

GUILLAUME: A MEANING-BASED APPROACH

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The scientist looks for order in the appearances of nature by exploring such likenesses... order must be discovered and, in a deep sense, it must be created. What we see, as we see it, is mere disorder.

(J. Bronowski 1965:13-14)

1. INTRODUCTION.

It seems to be a commonplace of linguistics in this century that the basic relationship in language is that between meaning and sign. Saussure (1916:32) expressed it in terms of sense and acoustic image, Bloomfield (1933:27) in terms of meanings and sounds, Chomsky (1966:10) in terms of semantic interpretations and signals. Regardless of the terms used, the same reality is being designated and the same importance has been assigned to it by each of these linguists: for Saussure, it is the essential relationship; for Bloomfield, it is what we study when we study language; for Chomsky, it is what constitutes the speaker's competence. If, along with these and many other linguists, we are prepared to grant that the meaning/sign relationship is basic to everything else in language, that the conception we have of this relationship is basic to our whole view of language, it follows that it will condition everything we do in linguistics. That is, the sort of thing we as linguists look for in order to explain what we have observed — the sort of theory we try to construct — depends on what we have postulated at the outset, on the way we have imagined the link between a linguistic sign and its meaning.

This is the subject I should like to discuss here. I want to contrast two radically different views of this basic relationship, Chomsky's and Guillaume's, and show that Guillaume proposes not just one alternative view, but a view of the meaning/sign link which is diametrically opposed to that of Chomsky. Since each of these views constitutes a starting assumption for linguistics, they can be evaluated only in the light of the consequences they lead to and so we shall have to examine, in a general way, where each of them leads, to contrast the type of theory they give rise to. Let us begin by outlining the two views.

2. CONTRARY VIEWS

In an early publication, *Syntactic Structures*, Chomsky makes the following remark (p.108):

... it is questionable that the grammatical devices available in language are used consistently enough so that meaning can be assigned to them directly.

This is revealing because it suggests that, in Chomsky's eyes, a grammatical device, a type of linguistic sign, has no regular, predictable link with its meaning. Such an assumption is quite understandable in the light of the numerous

unsuccessful attempts on the part of linguists to find the 'basic' meaning of different grammatical signs. Though more forthright than many in avowing failure, Bloomfield (1933:280) is typical in his findings with regard to the simple and progressive forms in English:

the difference between *wrote* and *was writing* is so elusive and differs so much for different verbs and in different phrases, that the definer, after stating the main principles, cannot do better than to resort to a demonstration by means of examples.

Confronted with the repeated failures of other linguists to find order or unity in the elusive differences of sense expressed by some grammatical form, Chomsky assumes that there is no such order or unity. That is, he postulates that the meaning/sign relationship is inconsistent, disorderly, unpredictable. We shall see that this view colors all his subsequent theorizing, but first let us examine Guillaume's contrary view of the same relationship.

Some forty years earlier, Guillaume's first important work described in considerable detail the various elusive senses expressed by the articles in French. Familiar with the remarkable scientific work of the comparativists of the nineteenth century, he attempted to discover order or unity in these various observed senses through an 'application of the comparative method' (1919:11). Now this attempt to apply the tried and true comparative method is significant on two counts. We know that the comparative method had been worked out and refined as an instrument of analysis permitting linguists to reconstruct the common non-attested ancestor of diverse forms attested centuries later in different languages of the same family. What Guillaume was trying to do in the 1919 volume was to apply this method, not to the forms, the physical signs, but to the meanings, the various observed senses of the article in Modern French. This was a significant innovation. An even more significant innovation was the fact that he was trying to apply this method of analysis not in order to reconstruct a non-attested form which had existed some centuries earlier, but in order to reconstruct the non-attested potential meaning of the article which, he postulated, the speaker must somehow have in mind before beginning to speak, before beginning to construct the observed sentence with its particular use of the article expressing one of its actual senses. Guillaume was applying the comparative method, not to forms separated by the long stretch of historical time it takes for phonetic change to occur, but to meanings separated by the extremely short stretch of operative time it takes for a speaker to bring an article to consciousness for a particular use in a particular sentence. He was actually applying the venerable method of comparative linguistics to the moment of speech in an attempt to reconstruct and describe the unity underlying the various observed senses of the articles (for a more detailed treatment, see Valin, to appear). The very originality of this attempt scandalized most linguists of his day so that they failed to appreciate what Guillaume was trying to do and even today many remain incredulous when confronted with the idea that some mental process or operation is required for us to use an article, or any other word for that matter. But with recent progress in neurophysiology and related fields, even linguists are becoming less incredulous when they hear speak of the mental mechanisms on which our grammatical systems are based.

Guillaume failed in his early attempt to find the underlying or potential meaning of each article because at that time he had not yet discerned clearly enough the basic parameter for his analysis: the micro-time¹ involved in any subconscious mental operation. So it was not until over twenty years later that Guillaume finally saw for each article the single meaning underlying and permitting its various uses. But this is another story which I cannot go into here (see Hirtle 1984). The

important point for us is that even when confronted with his failure to find the 'basic', or better, potential meaning of those two words, which can express an extraordinary range of senses, including, at the limit, contrary senses — even then Guillaume did not throw up his hands and declare that the link between sign and meaning is disorderly but persisted in his assumption that it is somehow orderly, that a linguistic sign somehow has one meaning.

From this it becomes evident that Chomsky and Guillaume adopt contrary positions with regard to that relationship which is fundamental to language and consequently to linguistics. For the one, the relation between sign and expressed sense is inconsistent, disorderly; for the other it is somehow consistent, orderly. At the outset, of course, neither of these linguists offered proof that his position was the valid one since in order to do any work at all in linguistics one must adopt either the one or the other: they really are starting assumptions, postulates. Furthermore, there appears to be no middle ground between these two positions: something is either inconsistent or consistent, disorderly or orderly.² The opposition between the two thus forms a watershed, a continental divide which, because it is a postulate, a necessary starting assumption, obliges every linguist to choose, wittingly or unwittingly. This is why it is important to be aware of the consequences entailed in choosing one or the other. We shall examine five of these consequences in the light of Bronowski's observation (1965:13) that 'All science is the search for unity in hidden likenesses'.

3. CONSEQUENCES

3.1 FORM VS. MEANING IN GRAMMATICAL THEORY. The immediate consequence of a linguist's meaning/sign option is obvious: theory must be based on whatever is the unifying element in the variously observed phenomenon. For those who adopt the Chomsky option, 'meaning will be relatively useless as a basis for grammatical description' (1957:101) because of its 'imperfect correspondences' with the form, the sign. That is to say, it is the form or sign, not the meaning, which shows constancy. From this it follows that:

only a purely formal basis can provide a firm and productive foundation for the construction of grammatical theory. (1957:100)

Most people are familiar with this dictum but not all have reflected on what it entails for a grammatical system: it means that the basis for a grammatical system will be the relationship between the physical signs involved. That is to say, for a system like that of tense in the indicative in English, the basic relation is that between \emptyset and *-ed*: Now this can account for verbs like *bake/baked*, *paint/painted*, etc., in fact for most verbs in English, but we also have *sing/sang*, *is/was*, *put/put* etc. The problem posed here is a real one: how can adding the *-ed* suffix be considered the same thing as changing a vowel, or as changing a vowel and adding a consonant, or making no change, etc.? What is the 'hidden likeness' here, the unifying element, which permits us to consider them as part of the same system? Some of Chomsky's predecessors attempted to grapple with this difficulty but the outcome was, at best, amusing and in any case failed to meet the criticism that only a hidden appeal to meaning permits us to consider such vastly different 'formal devices' to be expressions of the same tense. To my knowledge nobody has yet given a satisfactory solution to this problem, inherent in any approach which purports to be 'purely formal'.

On the other hand, for those who opt for a constancy in the meaning/sign relationship, the Guillaume option, meaning will be the necessary foundation for grammatical theory since it is meaning which is the unifying element, the unity in

hidden likenesses underlying the observed phenomenon. That is to say, the basis for a grammatical system is the relationship between the meanings involved: the opposition between the meanings 'non-past' and 'past' remains constant whatever the physical means used to express it. Of course, this option is confronted with its own inherent problem: explaining how the diverse senses of the same morpheme can arise from a single basic or potential meaning. For example, the *-ed* tense is normally used to express 'past' in *He opened the window*, but we can also use it when speaking of something present or even future, as in *If we opened the window, we...* What is the hidden likeness here? Is there an underlying unity of meaning here which permits us to consider this the same form in each case? A solution based on Guillaume's technique for analyzing meaning has been proposed for this use (see Hirtle to appear) and for a number of other similar uses. On the other hand many more such problems remain to be analyzed in this way.

All this brings us to consider the nature of a grammatical system. Like any other system, a grammatical system must be a set of relationships between items. Our basic option, however, determines the nature of these items: they are either signs or meanings, or if you prefer, either 'formal devices' or 'semantic notions'. Now the set of relations instituted between signs, items which are essentially phonological or phonetic, will be very different from relations between essentially notional or meaningful items. Our basic option thus leads inevitably to two very different types of grammar, and one of the first manifestations of this difference is found in the relations between words, in the syntax.

3.2 LANGUAGE: RULE-GOVERNED OR MEANING-EXPRESSING. The currently widespread view that a theory of syntax must be established without any appeal to meaning is, of course, a necessary consequence of the 'purely formal' option. From this point of view, since a grammatical system is essentially a set of relationships between forms, between physical signs, the whole of syntax must be described in these terms. Attempts to establish a form-based theory have focused on 'capturing' the frequently observed facts of discourse by means of rules, which describe regularly occurring correspondences between forms in the data. For example it is traditional to describe the syntax of *some* and *any* in terms such as: 'use *any* in negative contexts, *some* in positive contexts.' There is, however, no reason given to explain why the sounds of *any* are compatible with the sounds of a negative word like *not* or *nobody* whereas the sounds of *some* are not. That is to say, the relationship between the sign of the quantifier and the sign of the negative is not motivated, not depicted as the outcome of some factor inherent in these two forms and so the link between them remains arbitrary, something not to be understood but simply to be accepted as such. Similar remarks might be made concerning the rule for the use of *do* auxiliary in questions and negatives, as well as the rule of verb agreement in English whereby an *-s* suffix is found on the non-past of the verb provided that there is no *-s* on the headnoun of the subject, and vice versa. Such ways of presenting some of the most frequently observed facts of English syntax are convenient because very succinct, but they depict only the correspondences between disparate items, not the hidden likenesses sought in a science. And this appears to hold for all purely formal attempts to theorize syntax: the relations between words are observed but not explained.

Notwithstanding this limitation, rules of this type have come to be seen in a very different light, perhaps because they are exemplified so frequently in usage. Many linguists have come to consider them, not just as a convenient mode of description, the result of observing usage, but as a condition governing usage, as a prior constraint on speakers, and this to the point that it is felt by some that speakers

actually obey the rules. Thus what was originally a descriptive device, a means of summarizing regularities observed in the data, is hypostatized and so comes to be viewed as a causal device, a means that somehow governs how a speaker produces discourse.

For a meaning-based approach, on the other hand, such rules of usage simply pose the problem of finding an explanation since all facts of syntax are to be explained in terms of meaning. Why does *any* occur with negatives? Why is *do* auxiliary used in questions and negative sentences? Why do third person singular non-past verbs take an *-s*? It is often very difficult to explain such 'regular' usage, such commonplace observations. Thus it has taken many years of research to show that the frequent compatibility of *any* and incompatibility of *some* with negatives is a direct consequence of their respective meanings (see Hirtle 1989). Likewise for *do* auxiliary. And work is still required to explain satisfactorily verb/subject agreement in the non-past in English because the meaning of the *-s* suffix of the verb has not yet been clearly discerned.

Thus a purely formal approach tends to reify a rule describing usage and so consider it as an explanation whereas the meaning-based approach attempts to explain the observed occurring and positioning of forms in terms of the meaning they express. This first difference with regard to syntax concerns 'regular' usage, but when it comes to 'irregular' usage the difference is even more marked.

3.3 'EXCEPTIONS' AS DATA. Describing by means of rules, although valid and indeed economical for the most frequent type of usage, does not account for the less frequent, 'irregular' or exceptional uses. For example, cases where *some* cohabits with a negative form (e.g. *I don't understand something in this text.*) or where *any* is used in a strictly positive context (e.g. *Any good household cleaner will do the job.*) are not 'captured' by the traditional rule. Likewise for negatives without *do* (e.g. *He suggested I not go.*) or the rule for verb/subject agreement in English in cases of 'disagreement' (e.g. *My family are too careful of me.*). Indeed, one wonders how such cases could be described in terms of a rule of syntax based on purely formal criteria.

A meaning-based approach, on the other hand, undertakes to explain all uses, frequent or rare, of native speakers (who share the same linguistic system). Occasional uses such as those just cited can be explained on the basis of the meaning expressed by tracing the sentence meaning back to the word constituents involved and contrasting it with the meaning expressed by usual, 'regular' usage. Thus *some* with its sense of posing existence would normally contradict *not* with its sense of negating existence, but if no such incompatibility of sense arises, as in the above example, we can use them in the same context. And in saying *My family are...*, the speaker wishes to express the intervention of each member of the family, rather than the family as a single unit. In all cases, frequent or rare, the role of speakers is the same: to establish syntactic relations between the meanings of words in order to express what they have in mind, i.e. the experiential content which prompted them to speak in the first place. Thus what governs usage is the meaning to be expressed, meaning which is a representation by means of words of the speaker's momentary experience (see Hirtle 1994).

The two approaches are thus far apart here. Autonomous syntax, which is essentially a matter of relationships between forms, cannot accommodate irregularities in these relationships. Such infrequent uses are therefore considered at best peripheral but often as something not to be included in the data. Meaningful syntax, on the other hand, essentially a matter of relationships between meanings, accommodates infrequent uses as infrequent ways of joining ideas together. In fact,

an expression where there is no relationship between the ideas would be nonsense, incomprehensible, unthinkable and so cannot arise in the data because a set of words which does not make sense, at least to the speaker, simply would not be a sentence, would not reflect a human experience.

Thus a linguist working in a meaning-based approach actively seeks out every attested use because every attempt on the part of a speaker to express some experiential content constitutes data, facts to be explained, a further test for proposed explanations. On the other hand, in a purely formal approach a linguist makes a selection in the data and considers only the great bulk of uses because they provide supporting evidence. To avoid the obvious criticisms involved in selecting data in this way, attempts are made to refine the descriptive net of rules so as to capture more and more of the rare uses. Such attempts have, however, resulted in a very complex set — some would say a jungle — of rules and this has posed a problem for those concerned with how we come by our mother tongue.

3.4 ACQUIRING THE MOTHER TONGUE. The very fact that infants acquire the ability to express themselves through some human language with all its complexities as well as the extraordinary rapidity with which they do it call for some explanation. Those who assume that rules govern usage are confronted with the problem of how 'children learn the dizzyingly complex underlying rules of spoken language' as one writer put it recently. Such linguists are led to postulate that some of these rules — supposed to be common to all languages, a set known as Universal Grammar — are innate. It has even been proposed that such rules are acquired by genetic mutation. This need to assume innateness to explain how infants acquire a set of rules, postulated as governing usage, is viewed by many as a *reductio ad absurdum*, a clear indication that the starting assumption of this approach is at fault.

Linguists who appeal to meaning are also obliged to infer something innate, namely, the existence of some innate capacity permitting infants to acquire their mother tongue. Since, in this approach, a grammar is essentially a systematic organization of abstract ideas, of grammatical meanings, the innate capacity is assumed to be that required for the acquiring and organizing of any sort of ideas. It is, in fact, the capacity required by any person to learn how to think in a human fashion — including that for generalizing (and particularizing), for establishing relationships — the very capacity assumed to be innate by most scholars who consider human thought a specific characteristic of human beings. In this approach, therefore, there is no need to postulate anything innate other than what is already postulated, implicitly or explicitly, by most other scholars concerned with things human.

For a purely formal approach, the problem of acquiring language leads into a blind alley, an outcome which reflects most unfavourably on the starting assumption. For a meaning-based approach, the same problem leads to a position commonly adopted by philosophers and others to explain the existence of human thought. The starting assumption in this case receives some confirmation from such an outcome.

The several points brought up so far make it quite clear that the very notion of syntax is thus conceived in two different ways. On the one hand it is the rules of syntax which permit the use of words in a given structure because syntax, being autonomous, is seen as a set of arbitrary relationships between forms, between phonological units. On the other hand it is the meaning within the words themselves which determines the syntax because a syntactic relationship is seen as a relation of coherence between meanings. The immediate consequence of this is that

the linguist will focus either on the sentence, the unit of syntax, or on the word, the unit of meaning, and this brings us to the most fundamental difference between the two approaches.

3.5 THE PLACE OF THE WORD IN A GRAMMAR. A purely formal approach depends on the observation of differences in the physical realization of discourse. In English, variability in the phonological form of words is relatively restricted: most substantives can take only an *-s* suffix, most verbs only *-s*, *-ed* and *-ing* and many other words are invariable.³ Since so many English words appear in the sentence as an indivisible form, both the relative position and the co-occurrence of words is of considerable importance to indicate grammatical meanings in discourse. As a consequence, for a linguist whose first concern is the physical sign, the sentence will be the focus of interest because it is here that all signs, be it the form, the order or the co-occurrence of words, can be observed. That is to say, a 'strictly formal' approach to language leads to a theory which is primarily syntactic, based on the sentence, because in a language like English much of the grammatical meaning is signified by means of syntax. This leads to the view that rules govern usage, as seen above, that syntax conditions meaning. (In certain other languages, Eskimo for example, where word order is of little importance in this respect, the main focus would not be on the sentence.)

On the other hand, an approach based on meaning aims at explaining the facts of syntax in terms of meaning and so is constrained to examine the units of meaning that enter into syntactic relations, i.e. the words. For example to explain why *any* is compatible with negation whereas *some* is usually not, it was first necessary to work out, using the appropriate techniques of analysis, the underlying meaning of each quantifier and then to show how they form a small binary system. Only after these meanings had been clearly discerned did the facts of syntax become understandable. The observed relations with negation were seen to be consequences of the underlying meaning of the quantifier, and even in contexts like questions, where both quantifiers can be used, the slight differences of meaning expressed were seen to be the result of the underlying meaning postulated for the quantifiers. The principle involved here — meaning conditions use — applies in all cases. Thus it can now be demonstrated how the meaning of, say, auxiliary *have* determines its co-occurrence with the past participle of the verb, whereas auxiliary *do*'s meaning is the condition for it to co-occur with the infinitive. A meaning-based approach seeks to describe how any word is constructed in thought, meaningwise, in such a way as to permit it to be used in a sentence, to permit it to enter into the syntactic relation the speaker wishes to establish for it. That is to say, a meaningful approach to language leads to a theory based on the word because in any language the first form for expressing meaning is the word and so the nature of a syntactic relationship is seen to be conditioned by the nature of the words involved. Without a theory of the word in a given language, no theory of syntax is possible since morphology (= the grammatical meanings of a word) conditions syntax (= the grammatical use of a word).

We can see here that the two approaches are poles apart. Because a purely formal approach attempts to establish a theory of grammar strictly in terms of the relations between forms, it ignores the make-up of words, their meaning components, except when they exhibit a formal variation. A meaningful approach, on the other hand, bases grammatical theory on the meaning of words and so can establish a theory of the sentence only after a theory of the word has been sufficiently developed. An approach that seeks to provide a theory of the word as well as a theory of the sentence is preferable to one that largely ignores the word

because the word, or more exactly the vocable, is after all a true universal of human language: absolutely every act of language everywhere involves words, and a theory of the word must explain to us why this is so. But this is a subject which cannot be developed here (see Hirtle 1993 for comments).

4. CONCLUSION

From this summary survey it can be seen that the manner of postulating the basic relationship in human language, that between meaning and sign, has important consequences both for the way we view the nature of language and for the way linguistic theory is developed. Postulating the basic relationship as disorderly, inconsistent, leads to a view of grammar as essentially a series of rules with no apparent organizing principle grouping them together. As a consequence, syntax is presented as an arbitrary collocation of forms justified not by the forms themselves, the physical manifestation of words, but by the very fact that they occur frequently enough to be described by a rule, less frequent collocations being disregarded. And to justify the rules themselves another postulate is required: they are declared innate. Postulating that the basic meaning-sign relationship is orderly, consistent, leads to a view of grammar as essentially a systematic set of abstract meanings for organizing the lexical meanings called on to represent the speaker's momentary experience. Each such lexical meaning is organized, grammatically systematized into one variant of a single, language-specific grammatical/lexical form, the word. The corresponding set of signs in appropriate order permits the various meanings to be expressed within the framework of another grammatical/lexical form, the sentence.

Our view of the basic relationship determines not only our view of language but also the scientific value of the linguistic theory it gives rise to. A phenomenon conceived as inconsistent, disorderly, haphazard remains inexplicable whereas discerning some consistency, order, rationality makes explanation possible thanks to the principle of this order. Hence 'unity in hidden likenesses' is sought by all science. This is why it is so important for anyone given to reflecting on the workings and nature of language to determine whether the relation 'linking sense to sound and light' is orderly and consistent or not. This postulate will determine not only one's view of the nature of language and consequently of linguistics, but also one's view of the nature of human thought itself.

NOTES

¹ Introduced by Valin (cf. 1994:151), the term 'micro-time' designates the time necessarily involved in any of the mental operations of language, time which is so short that with the means available today we cannot measure it, let alone become conscious of it.

² It has been suggested that perhaps some meaning/sign units are orderly, others not. This would imply that the meaning/sign relationship is not really fundamental, as assumed in the present article, since there would be some other principle governing its two manifestations, but what this might be remains a mystery. The question is important because without some fundamental principle it is hard to conceive how a language can constitute a single entity. Indeed, awareness of the variability of both signs and meanings has led some linguists to propose that there is no such thing as the English language. Such a proposal amounts to accepting the appearances of language, 'what we see, as we see it' with all its 'disorder', as the basic reality of language and so precludes the need to 'look for order' which, according to Bronowski, is the very task of science.

³ For this reason English has been called 'an eroded language', an apt description for those who adopt a purely formal approach. For those who consider meaning primary, however, it is a misleading description because it suggests that English words have lost some or all of their grammatical meanings, and this is not the case.

REFERENCES

- Bloomfield, Leonard. 1933/1966. *Language*. New York: Holt.
- Bronowski, J. 1965 *Science and human values*. New York: Harper & Row.
- Chomsky, Noam. 1957/1962. *Syntactic structures*. (*Janua linguarum*, 4.) The Hague: Mouton.
- Chomsky, Noam. 1966. *Topics in the theory of generative grammar*. (*Janua linguarum*, 56) The Hague: Mouton.
- Guillaume, Gustave. 1919/1975. *Le problème de l'article et sa solution dans la langue française*. Paris: Nizet et Québec: Les presses de l'Université Laval.
- Hirtle, Walter. 1984 *Gustave Guillaume – a primer*. Tenth LACUS Forum 1983. ed. by Allan Manning, Pierre Martin, Kim McCalla. 79-84. Columbia, S.C.: Hornbeam Press.
- Hirtle, Walter. 1988 *Some and any: exploring the system*. *Linguistics* 26. 443-477.
- Hirtle, Walter. 1993. *The Word: Why?* *Proceedings of the XVth International Congress of Linguists*, eds. André Crochetière, Jean-Claude Boulanger and Conrad Ouellon. Vol. 1, 47-58. Sainte-Foy: Les presses de l'Université Laval.
- Hirtle, Walter. 1994 *Meaning and referent: for a linguistic approach*. *Word* 45. 103-117.
- Hirtle, Walter. To appear. *The simple form again: an analysis of direction-giving and related uses*. *Journal of pragmatics*
- Saussure, Ferdinand 1916/1955. *Cours de linguistique générale*. Paris: Payot.
- Valin, Roch. 1994. *L'envers des mots. Analyse psychomécanique du langage*. Sainte-Foy: Les presses de l'Université Laval and Paris: Klincksieck.
- Valin, Roch. To appear. *The comparative method in historical linguistics and in the Psychomechanics of Language*. *Lynx* 5.