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MOTIVATING TAGMEMIC CONCEPTS

Bruce Waters

Summer Institute of Linguistics

I SUMMARY OF HUDDLESTON'S ARTICLE "THE SYNTAGMEME"

Huddleston's (1971) article examines the concept of the syntagmeme in the light of Longacre's "dual structural criterion", the latter being the notion that two (at least) differences are needed for contrast between syntagmemes. Huddleston's main thrust is that the notions of contrast and variation, while well-motivated linguistically in classical phoneme theory, are not at all well-motivated when considering grammatical constructions. The dual structural criterion, which is founded on the assumption that contrast between and variation within grammatical constructions is well-founded, is at present the only universally applicable criterion which has been put forward as a means of uniting syntagmas (Huddleston's "grammatical constructions") into syntagmemes (leaving aside the alternative criterion of using native-speaker intuitions).

In relation to the syntagmeme concept, there are three problems to be dealt with. The etic/emic distinction (reflected in the name syntagmeme), the contrast/variation distinction (since the syntagmeme is assumed to contrast with other syntagmemes at that level, but not contrast with its various manifestations), and the dual structural criterion (which is used to "discover" syntagmemes). Firstly, we must

ask if the dual structural principle is an appropriate criterion for uniting syntagmas - that is, does it have sound linguistic motivation? Secondly, what do "contrast" and "variation" mean, if anything, when applied to grammatical constructions? Thirdly, in the grammatical hierarchy, how appropriate is it to equate the etic/emic distinction with the notions of contrast and variation? In classical phoneme theory the concepts etic/emic and contrast/variation amount to much the same thing. It is then assumed, without a shred of evidence, that emic versus etic is equivalent to contrast versus variation at every other point in the tagmemic model - in particular, within the grammatical hierarchy. However, it should be clear that emic elements must be those elements with respect to which native-speakers have intuitions (that is, they are what such a person "knows" about his language - even though the majority of such knowledge may be subconscious). In this sense, every grammatical element must be viewed as emic, since to change one such unit for another will always produce a native-speaker response. Indeed, this is a significant blind spot in tagmemic theory. No one has yet produced any evidence that the etic/emic distinction is appropriate to the grammatical hierarchy.

In his article, Huddleston asserts the following:

(1) that the dual structure criterion lacks linguistic motivation,

(2) that the notions of contrast and variation, as applied in classical phoneme theory, cannot be applied in the grammatical hierarchy, and

(3) that the etic/emic distinction has no relevance for grammatical constructions.

Huddleston gives both theoretical and empirical grounds for his assertions, a detailed account of which was presented during the seminar this paper was given. I do not intend to reproduce his arguments here, but would recommend that his article be studied in detail.

In this paper, I will contend that Huddleston's assertions (1) and (3) are valid, but that assertion (2) may be made void by redefining what is meant by the notions of contrast and variation. Of course, we could define contrast (and variation also) in any of a number of ways, but there would be no reason why the result should be linguistically insightful. So whatever content we give to the words "contrast" and "variation", the following constraint must apply: "contrast and variation (re-interpreted) must be applicable to both grammar and phonology, and in particular, they must lead to the same classification of contrastive units at the phoneme level as do the classical definitions of contrast and variation at that level". Peter Fries (1974) has laid the foundation of such a definition of contrast as "contrast in field". This is an extension to the grammatical hierarchy of contrast as defined by significant oppositions of phonetic distinctive features. However, Fries does not see any need to subtract semantics from the re-interpreted notion of contrast; but unless he does this, Huddleston's criticisms are no less apt than before.

I shall show later how contrast and variation can be defined in such a way that the above constraint is satisfied, and at the same time, Huddleston's criticisms avoided.

II MATRIX REPRESENTATIONS

Do we have any alternative approach for describing structure? Huddleston invokes Pike's (1962) idea of matrix theory, saying (p. 41) "this innovation undoubtedly constitutes a significant improvement in the tagmemic model". But he goes on to say, "I would claim that it has not as yet had its due impact on the theory - that it has not in fact been satisfactorily incorporated into the model". Before dealing with the difficulties of matrix theory in tagmemics, let us consider how it is useful.

Huddleston states (p. 41) "matrix theory removes the need for the arbitrary dual structural criterion - or any other criterion for a syntagmeme/allosyntagma distinction: there will be as many distinct construction types as there are different combinations of variables. Thus to compare two constructions it will be sufficient to show what structural properties they have in common and along what dimensions they differ; we do not need to ask the further question whether their differences are sufficient to establish them as emically distinct rather than variants (allos) of a single syntagmeme". Conceivably, matrices could be used to present information of this type. Therein lies their usefulness.

Turning now to the problems inherent in matrix representation, let us consider the following six sentences given by Huddleston:

(1) John saw Peter. (2) John saw Peter yesterday.

(3) Peter was seen by John. (4) Peter John saw.

(5) Did John see Peter? (6) When did John see Peter?

The following dimensional values are relevant for the construction of a matrix illustrating the relationship obtaining between these sentences:

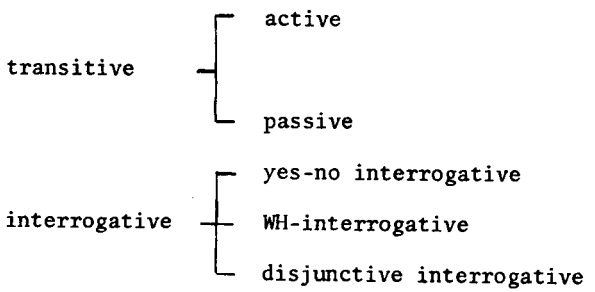
a. transitive/intransitive b. active/passive

c. specified time/non-specified time d. declarative/interrogative

e. yes-no interrogative/WH-interrogative

f. marked theme/unmarked theme.

Some of these dimensions are inter-dependent. Transitives may be either active or passive, while interrogatives may be further subdivided into yes-no interrogatives and WH-interrogatives. (We can add disjunctive interrogatives as a further value.)



Disjunctive interrogatives may be exemplified by constructions of the type:

(7) Did John go to town or did he go to Mary's house?

Hence we see that dimensions a. and b. are inter-dependent, as are d. and e. So there are only four independent dimensions in the above data (excluding sentence (7), namely a., c., d. and f.)

We encounter problems when we construct two-dimensional charts for contrasts involving more than two independent dimensions. Firstly, there is a lot of arbitrariness inherent in the choice of which dimensions to take as "primary". For argument's sake, let us consider only the above-mentioned independent dimensions. For the two charts which follow, which is the better?

		marked theme		unmarked theme	
		spec. time	non-spec. time	spec. time	non-spec time
trans.	interrog.				
	declar.				
intrans.	interrog.				
	declar.				

Chart 1.

		interrog.		declar.	
		spec. time	non-spec. time	spec. time	non-spec. time
marked theme	trans.				
	intrans.				
unmarked theme	trans.				
	intrans.				

Chart 2.

Of course, both charts handle the same facts, and two more equivalent charts could also be constructed from these four independent dimensions. Given that one is chosen, the reader of the chart is apt to gain the erroneous impression that the "outer" dimensions on the chart are more "basic" or "primary" in some sense. This confusion arises because charts need to include the dependent dimensions as well as the independent ones - and in this case, one dimension <u>is</u> "primary".

For example:

		X	Y
interrog.	WH-interrog.		
	yes-no interrog.		
	disjunctive interrog.		
declarative			

Chart 3.

Here, interrogative is more "primary" than WH-, yes-no or disjunctive interrogatives. But in chart 2., for example, it would be a mistake to think of "marked theme" as more primary than "transitive" or "intransitive".

Secondly, the more dimensions that are put on a chart, the greater the complexity, the greater the frequency of empty "boxes" in the chart, and the harder it becomes for the reader to gain insight into the language's structure. For example, for the six sentences above, a minimum of six rows and four columns would be needed (that is, twenty-four boxes) for just six sentences. Clearly, as we expand our data, we expand the matrix rapidly, and there is a limit to what can be fitted on a page.

Huddleston also criticizes matrices on the grounds that they are, as Postal (1966) put it, "ad hoc devices thrown in to talk about the relations between sentences", and, as such, constitute only an informal addition to a theory, rather than a formal generative device. This is not to say that they are valueless - for as far as description is concerned, they can be quite useful. But Huddleston's point is that they are not "generative" in the sense that tagmemic formulae are. His argument is more detailed than this, and is well worth careful consideration. Of course, by "generative" we mean this in the Chomskian (1964, p. 51) sense. That is, not simply that a non-deviant terminal string is generated, but also that the structural description

assigned to the string mirrors native-speaker intuitions (that is, has "descriptive adequacy" (Chomsky, 1964, p. 63)).

III THE ALTERNATIVE PROPOSALS OF BEE AND OF FRIES

Darlene Bee and Peter Fries both claim to have well-motivated criteria for treating contrast in syntax.

Bee uses a weighting system. Constructions may vary with respect to function, class or distribution. She asserts, without empirical evidence, that distribution is by far the most important factor of the three. Quantitatively, she claims that distribution is twice as important as each of function and class, as far as the assigning of "weights" is concerned. To decide whether two constructions should be united into the one "emic" construction type, one applies the following procedure. Each construction must be evaluated so as to determine what factors are involved (i.e. functions present, filler classes, order, etc.) and depending on whether each is the same, similar or different when compared with the corresponding factor in the other construction, numerical values ("weights") are assigned for each such factor and the sum taken, for each construction, over all the factors involved. According as this sum is low, high, or intermediate; the constructions will be variants of one "eme", realizations of two different "emes", or of uncertain status, respectively.

The system of weighting is not language specific (if it were, it would probably be far more useful as a tool for "discovering" native-speaker intuitions or, at least, approximations thereto) but is set up as a wholly etic grid. She claims "...this is taking a rather drastically different view of the analysis of tagmemic units than has been taken before, and it means we will have to cover quite new ground". I suspect, however, that her claim is somewhat of an over-statement. She includes transformation potential as one possible mode of contrast, so that by treating active/passive clause pairs as "variants" of one clause type, she avoids one of Huddleston's criticisms (Huddleston, 1971, p. 40). Nevertheless, the theoretical difficulties outlined by Huddleston still apply. Firstly, the method she proposes is scarcely less ad hoc than is Longacre's. His method implies "there must be at least two differences - but differences are only highly significant if nuclear tagmemes are involved"; while Bee's method implies "there will probably be several differences, many of which will not be important except in their cumulative effect on the weight". There is no real difference in kind here; both methods assert that different factors are not equally important in establishing contrast. That is, while the two methods differ in the details of how to evaluate the degree of difference between two constructions, the underlying principles are exactly the same for each method.

Secondly, the problem of what is meant by contrast and variation at "above-the-phoneme" levels still remains. For example, native

speakers would undoubtedly say that "John hit Mary" and "John hit Mary in the garden yesterday" are "different" (that is, they react to these as two "emes"), yet Bee's method would make them variants of one syntagmeme. In fact, there are really two problems here: (1) what is meant by "contrast" and "variation" at this level, and (2) what meaning can we give to "etic" and "emic" at this level? Bee gives no evidence that the latter distinction is involved here.

Now we shall examine Fries's method. Fries specifically addresses himself to the problem of the meaning of contrast and variation at "above-the-phoneme" levels, and he does succeed in defining these concepts in a way that can be extended from the phoneme level to all higher levels, and in the grammatical hierarchy, in a hierarchic model. In fact, his definitions are a restatement of Hallidayian systemic grammar in respect to the notion of "system". Fries's approach closely parallels that put forward by Pike (1962) and Huddleston (1971), that is, comparing constructions with respect to how they may differ along various dimensions. However, instead of the term "matrix", Fries uses "system" or "field". Fries makes an interesting claim (c.f. Bee, Longacre, Pike and others), namely, that the dimensions that are relevant for establishing contrast are largely "functions" (from his article it is clear that he also includes such categories as transitivity, mood, theme, etc.). He is claiming that "class" rarely is involved, and that "distribution" is never involved. Actually, his definition of contrast makes the exclusion of distribution a logical necessity.

He defines "field" as "...a set of language units which differ from each other along a certain finite set of parameters. In the grammatical hierarchy, the units are syntagmemes and the parameters [dimensions] of each field are expressible in terms of grammatical functions" (p. 25). This definition, as applied to phonology, is as follows:

/p/ and /b/ can be said to be in contrast, not because of their differing effects when inserted in a frame /__in/ (c.f. Huddleston, 1971, p. 40), but because they differ with respect to the feature [±voice] - which is one parameter (dimension in the "system" or "field" of bilabial stops in word initial position. What then of the concept of "variation"? For the bilabial stops, while the voicing parameter is diagnostic for contrasting one member in the system with another, the phonetic feature of aspiration (which is another valid parameter, no less than voicing) does not. That is, certain parameters are held to be significant for establishing contrast, while others are not. The problem then boils down to deciding what makes one parameter significant, and another non-significant. Huddleston's answer (1971) was to say that the diagnostic feature is the one which correlated with a change in meaning in a unit at a higher level. However, Huddleston's characterization of contrast as necessarily involving meaning is unnecessarily strong. It is possible to give a weaker definition of contrast, namely, <u>two units can be said to be in contrast if, at a higher level, treating them as contrastive is descriptively useful</u>. (It should be emphasized that native-speaker intuitions

have nothing to do with this principle. Such intuitions have, in theory at least, been incorporated formally within the various construction types being considered.)

Let us take an example to illustrate one of the ways in which setting up two contrastive units may be "descriptively useful". In some Philippine languages, CV and CVC are possible syllable structures; but whereas CV syllables may occur anywhere in a word, CVC syllables may occur only word-finally. Therefore, on the basis of making the simplest possible distribution statements of syllables into the word, it is better to posit two contrastive syllable types, CV and CVC, rather than one CV(C) type. The value of such a definition of contrast lies in the fact that we can meaningfully speak of contrast between units at all levels of the grammatical and phonological hierarchies, without invoking the notion of a constrast in meaning. Of course, once it is established (on the grounds of descriptive usefulness) what are the diagnostic parameters for describing contrast between syntagmemes, the remaining parameters can be handled as variation within syntagmemes.

All this only serves to bring the "etic/emic" problem into sharper focus. There is no way that syntagmemes, so defined, could be "emic" while the constructions from which they were derived were "etic". What is involved here is not a difference between "inside" and "outside" views, but something closer to Chomsky's idea of explanatory adequacy (Chomsky, 1964, p. 63).

It is regrettable that the contrastive unit should be called a syntagmeme. Such a name suggests "emic" status for something which may not mirror native-speaker intuitions. Because of the "descriptive usefulness" requirement, the construction involved may encompass several units at a level of generality pertaining to which a native speaker may have no difinite intuitions at all. We should not characterize grammatical constructions as either etic or emic, but simply think of them as contrastive construction types. It would be less confusing if we could have a name for them that avoided the emic/etic red herring.

A FURTHER NOTE

George Elliot pointed out that Harris tried to define linguistic elements apart from meaning, and succeeded only in failing. I would agree that we do need "meaning" as part of the notion of contrast at the phoneme level. However, I maintain that we need to give "contrast" and "variation" a different meaning within the grammatical hierarchy, along the lines that I have suggested.

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