

GRAMMATICAL AND CULTURAL FUNCTION IN TAGMEMICS

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Robert E. Longacre (1965) lists the correlation of function and set as one of the fundamental insights of tagmemics.¹ In this article we briefly examine the tagmemic notion of function and suggest in particular that it be extended more systematically into the realm of cultural studies.²

OVERVIEW

The basic theory of tagmemics as originally proposed by Pike (1954, 1955, 1960; revised edition 1970) has been pedagogically expounded by Elson and Pickett (1962), Longacre (1964) and Cook (1969). However, in each case tagmemic notions are applied solely to grammar. The larger implications of Pike's view of language in relation to behavior have not yet been fully developed.

In Pike's view the structure of language consists of three hierarchies: the lexical, phonological and grammatical. Initially Pike saw the minimal units of these three hierarchies as, respectively, the morpheme, phoneme and tagmeme (1958:275). Later³ the minimal units were described as the lexeme, phoneme and morpheme. This shift in terminology is important and reflects at least two facts: (1) the functional role of the tagmeme has been developed within the grammatical component, i.e. within this component the term "tagmeme" seemed appropriate;⁴ (2) the lexical component has never been well defined and the unit referred to as a lexeme is still not.

In addition to hierarchy as a dimension of language Pike (1954:35ff) describes several modes or conditions by which units can be discovered or identified. The correlation between units and their distribution (now called a tagmeme, regardless of the hierarchy, e.g. Longacre, 1964:6) was called then by Pike the "distribution mode"; the "manifestation mode" allowed for the fact that units of behavior were observed to vary under certain, usually stateable, conditions. As such the manifestation mode embraced physical properties of the unit. On the other hand, the "feature mode", as the name suggests, provided for the distinctive features of a given unit. Each unit has particular characteristics or features which would identify it and contrast it with other

units. This mode however also allows the most abstraction of all, relating to what Pike calls "meaning and purpose in human activity" (1954:38). Modes of a unit could also be thought of as dimensions (1954:41n), except that modes as aspects of units have structure and are not simply parameters of structure.

A further tagmemic view allows the investigator to view language as "particle, wave and field" (Pike 1959). Longacre later (1964b) capitalized on this concept and presented an overall dimensional array of particle, wave and field, within the hierarchies of phonology, grammar and lexicon. In terms of transformational grammar (e.g. Chomsky 1964:62-3), it can also be suggested that tagmemic units viewed as particles relate mainly to observation or discovery, that units viewed as process relate to description, while units viewed as field relate to explanation. The latter should include the greatest number of generalizations and universal linguistic features. As Leech points out (1968:92) these three transformational perspectives may be viewed also as ascending levels of adequacy in evaluating grammars.

In Pike's "behavioral" model the "functional spot" (1954:34b) was determined by its role in a particular cultural setting. The spots were filled by units of behavior which were contrastive in terms of roles. The units, or in Pike's term, "class of segments" (1954:35a) were determined by cultural participants as "appropriate" to a given spot. It can thus be seen that even at this embryonic point in tagmemic history, situation role was implicit in the recognition of a tagmeme. However, this correlation of a "spot" on the one hand with a "class" on the other was but one part of Pike's overall view and was included within the "distribution mode" (1954:36a). Today, however, this correlative aspect of the tagmeme constitutes the main focus of tagmemic theory. In the first text-book printed which built upon this concept (Pickett 1956) the term "function spots and their fillers" (1956:3) is used. The distribution emphasis of tagmemic function is also evident in Elson's (1959:3) definition of a tagmeme:

"tagmeme is . . . slot-class correlation. A slot is any grammatical position (e.g. subject) which is filled by a list of mutually substitutable items (e.g. nouns) . . . A tagmeme is said to occur when a member of the class defined by occurrence in a given slot occurs in that slot as an act of speech."

Later Elson and Pickett (1960:16) modified the definition to read:

" . . . a SLOT is a grammatical position or function (e.g. subject) which is FILLED by a list of mutually substitutable items (e.g. nouns) . . . The tagmeme is the unit of grammatical arrangement involved in or resulting from this slot-class correlation. "

Still later (1964:57), they add that the slot-class correlation "has a distribution within the grammatical hierarchy of a language". Due to continual confusion they also clarify that slot refers primarily to grammatical function and only secondarily to linear position. A further modification later by Longacre (1964a:15) equates in turn a correlation of syntagmeme: tagmeme. His definition of a tagmeme follows:

"The tagmeme is a functional point (not necessarily a point in fixed linear sequence) at which a set of items and/or sequences occur." (1964a:15-16)

None of these definitions or textbooks elaborate upon the fact that Pike saw this correlation solely within the distributional mode.

EXTENSIONS TO THEORY

Postal (1964) criticized, among other things, the apparent weak generative capacity of a tagmemic grammar as well as the lack of formal presentation rules. As a result tagmemic grammars have since been adapting many variations.⁵ The first main revision was by Longacre (1964a, 1965) in which he not only attempts to carefully define operations upon tagmemic formulas but in which he also contrasts tagmemics with immediate constituent analysis. Longacre, for example, points out (1965:69n) that the colon between the symbols for function and set means "preceding function defines following set". However, the emphasis in tagmemic grammars is normally "set manifests function" due to the fact that functions were not justifiable on an abstract level, i.e. without some form. The possibility of dual function has presented difficulties and, as Becker (1967) and others have shown, much more information has had to be included in tagmemic formulae to adequately represent tagmemic function.⁶ Pike first indicated the problem with the use of such terms as Subject-as-actor, Subject-as-goal, and in his description of situational and grammatical roles in Philippine languages (1964b) he includes many more complex symbols. Because of the problem of representing all of the underlying relations of a given string of tagmemes at any one time Merrifield (1967) has suggested the abandonment of the term tagmeme, but not its concept. He sees the tagmeme as a relationship between grammar and semantics, or in Pike's terms between the grammatical and lexical

hierarchies. The functional or slot aspect is described within the semantic hierarchy while the categorical or set aspect is described within the grammatical hierarchy. Formally, rules relate the two hierarchies.

Merrifield (1967:44) maintains that both the syntactic and semantic components have class membership and phrase structure rules. The former is simply the name of the class followed by a list of its members. The latter are the well known branching or expansion rules. An example of a phrase structure rule with typical tagmemic formula in Merrifield (1967:49) is: VP = (NEG) (ASP) (AUX) NUC (DIR), where the obligatory nucleus is rewritten immediately below the first rule. The distinction between class-membership and phrase rules is not always as carefully provided for in tagmemic studies. Bee (1970), for example, has rules which rewrite functions as well as categories. In her examples the arrow which follows the function symbols specifies the class-membership, i.e. the kind of construction in which the functions are diagnostic, rather than simply showing an equivalence or phrase structure relation. Rather, function is the "peculiar office or role of one formally distinguishable part of a construction type in relation to other parts of the same construction" (Longacre 1965:65). The function of a particular part (unit) is distinguishable only by its relation to other parts. An Object or Subject function is recognized by their relationship to a Predicate and to each other. This is important and the inherently relational character of such functions must be kept distinct from such inherently non-relational notions as categories. Functions are thus properties of the grammatical patterns of the language while categories or exponents constitute the basic groups of units which can enter into a given pattern (Dik 1968:158).

By providing the functional relationships that are expressed strictly in terms of surface structures, tagmemics has not invariably described function. Rather in many instances the slots which are represented define a grammatical category. This is perhaps best seen in Perlmutter's (1970:253n) criticism of Brend's tagmemic description of Spanish clauses. He states that "The "slots" into which the mutually substitutable classes of Spanish clitic pronouns must go do not represent function at all, but rather person." He concludes that this is because the grammatical relations are marked in the underlying structure and not in the surface structure at all. If tagmemics were to focus on the grammatical relations of the clitics, according to Perlmutter, it would then have to "ignore the constraints on clitic order and co-occurrence in surface structure ..."

In many respects Fillmore (1968) has provided the kind of underlying features

that deep tagmemes would include. His first rules include underlying relationships of the type: Sentence → Modality + Proposition. The Case functions which represent these in deep and surface levels are of a fixed number and some of them do not appear at all in the surface grammar. His functional case labels are introduced directly into the Base component of a transformational grammar.

WIDER IMPLICATIONS

Simply because of the number of articles using the tagmemic model which have appeared on various languages throughout the world the future of the theory seems secure alongside of the more elegant transformational theory. What then makes the theory often seem so restrictive to others? Besides the question of whether it constitutes a general enough view of language, there is the additional question if it can really define language in relation to behavior in anything like the manner Pike indicated.

The discovery procedures as outlined in Longacre's textbook are very crucial to beginning language analysis.⁷ The surface structure of many diverse languages have also been presented by means of such a tagmemic model. In addition, the modification and exemplification of the theory seem to confirm Pike's prior assumptions about the hierarchical structure of language and about the necessary correlation of function with units. But the Latin model was also descriptively adequate in that it accounted for the basic facts of language structure and arrangement. So simply because much work has been done within the tagmemic framework is not sufficient justification for its future application.

A more telling argument against tagmemics is given by Perlmutter (1970;252n):

"To the extent that tagmemics is a substantive theory of language, then, it claims that the sentences of human languages can be represented in terms of "tagmemes" -- slots which represent grammatical functions. If tagmemics is to be a substantive theory, it must define and constrain the notion "grammatical function". If new "grammatical functions" can be invented ad hoc for each new language one encounters, then the basic claim of tagmemics is empty and it fails to make any substantive predictions about human languages."

Fillmore's "Case Grammar" asserts that the underlying deep cases of a grammar are in some sense universal. Tagmemics, in view of the rich resources of language data available in this framework, must begin to examine such issues. In Becker's tagmemic study of the English "subject tagmeme" he outlines 11 variable deep functions of the subject. His agent, instrument, goal, time and location correspond closely to Fillmore's agentive, instrumental, dative and locative cases. Fillmore's factitive case may correspond to both of Becker's state and act.

Finally, if we return to Pike's original interest in the structure of human behavior, tagmemics has made substantial claims. It claims that the nature of human behavior is a tagmemic one, i.e. one in which there is an association, a correlation between functional role and manifesting set.

NECESSITY FOR A CULTURAL TAGMEME

According to Pike the "functional spot" (1954:34b) could be determined by its role in a particular cultural setting. The spots were filled by units of behavior which were contrastive in terms of roles. Unfortunately, the most neglected aspect of tagmemics has been where Pike first began it all: with what can be called the cultural tagmeme. The cultural tagmeme is a correlation of cultural function or role on the one hand with the language (i.e. linguistic forms) generally spoken in association with or to express such roles. As such the cultural tagmeme is not equivalent with the present tagmemic lexicon. It is true that the surface representation of cultural tagmemes may often be expressed in terms of a dictionary or thesaurus. However, the lexical sets in lexical domains, lexical oppositions, and lexical matrices as proposed by Longacre (1964:6) are in fact more similar to manifestations of what might be called cultural syntagmemes. The pattern points of such cultural syntagmemes are manifested at specific levels in the cultural hierarchy. In a very rudimentary way there appear to be, for example, levels such as:⁸

Society -- the largest unit, with the fewest and most general linguistic and cultural features in common.

Community/Clan -- A unit with a special relationship. It is typically distributed within the society.

Family -- A unit typically distributed within the Community/Clan and which is often defined biologically at the surface level.

Individual -- the lowest level at which roles can be contrastive. As in grammar, the role of the individual may be embedded in levels above its own although it is typically distributed within the Family.

All of the levels comprise contrastive cultural tagmemes which can be subjected to the same demands of internal coherence and closure, minimal structure, contrast, variation and distribution that Pike and Longacre stipulate for grammatical units. The manifestations of the C-tagmemes are various linguistic and/or symbolic speech characteristics associated with the cultural role at some level in the society.⁹ Thus speech surrogates, such as whistle speech, sociolinguistic speech factors such as educated dialects, and so on, are language variations at particular levels of the society. The speech parameters and classifications of speech as outlined, for example, by Humes (1964) or Fishman (1968) manifest particular cultural roles in society. The features outlined by Hockett (1964) can be viewed in this same way.

The obvious difference between tagmemes of the other hierarchies or components and the cultural one is that the latter is generally manifested by people who are alive (although not necessarily so) and who may conscientiously shift their role.

With the C-tagmeme in mind Pike's breakfast scene, church service and football game may be viewed as particular levels of the culture. The levels are, respectively, the family and, for the latter two, the community. Each level in a culture may also be characterized or manifested by a diagnostic type of speech: idiolect, dialect, language, nation.

To consistently relate so many aspects of a society within a cultural component will require explicit underlying role rules. Tagmemic role rules would express a correlation between the role of, for example, a father and his verbal or non-verbal behavior which express or manifest his role at the family and clan/community level. His role as magician, trader, builder and so on would be manifested by particular contrastive behavior which would also be described on cultural levels. Such roles are played in conjunction with other individuals at various spacio-temporal settings: sickness, marriage, dances and so on.¹⁰ Such settings may be viewed by the observer as contrastive cultural syntagmemes. They should be expressed in terms of pattern points which reveal significant differences between aspects of the culture. The same individuals may fill roles for many settings but procedural steps for the initial discovery and classification of the contrastive

cultural tagmemes should follow the lines of conventional ethnography.

SUMMARY

The grammatical aspect of tagmemics had to be developed before the cultural aspects of the tagmeme could become clear. This is especially true in that although the lexical hierarchy was set up as a separate entity, it was never treated on a par with phonology or grammar. Rather, certain aspects of the "lexical" hierarchy belong to the deep structure of the grammar and other features are properly those of the cultural hierarchy. When Pike did work in this direction he did not equate individual roles with the concept of a tagmeme; rather he applied such roles to a separate sub-theory which he has called matrix theory.¹¹

If tagmemics can develop further the relationship between language and individual (or group) roles which are in turn structured within a total cultural framework, it may make a significant contribution. Transformational grammar, as developed by Chomsky (1968:64) shows already an interest in this direction:

"Are there other areas of human competence where one might hope to develop a fruitful theory, analogous to generative grammar?"

Although this is a very important question, there is very little to be said about it today. One might, for example, consider the problem of how a person comes to acquire a certain concept of three-dimensional space, or an implicit "theory of human action," in similar terms. Such a study would begin with the attempt to characterize the implicit theory that underlies actual performance and would then turn to the question of how this theory develops under the given conditions of time and access to data -- that is, in what way the resulting system of beliefs is determined by the interplay of available data, "heuristic procedures", and the innate schematism that restricts and conditions the form of the acquired system. At the moment this is nothing more than a sketch of a program of research."

NOTES

¹The others listed are: "the search for constructions of maximum relevance, the emphasis on explicit, systemic hierarchy, and the concept of relatedness in logical space (with transformation only one of the possible parameters which relate constructions)." (1965:65)

²Cultural studies as used here is a suggested cover term for basically non-descriptive linguistic questions, often referred to by such terms as ethno-linguistics, psycho-linguistics, or socio-linguistics.

³For example, Longacre (1964:6). Recently, Cook (1969:168) retains the tagmeme as the "particle-static unit" in the feature mode (contrastive feature) of the syntactic component.

⁴Pike in tracing the development of the terminology points out that the only similarity between his and Bloomfield's tagmeme is the common goal both of them had in finding a grammatical unit distinct from a lexical one (1958:275).

⁵I have dealt with these in greater detail in a forthcoming article entitled "Tagmemics and Tagmemic Rules".

⁶Fries (1970) states that dual function arises in a tagmemic grammar in three general situations: (1) when two tagmemes within the same construction share the same filler; (2) overlapping (or fusion) of two constructions; (3) when an endocentric construction has a minimal form. Becker (1967), by describing functions in terms of levels deals with these problems in detail.

⁷See, for example, the "procedural hints" in Koutsoudas (1964:41ff) for the beginning stages of his system of writing a transformational grammar.

⁸In New Guinea, Glasse (1969:21) defines the corporate Fore groups as phratry, clan, clan-parish, subclan, lineage, and hamlet. At this stage there is no way of more than guessing how many different cultural levels are empirically justified. If grammar provides any clue, we will begin with many more than are necessary on a deeper level. In Pike's term, we will begin etically. In a seldom cited article, Hockett (1964) extends this etic-emic, or, as he calls it, the outside and inside view to ethnography.

⁹On the surface level there may be no linguistic sign, simply gestures, grunts or both. This should not obscure the fact that the participants simply have not audibly registered the underlying linguistic signals. On this point, see also Birdwhistell (1966:183) who states that "so-called gestures are really bound morphs", that is they do not stand alone in a speech stream.

¹⁰Bock (1962) sees social roles as distributed within a cultural dimension of situation, social time and social space. This complete unit is called a "situation-matrix".

¹¹Pike (1964a), in other words, does not correlate the individual roles with their sociological functions in a tagmemic manner.

REFERENCES

- Becker, Alton L.
1967 A Generative Description of the English Subject Tagmemes.
Unpublished Ph.D. dissertation, University of Michigan.
- Bee, D.
1970 Usarufa: A Descriptive Grammar. In H.P. McKaughan (ed.)
The Languages of the Eastern Family of New Guinea. (Seattle:
U. of Washington Press.)
- Birdwhistell, R.L.
1966 "Some Relations Between Americal Kinesics and Spoken American
English", In A.G. Smith (ed.) Communication and Culture
(N.Y.: Holt, Rinehart and Winston) pp. 182-189.
- Boch, P.K.
1964 "Language Structure and Social Structure", Southwestern Journal
of Anthropology, 20:393-403. Reprinted in J.A. Fishman (1968).
- Chomsky, N.
1964 "A Transformational Approach to Syntax", In J.A. Fodor and J.J.
Katz (eds.) The Structure of Language: Readings in the Philosophy
of Language (Englewood Cliffs: Prentice-Hall, Inc.)
1968 Language and Mind. (N.Y.: Harcourt, Brace and World, Inc.)
- Cook, W.A.
1969 Introduction to Tagmemic Analysis. (N.Y.: Holt, Rinehart and
Winston)
- Dik, S.
1968 Coordination: Its Implications for the Theory of General Linguistics
(Amsterdam: North-Holland Pub. Co.)
- Elson, B.F.
1959 Beginning Morphology-Syntax. (Glendale: Summer Institute of
Linguistics) Revision of Elson, 1958.

- Elson, B.F. and V. Pickett
 1960 Beginning Morphology-Syntax (Santa Ana: Summer Institute of Linguistics) 2nd Edition 1964.
- Fillmore, C.J.
 1968 "The Case for Case". In E. Bach and R.T. Harms (eds.)
Universals in Linguistic Theory (N.Y.: Holt, Rinehart and Winston, Inc.) pp. 1-88.
- Fishman, J.A. (ed.)
 1968 Readings in the Sociology of Language (The Hague: Mouton)
- Fries, P.H.
 1970 "On double Function in Tagmemic Analysis", Anthropological Linguistics 12(4): 122-35.
- Glasse, R.M.
 1969 "Marriage in South Fore", In R.M. Glasse and M.J. Meggitt (eds.)
Pigs, Pearlshells and Women: Marriage in the New Guinea Highlands. (Englewood Cliffs: Prentice-Hall, Inc.)
- Hockett, C.F.
 1964 "Scheduling", In F.S.C. Northrop and H.H. Livingston (eds.)
Cross-Cultural Understanding: Epistemology in Anthropology. (N.Y.: Harper and Row)
- Hymes, D. (ed.)
 1964 Language in Culture and Society: A Reader in Linguistics and Anthropology. (N.Y.: Harper and Row)
- Koutsoudas, A.
 1964 Writing Transformational Grammars: An Introduction (McGraw-Hill Book Co.)
- Leech, G.N.
 1969 Towards a Semantic Description of English. (London; Longmans Linguistic Library)
- Longacre, R.E.
 1964a Grammar Discovery Procedures (The Hague: Mouton), Series Minor 33.
 1964b "Prolegomena to Lexical Structure", Linguistics 5:5-24.

- 1965 "Some Fundamental Insights of Tagmemics", Language 41:65-76
- Merrifield, W R.
1967 "On the Form of Rules in a Generative Grammar", Georgetown University Monographs, 20:43-45
- Perlmutter, D.M.
1970 "Surface Structure Constraints in Syntax", Linguistic Inquiry 1:187-255.
- Pickett, V.
1956 An Introduction to the Study of Grammatical Structure (Glendale: Summer Institute of Linguistics)
- Pike, K.L.
1958 "On Tagmemes nee Gramemes", IJAL, 24:273-8.
1959 "Language as Particle, Wave and Field", The Texas Quarterly, 2(2):37-54.
1964a "Name Fusions as High-Level Particles in Matrix Theory", Linguistics, 6:83-91
1964b "Dramatis Personae in Reference to a Tagmeme Matrix", Oceanic Linguistics, 3:5-25.
1967 Language in Relation to a Unified Theory of the Structure of Human Behavior (The Hague: Mouton). Revision of Vol. I (1954), Vol. II (1955) and Vol. III (1960) (Santa Ana: Summer Institute of Linguistics).
- Postal, P.M.
1964 Constituent Structure: A Study of Contemporary Models of Syntactic Description, IJAL, 30, Part 3.