguistic theory for the operation of anaphoric processes, processes which have the effect of shortening, simplifying, de-stressing sentences which are partly identical to their neighbors (or which are partly 'understood'). It happens that English anaphoric processes make use of pronominalization, stress reduction, and also deletion, under conditions where other languages might get along exclusively with deletion.<sup>23</sup> Under some conditions, in languages of the latter type, the deleted element happens to be the 'subject'. The non-occurrence of subject nouns in some utterances in some languages is *not* by itself, in other words, a good argument against the universality of the subject/predicate division. There are better ones. Some of these have already been suggested, others are to appear shortly.

<sup>22</sup> The tagmemicists in particular, because of their notation for 'optional' constituents, have had to come to grips with this distinction. A 'tagmemic formula' may be thought of as an attempt to present in a single statement a quasi-generative rule for producing a set of related sentences *and* the surface structure (short of free variation in word order) of these sentences. If the formulas for transitive and intransitive clauses are expressed as *i* and *ii* respectively:

- i.  $\pm$  Subj + Pred  $\pm$  Obj  $\pm$  Loc  $\pm$  Time
- ii.  $\pm$  Subj + Pred  $\pm$  Loc  $\pm$  Time

it is clear (a) that any clause containing just a Pred can satisfy either of these formulas, and (b) that the potential appearance of such constituents as Loc and Time is less relevant to the description of these clauses than is that of the constituent Obj. Pike draws a distinction, which cross-cuts the optional/obligatory distinction, between 'diagnostic' and 'nondiagnostic' elements of clauses; see, for example, Pike (1966, esp. Chapter 1, Clauses). Grimes, on the other hand, seems to suggest introducing the 'diagnostic' constituents obligatorily, allowing for their deletion under certain contextual or anaphoric conditions. See Grimes (1964, esp. p. 16 f.).

<sup>23</sup> For an extremely informative description of these processes in English, see Gleitman (1965) and Harris (1957, esp. Section 16).

By distinguishing between surface- and deep-structure case relationships, by interpreting the 'subject' and 'object' as aspects of the surface structure, and by viewing the specific phonetic shapes of nouns in actual utterances as determinable by many factors that are vastly variable in space and time, we have eliminated reasons for being surprised at the noncomparability of (surface) case systems. We find it partly possible to agree with Bennett when, after surveying a few representative nineteenth century case theories, he stated (1914, p. 3) that they erred in sharing the 'doubtful assumption . . . that all the cases must belong to a single scheme, as though parts of some consistent institution'. We need not follow him, however, in concluding that the only valid type of research into the cases is an inquiry into the earliest value of each case.

Greenberg has remarked that cases themselves cannot be compared across languages—two case systems may have different numbers of cases, the names of the cases may conceal functional differences—but that *case uses* may be expected to be comparable. He predicts, for instance, that the uses of cases will be 'substantially similar in frequency but differently combined in different languages' (1966, p. 98; see also p. 80). Greenberg's recommendations on the cross-linguistic study of case uses were presented in connection with the 'true' case languages, but it seems clear that if a 'dative of personal agent' in one language can be identified with an 'ablative of personal agent' in another language, then the 'personal agent' relationship between a noun and a verb ought also to be recognizable in the so-called caseless languages on exactly the same grounds. If, furthermore, it turns out that other grammatical facts can be associated with sentences containing the personal agent relationship, it would appear that the concepts underlying the study of case uses may have a greater linguistic significance than those involved in the description of surface case systems. These additional facts might include the identification of a limited set of nouns and a limited set of verbs capable of entering into this relationship, and whatever additional generalizations prove to be stable in terms of this classification. Higher level dependencies may be discovered, such as the limitation of benefactive phrases to sentences containing a personal agent relationship in their deep structure.

The question should now be asked, of course, whether we are justified in using the term *case* for the kind of remote syntactic-semantic relations that are at issue. There is among many scholars a strong feeling that the term should be used only where clear case morphemes are discoverable in the inflection of nouns. To Jespersen, it is wrong to speak of 'analytic' cases, even when there is no 'local' meaning in the preposition phrases, because cases are one thing and preposition-plus-object constructions are another (1924, p. 186). Jespersen's position is colored a little by his belief

that the caselessness of English represents a state of progress for which we ought to be grateful.<sup>24</sup>

Cassidy, in his 1937 appeal to rescue the word *case* from abuse, wrote (p. 244): "Case" will be properly used and will continue to have some meaning only if the association with inflection be fully recognized, and if stretching of the term to include other sorts of "formal" distinction be abandoned. In a similar vein, Lehmann (1958) chides Hirt for suggesting that an awareness of cases had to precede the development of case endings—that there was, in other words, 'among the speakers of pre-Indo-European and Proto-Indo-European a disposition for cases' (p. 185). Lehmann continues (p. 185): 'We can account for Hirt's statement by the assumption that to him a case was a notional category, whether or not it was exemplified in a form. To us a particular case is non-existent unless it is represented by forms which contrast in a system with others.' The claim that syntactic relations of various types must exist before case endings could be introduced to give them expression would surely have gone unchallenged; what was offensive, apparently, was the use of the word *case*.

It seems to me that if there are recognizable intrasentence relationships of the types discussed in studies of case systems (whether they are reflected in case affixes or not), that if these same relationships can be shown to be comparable across languages, and that if there is some predictive or explanatory use to which assumptions concerning the universality of these relations can be put, then surely there can be no meaningful objection to using the word *case*, in a clearly understood deep-structure sense, to identify these relationships. The dispute on the term *case* loses its force in a linguistics which accepts the centrality of syntax.<sup>25</sup>

<sup>24</sup> Jespersen (1924, p. 179):

However far back we go, we nowhere find a case with only one well-defined function: in every language every case served different purposes, and the boundaries between these are far from being clear-cut. This, in connection with irregularities and inconsistencies in the formal elements characterizing the cases, serves to explain the numerous coalescences we witness in linguistic history ("syncretism") and the chaotic rules which even thus are to a great extent historically inexplicable. *If the English language has gone farther than the others in simplifying these rules, we should be devoutly grateful and not go out of our way to force it back into the disorder and complexity of centuries ago.* [Italics added.]

<sup>25</sup> The universality of case as a grammatical category is affirmed in Hjelmslev (1935, p. 1). In a recent study from a Jakobsonian point of view, Velten (1962) reveals enough of the historical continuity of 'synthetic' and 'analytic' cases to suggest that the linguist has no right to assign cases and prepositions to different 'chapters' of the study of grammar. The deep-structure notion of cases may be thought of as involving an extension of the synchronic concept of 'syncretism'. The usual synchronic sense of case syncretism assumes the form of a decision to posit a case contrast that may not be expressed overtly in most contexts as long as it appears overtly in 'one part of the system'. (See Newmark, 1962, p. 313.) Deep-structure cases may simply be

We may agree, then, for our present purposes, with Hjelmslev, who suggests that the study of cases can be pursued most fruitfully if we abandon the assumption that an essential characteristic of the grammatical category of case is *expression in the form of affixes on substantives*. I shall adopt the usage first proposed, as far as I can tell, by Blake (1930), of using the term *case* to identify the underlying syntactic-semantic relationship, and the term *case form* to mean the expression of a case relationship in a particular language—whether through affixation, suppletion, use of clitic particles, or constraints on word order.

### 3. Case Grammar

The substantive modification to the theory of transformational grammar which I wish to propose amounts to a reintroduction of the 'conceptual framework' interpretation of case systems, but this time with a clear understanding of the difference between deep and surface structure. The sentence in its basic structure consists of a verb and one or more noun phrases, each associated with the verb in a particular case relationship. The 'explanatory' use of this framework resides in the necessary claim that, although there can be compound instances of a single case (through noun phrase conjunction), each case relationship occurs only once in a simple sentence.<sup>26</sup>

It is important to realize that the explanatory value of a universal system of deep-structure cases is of a syntactic and not (merely) a morphological nature. The various permitted arrays of distinct cases occurring in simple sentences express a notion of 'sentence type' that may be expected to have universal validity, independently of such superficial differences as subject selection. The arrays of cases defining the sentence types of a language have the effect of imposing a classification of the verbs in the language (according to the sentence type into which they may be inserted), and it is very likely that many aspects of this classification will be universally valid.

Case elements which are optionally associated with specific verbs,

nowhere overtly reflected as affixes or function words. The notion we are after probably corresponds to Meinhof's *Kasusbeziehungen*. (See Meinhof, 1938, p. 71.) The Meinhof reference, which I have not seen, was quoted in Frei (1954, fn. p. 31).

<sup>26</sup> It follows that whenever more than one case form appears in the surface structure of the same sentence (on different noun phrases), either more than one deep-structure case is involved or the sentence is complex. If, for example, German *lehren* is described as a verb which 'takes two accusatives', we have reason to believe that in the deep structure, the two object nouns are distinct as to case. Often enough the language will provide evidence for the distinction, as in the occurrence of such passive sentences as *das wurde mir gelehrt*.

together with the rules for forming subjects, will serve to explain various co-occurrence restrictions. For, example, in 18 the subject is in an Agent relation to the verb; in 19 the subject is an Instrument; and in 20 both Agent and Instrument appear in the same sentence, but in this case it is the Agent which appears as the subject, not the Instrument.

18. John broke the window.  
 19. A hammer broke the window.  
 20. John broke the window with a hammer.

That the subjects of 18 and 19 are grammatically different explains the fact that the combined meaning of the two sentences is not produced by conjoining their subjects. Thus 21 is unacceptable.

21. \* John and a hammer broke the window.

Only noun phrases representing the same case may be conjoined. Similarly, the fact that only one representative of a given case relationship may appear in the same simple sentence, together with the generalizations on subject selection and the redundancies which hold between cases and lexical features (for example, between Agent and animateness), explains the unacceptability of Sentence 22.

22. \* A hammer broke the glass with a chisel.

It is unacceptable, in particular, on the interpretation that both *hammer* and *chisel* are understood instrumentally. It cannot represent a sentence containing an Agent and an Instrument, since the noun *hammer* is inanimate.<sup>27</sup>

The dependency that can be accounted for by making these assumptions is that the subject of an active transitive sentence must be interpretable as a personal agent just in case the sentence contains a *with* phrase of instrumental import. Apparent exceptions to this generalization can be seen to have different underlying structures. Sentence 23 looks like an exception, but by attending to the effect of the word *its*, the essential difference between 23 and Sentences 22 and 24 becomes apparent.

<sup>27</sup> The author is aware that in Sentence 18 one might be talking about what John's body did as it was tossed through the window and that in Sentence 19 one might be speaking metaphorically, personifying *hammer*. Under either interpretation Sentence 21 turns out to be acceptable, and under the personification interpretation, Sentence 22 becomes acceptable. What is important to realize is that these interpretations, too, are explainable by reference to exactly the same assumptions appealed to in explaining their 'face value' interpretations.

23. The car broke the window with its fender.  
 24. \* The car broke the window with a fender.

Sentence 24 violates the conditions that have been discussed, but Sentence 23 is a paraphrase of Sentence 25 and may be interpreted as having the same structure as 25.

25. The car's fender broke the window.

What is suggested here is that Sentences 23 and 25 are agentless sentences containing a *possessed noun* as the Instrument (*the car's fender*). The rules for choosing a subject allow an option in this case: either the entire instrument phrase may appear as the subject (as in 25), or the 'possessor' alone may be made the subject, the remainder of the instrument phrase appearing with the preposition *with* (as in 23). The second option requires that a 'trace' be left behind in the instrument phrase, in the form of the appropriate possessive pronoun. A similar explanation is suggested for such sentences as 26 and 27, which are also interpretable as deep structurally identical.

26. Your speech impressed us with its brevity.  
 27. The brevity of your speech impressed us.

The superficial nature of the notion 'subject of a sentence' is made apparent by these examples in a particularly persuasive way, because in the possessor-as-subject cases, the 'subject' is not even a major constituent of the sentence; it is taken from the modifier of one of the major constituents.

In the basic structure of sentences, then, we find what might be called the 'proposition', a tenseless set of relationships involving verbs and nouns (and embedded sentences, if there are any), separated from what might be called the 'modality' constituent. This latter will include such modalities on the sentence-as-a-whole as negation, tense, mood, and aspect.<sup>28</sup> The exact nature of the modality constituent may be ignored for our purposes. It is likely, however, that certain 'cases' will be directly related to the modality constituent as others are related to the proposition itself, as for example certain temporal adverbs.<sup>29</sup>

The first base rule, then, is 28, abbreviated to 28'.

<sup>28</sup> There are probably good reasons for regarding negation, tense, and mood as associated directly with the sentence as a whole, and the perfect and progressive 'aspects' as features on the V. See for a statement of this position Lyons (1966, pp. 218, 223).

<sup>29</sup> In my earlier paper I suggested that sentence adverbials in general are assigned to the modality constituent. I now believe that many sentence adverbs are introduced from subordinate sentences (by transformations of a type we may wish to call 'injections'). This possibility has long been clear for unmistakable sentence adverbs like *unfortunately*, but there are also quite convincing reasons for extending the injection interpretation to adverbs like *willingly*, *easily*, and *carefully*.

28. Sentence  $\rightarrow$  Modality + Proposition  
 28'.  $S \rightarrow M + P$ <sup>30</sup>

The P constituent is 'expanded' as a verb and one or more case categories. A later rule will automatically provide for each of the cases the categorial realization as NP (except for one which may be an embedded S). In effect the case relations are represented by means of dominating category symbols.

The expansion of P may be thought of as a list of formulas of the form seen in 29, where at least one case category must be chosen and where no case category appears more than once.

$$29. P + V + C_1 + \dots + C_n$$

Whether these formulas can be collapsed according to the familiar abbreviatory conventions is not at present clear. For our purposes we may simply think of P as representable by any of a set of formulas including  $V + A$ ,  $V + O + A$ ,  $V + D$ ,  $V + O + I + A$ , and so forth. (The letter symbols are interpreted below.)

The case notions comprise a set of universal, presumably innate, concepts which identify certain types of judgments human beings are capable of making about the events that are going on around them, judgments about such matters as who did it, who it happened to, and what got changed. The cases that appear to be needed include:

- Agentive (A)*, the case of the typically animate perceived instigator of the action identified by the verb.<sup>31</sup>  
*Instrumental (I)*, the case of the inanimate force or object causally involved in the action or state identified by the verb.<sup>32</sup>  
*Dative (D)*, the case of the animate being affected by the state or action identified by the verb.

<sup>30</sup> The arrow notation is used throughout, but this should not be interpreted as meaning that the proposal for a case grammar requires an assumption of a left-to-right orientation of the constituent symbols of the rewriting rules.

<sup>31</sup> The escape qualification 'typically' expresses my awareness that contexts which I will say require agents are sometimes occupied by 'inanimate' nouns like *robot* or 'human institution' nouns like *nation*. Since I know of no way of dealing with these matters at the moment, I shall just assume for all agents that they are 'animate'.

<sup>32</sup> Paul Postal has reminded me of the existence of sentences like

- i. I rapped him on the head with a snake.

The requirement that instrumental NPs are 'inanimate' is the requirement to interpret *i* as having in its underlying structure something equivalent to *with the body of a snake*. The fact that there are languages which would require mention of a stem meaning 'body' in this context may be considered as support for this position, and so may the unacceptability, pointed out by Lakoff, of sentences like *ii*:

- ii. \* John broke the window with himself. (See Lakoff, 1967.)

*Factitive (F)*, the case of the object or being resulting from the action or state identified by the verb, or understood as a part of the meaning of the verb.

*Locative (L)*, the case which identifies the location or spatial orientation of the state or action identified by the verb.

*Objective (O)*, the semantically most neutral case, the case of anything representable by a noun whose role in the action or state identified by the verb is identified by the semantic interpretation of the verb itself; conceivably the concept should be limited to things which are affected by the action or state identified by the verb.<sup>33</sup> The term is not to be confused with the notion of direct object, nor with the name of the surface case synonymous with accusative.

Additional cases will surely be needed. Suggestions for adding to this list will appear in various places below.

It is important to notice that none of these cases can be interpreted as matched by the surface-structure relations, subject and object, in any particular language. Thus, *John* is A in 29 as much as in 30; *the key* is I in 31 as well as in 32 or 33; *John* is D in 34 as well as in 35 and 36; and *Chicago* is L in both 37 and 38.

29. John opened the door.  
 30. The door was opened by John.  
 31. The key opened the door.  
 32. John opened the door with the key.  
 33. John used the key to open the door.  
 34. John believed that he would win.  
 35. We persuaded John that he would win.  
 36. It was apparent to John that he would win.  
 37. Chicago is windy.  
 38. It is windy in Chicago.

The list of cases includes L, but nothing corresponding to what might be called directional. There is a certain amount of evidence, as was mentioned above, that locational and directional elements do not contrast but are superficial differences determined either by the constituent structure or by the character of the associated verb. An example provided by Hall (39) suggests, by the occurrence of the pro replacement word *there*, that *to the store* and *at the store* are variants of the same

<sup>33</sup> In Fillmore (1966a) the neutral case was unwisely and misleadingly labeled 'ergative'.