

group is either a *subfamily* (with 9.5 pp. CD or greater) or a *genus* (with 8 pp. or greater but less than 9.5 pp. CD). An *open group* is either a *cluster* (with 5.0—7.0 pp. CD); a *hesion* (with 2.5—4.9 pp. CD), or a *linkage* (with less than 2.5 pp. CD).

The CD of a group is the amount of difference between the lowest basic percentage of the group and the highest percentage of any member of the group with a non-member. A critical percentage which has been used to form a group is called the *basic percentage* of that group. The percentage by which a language or group is classified together with other languages or groups is called its *critical percentage*.

A group is called a subgroup if the size of its CD is unknown or uncertain.

Following this procedure, Dyen arrived at the subgrouping of the Philippine languages described in the diagram below (see figure 1). The division of the Austro-nesian languages into four groups, namely, West (which includes Sarawak, Indonesia, Southeast Asia and Madagascar), North-

west (which includes Formosa, P.I., N. Borneo, and Brunei), North and East (which includes Micronesia and Polynesia), and Central (which includes Melanesia and East New Guinea) is geographical. The Philippine languages have been assigned to the Northwest group as mentioned.

Undoubtedly, this subgrouping leaves many gaps, for many languages were not included in the computations, as for example, Tausog, Waray, Pangasinan, Zambal, etc. In addition, some of the conclusions do not agree with the previous results arrived at by the other previous subgroupings. There is need, therefore, for further study, and most of all for a thorough investigation of the linguistic features which could reveal the interrelationships between these languages.¹⁵

¹⁵ For an eloquent plea not to be satisfied with the results of the results of lexicostatistical computations which is a purely quantitative approach and to employ the comparative method in determining the interrelationships between languages of the same family, see Robert E. Longacre, "Swadesh's Macro-Mixtecan Hypothesis" *International Journal of American Linguistics* 27.9129 (1961).

A Note on Predication in Tagalog*

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Leonard Bloomfield, who wrote his grammatical analysis of Tagalog in 1917¹, posited three types of syntactic relations in Tagalog, namely, 1) attribution, e.g., *Ina ko!* 'Mother (of) mine!', 2) predication, e.g., *sumusulat siya* 'he is writing', 3) the serial relation; e.g., *buto't balat*

'bone and skin'. For Bloomfield, most sentences consisted of a subject and a predicate (as in the construction *sumusulat siya, siya'y sumusulat*), but a few did not have such a structure. These may be subsumed under two groups: 1) impersonal-anaphoric, e.g., *umuulan* 'it is raining', and its sub-groups: namely, expressions of indefinite quantity, e.g., *walang papel* 'there is no paper' or *mayroong asuwang sa bayan* 'there is a vampire in the town', and expressions of occurrences in-

* I have profited from discussions with Prof. Isidore Dyen of Yale University in the preparation of this article.

¹ Leonard Bloomfield, *Tagalog Texts With Grammatical Analysis* (Urbana: University of Illinois, 1917) pp. 146-153.

volving indefinite or indifferent persons or things, e.g., *nagumpisa na nang pagsabuy* '“they” have already begun to throw'; and 2) exclamatory, e.g., *aray!* 'ouch!' and its sub-groups, namely, certain words with the prefix *ka-* and reduplication expressing recent completion of an act with their modifiers (e.g., *kararating ko pa lamang* 'I have only just arrived'), vocatives e.g., *walang hiya!* 'shameless one!', commands, e.g., *hintu na!* 'stop!', certain set expressions such as greetings, e.g., *magandang araw po!* 'good morning!', expressions of affirmation and negation, e.g., *oo nga* 'yes, indeed', and finally, the naming of an idea as in counting, e.g., *isa, dalawa*, 'one, two'.

Likewise, in a recent work², Elmer Wolfenden divides Tagalog clauses into two main types: 1) Minor Clauses, which are either exclamatory, e.g., *aray* 'ouch!', vocatives, e.g., *Belen!* 'Belen!' (name of girl), or zero anaphora, i.e., partial sentences which occur in answers to questions, e.g., *mayroon* 'there is', and 2) Major Clauses, which are classified according to predication types: a) Verbal predications, which contain a verb and a predicator, e.g., *bumabasa ako ng libro* 'I am reading a book', b) Non-Verbal predications, which are of five types: (1) descriptive, which contains a descriptive predicate head-word, e.g., *kaysipag ni Jose* 'Industrious of-the-personal Jose, i.e., how industrious Jose is', (2) classificational clause, which contains an uninflected stem as predicate head-word, e.g., *sundalo si Lito* 'soldier the-personal Lito, i.e., Lito is a soldier', (3) identificational clause, which contains an *ang* substantive phrase as predicate head-word, e.g., *ang humiram ang magbayad* 'the did-borrow the to-pay, i.e., the one who borrowed is the one to pay', (4) locational clause, which contains a *sa* substantive phrase as predicate head-word, e.g.,

sa kapatid ko ang sapatos na ito 'to-the brother of-me the shoes phrase-marker this, i.e., these shoes are my brother's', (5) substitutional clause, which contains a substitute as predicate head-word, i.e., *ikaw ang gumawa* 'you the did, i.e., you did it'.

Thus, for Wolfenden, the major clause is a construction which is a predication, and the minor clause is a construction which is less than a predication. This corresponds to Bloomfield's analysis of the situation, except that Bloomfield's impersonal-anaphoric sentences are left out, and various types of predications are identified. Wolfenden and Bloomfield, however, disagree on the following Tagalog sentence: *kaitim nang gabi* 'how dark is the night'. This is classified by Bloomfield as one that lacks the subject-predicate construction, whereas Wolfenden disagrees and thinks this construction is a predication, i.e., a major clause.³

At this point, it is necessary to define the term "predication" and ask the question whether such a term can be used to describe the structure of the Tagalog sentences under consideration. In his book *Language*, Bloomfield described predication as: "When a language has more than one type of full sentence, these types agree in showing a construction of two parts. The common name for such bipartite favorite sentence-forms is *predications*. In a predication, the more object-like component is called the *subject*, the other the *predicate*."⁴

C. F. Hockett does not have a formal definition or succinct description of predication, but in his discussion of Immediate Constituent Analysis, and form classes and constructions, he says: "The IC's of a composite form are commonly said to *stand in* a certain construction with each

² Elmer Wolfenden, *A Restatement Of Tagalog Grammar* (Manila: Institute of National Language, 1961), pp. 33-35.

³ Wolfenden. *op. cit.*, p. 34, No. 6.22.1.

⁴ Leonard Bloomfield, *Language* (New York: Henry Holt and Co., 1933), p. 173.

other, and the composite form built from the ICs by the construction is also called a *constitute*. All constitutes built by a single construction are necessarily members of the same form-class. The form-class, however, may include also forms built by some other construction, and even single morphemes. For example, all predications are members of a larger form-class which we may momentarily call "sentence-skeletons", forms to which one can add an intonation to yield a sentence. But not all sentence-skeletons are predications: *yès, why, the more the merrier...* are the former but not the latter. Again, predications are built by conjoining a third person singular subject and a modal predicate (one construction), but are also built by several other constructions, as in *she likes potatoes, I can go...*⁵

If I understand him correctly, Hockett regards the construction *the more, the merrier* as a sentence-skeleton but not a predication because the subject-predicate construction is missing in this utterance, whereas there is such a construction in *she likes potatoes*.

What emerges, then, from both discussions of the syntactic structure called predication is that it is essentially a two-part construction.⁶ Thus, in the English construction: *John ran*, there are the component parts: *John* (A), and *ran* (B). (A)

states an event or identity, while (B) is another word to which this event applies. (A) is the subject, and (B) is the predicate.

This diadic construction is the favorite sentence-form of English. And when either (A) or (B) is omitted, the structure is anaphoric. Thus, in the command: *stop!*, the full sentence is *you stop* or *stop ye!* And, in answer to the question 'who did this?', the answer *John* is anaphoric for *John did it*.

This anaphoric variant of the English predicative sentence is not present in Tagalog.⁷ Thus, what Bloomfield calls an impersonal-anaphoric sentence, like, *umuulan* 'it is raining', is not only not anaphoric, it actually *excludes* the possibility of a subject-predicate construction. For Tagalog, *umuulan* 'raining' together with the proper intonation pattern yields a sentence, whereas *raining*, by itself, even with the proper intonation, does not yield a sentence in English. A subject is mandatory. Thus, one has to say *it is raining*. The term "impersonal" is applicable only to a structure in which the subject occurs but is not a person. In Tagalog, no subject at all is involved. Again, one says in English *there is no paper*, whereas the Tagalog simply says: *walang papel* 'no paper'. One has to say *there is an earthquake* in English, in Tagalog *lumilindol* 'earthquaking'. It is quite clear that Tagalog does not have predication in these sentences.

This interpretation of Tagalog structure necessarily raises a related problem, namely, how does one analyze the Tagalog

⁵ Charles F. Hockett, *A Course in Modern Linguistics* (New York: The Macmillan Co., 1958), p. 164.

⁶ This same conclusion seems to be deducible from discussions by other linguists. For further descriptions, see Bernard Bloch and George L. Trager, *Outline of Linguistic Analysis* (Baltimore: Waverly Press, 1942), p. 79; Henry A. Gleason, *An Introduction to Descriptive Linguistics* (New York: Henry Holt and Co., 1956), p. 137. But this section was revised and the subject of predication less clearly dealt with in the 1961 edition, as cf. pp. 168-169; Archibald A. Hill, *Introduction to Linguistic Structures* (New York: Harcourt, Brace and Co., 1958) pp. 255-291; André Martinet, *Elements de Linguistique Generale* (Paris: Librairie Armand Colin, 1960) pp. 122-127; Hermann Paul, *Prinzipien Der Sprachgeschichte* (Tubingen: Max Niemeyer Verlag, 1960), pp. 284-290.

⁷ There are four basic types of syntactic structures in English, and predication is just one of them. The four types are: 1) structures of modification, e.g., hungry people, home town, easily superior, 2) structures of predication, e.g., money talks, soldiers have been killed, snow kept falling, 3) structures of complementation, e.g., speak truth, be careful, love your neighbor, 4) structures of coordination, e.g., pins and needles, hope and pray, neither war nor peace. cf. W. Nelson Francis, *The Structure of American English* (New York: The Ronald Press Co., 1958), p. 292.

word *ay* and its variant *y*? Wolfenden and Bloomfield regard this word as a predication marker³, but if there is no predication in Tagalog, then how does one classify the word *ay*. To what form-class does it belong?

To answer this question, it might help to consider for awhile another construction in Tagalog which involves similar markers. Take, for instance, the expression: *magandang bulaklak* 'beautiful flower'. This expression is made up of three morphemes: a) *maganda* 'beautiful', b) *ng* (marker), c) *bulaklak* 'flower'. This *ng* morpheme has the following variants according to storable environments: 1) suffix *-ng* after words ending in vowels and *n*, 2) *na* after words ending in vowels or consonants. Thus, *bulaklak na maganda*, but *magandang bulaklak*.

Following this same construction, one can set up the expression *siya ay maganda* 'she is beautiful'. One can consider the word *ay* as a marker whose occurrence is storable. Thus, if one labels the morphemes *siya* (A) 'she', *ay* (B) 'marker', *maganda* (C) 'beautiful', one may say that in the environment $A+B+C$, *B* occurs, but in the reverse order, namely, $C+A$, *B* disappears. Thus, *siya ay maganda* - *maganda siya*, and both mean 'she is pretty'.

One may, therefore, say that in Tagalog, the two expressions: *magandang bulaklak* and *siya ay maganda* belong to the same construction, and the markers *ay*, (*y*) and *na*, (*ng*) belong to the same form-

³ Elmer Wolfenden, *op. cit.*, p. 4, and L. Bloomfield, *Tagalog Texts*, p. 146. Mr. Wolfenden assigns *ay* to the category of coordinate particles which link immediate constituents in an equational relationship. Thus, *ay* has the same function as *ngunit* 'but', *bagaman* 'although', and *sapagkat* 'because'. But this seems far-fetched when one considers such occurrences of *ay*, *y* as *kahapon ay nagkaroon ng parada sa Maynila* 'yesterday there was a parade in Manila', where *ay* merely links *kahapon*, with *nagkaroon* thus qualifying it. *Bagaman*, *ngunit* and *sapagkat* do not occur in this or in similar environments.

class. It is significant that Bloomfield runs into the word *ay* again and again in the section of his grammar in which he explains the various types of attribution in Tagalog. Thus, to take but one of the more striking instances; Bloomfield divides the various positions of attributes in Tagalog as follows: 1) Loosely joined—in this position occur only attributes of a predicate, and they either precede the rest of the sentence with *ay*, *y*, or follow at the end of the sentence, e.g., *doon ay siya y nahiga* 'there, he lay down'; when a loosely joined attribute precedes, the *ay*, *y* is in some cases left off, e.g., *dahil dito tinawag niya ang kaibigan niya*, 'therefore, he called his friend'. The position of the enclitic *niya* shows that *dahil dito* is loosely joined, but *ay*, *y* is not used. Occasionally, a loosely joined attribute is preceded by the subject and only one *ay*, *y* is used, e.g., *karanyuwa y ang kosi-nero ay upahan* 'usually the cook is hired'. 2) Closely joined—the attribute immediately precedes or follows that modified, e.g., *hindi tama* 'not correct'. 3) Enclitic—they follow immediately on the first word of the expression modified, counting closely joined attributes, but not loosely joined, e.g., *hindi ko nalalaman* 'not by-me (it) is-known, i.e., I don't know.'

But it seems incorrect to classify the sentence *siya y maganda* with *magandang bulaklak* and call both attribution. For in attribution, we are again face to face with a diadic construction. Thus, returning to Leonard Bloomfield's book, *Language*, we find a description of the attributive syntactic construction: "Every syntactic construction shows us two (or sometimes more) free forms combined in a phrase, which we may call the *resultant* phrase. The resultant phrase may belong to a form-class other than of any constituent. For instance, *John ran*. . . . Therefore, we say that the English actor-action construction is *exocentric*. . . . On the other hand, the

resultant phrase may belong to the same form-class as one (or more) of the constituents. For instance, *poor John*. . . Accordingly, we say that the English character-substance construction is *endocentric* construction. . . Endocentric constructions are of two kinds, *co-ordinative* (or *serial*) and *subordinative* (or *attributive*). In the former type the resultant phrase belongs to the same form-class as two or more of the constituents. Thus. . . *boys and girls*. . . The constituents are the *members* of the coordination, and the other constituent is the *co-ordinator*. . . In subordinative endocentric constructions, the resultant phrase belongs to the same form-class as one of the constituents, which we call the head; thus, *poor John* belongs to the same form-class as *John*, which we accordingly call the *head*; the other member, in our example *poor*, is the *attribute*.⁹

Thus, it seems necessary to seek a new grammatical category which will adequately describe the Tagalog phenomenon. Such a category should express the syntactic relation not of mutual dependence (interdependence between the functives), nor determination (in which one functive presupposes the other), but rather of constellation (in which two terms are compatible, but neither presupposes the other).¹⁰ Such a term would accurately describe the free dependence of the terms involved in the structure. We choose to call such a grammatical category TOPIC, and we define this term as a grammatical center which is necessary in every Tagalog sentence (even in the minimal sentences) and which occurs either by itself or with QUALIFIERS. Such qualifiers, when they occur with the topic may or may not be joined

to the topic by LIGATURES.¹¹ We divide the types of ligatures into two groups: the *ay* (*y*) group, which we call "adjunctives", and the *na* (*ng*) group, which we call "attributives". The difference between the two groups lies in their functions: the adjunctives connect the qualifier to the topic loosely; whereas the attributives connect the qualifiers to the topic closely as in *magandang bulaklak* where *maganda* is in an adjectival relationship to the head-word *bulaklak*.

Returning now to the original sentences under consideration, if we let *T* stand for "topic", *Q* for "qualifier", *AT* for "attributive ligature" and *AD* for "adjunctive ligature", then Bloomfield's impersonal-anaphoric sentences would be analyzed as follows:

umuulan 'it is raining' = T
walang papel 'there is no paper' = Q
 + AT + T
nagumpisa na nang pagsabuy 'they have already begun to throw' = T + na
 + nang + Q
kararating ko 'I have just arrived' = T
 + Q

The exclamatory sentence would be an instance of topic and nothing else, e.g., *aray!* 'ouch!' = T

Finally, the subjective-predicate sentences would be interpreted as follows:

siya y maganda 'she is beautiful' = T
 + AD + Q
Maganda siya 'she is beautiful' = Q
 + T

The general model of Tagalog syntax would have to be realigned along the following lines:

⁹ L. Bloomfield, *Language*, pp. 194-195. Of course, it is possible to use the term attribution, or for that matter predication, and re-define it in a special way to adequately describe the Tagalog phenomenon.

¹⁰ Louis Hjelmslev, *Prolegomena To A Theory Of Language* Translated by Francis J. Whitfield, (Baltimore: Waverly Press, Inc., 1953), pp. 14-15.

¹¹ There are many kinds of markers, as for example, the *ang* "nominative", *nang* "possessive", and *sa* "locative" markers. The ligatures *ay*, *y*, *na*, *ng* are likewise called markers, or as Wolfenden calls them "marking particles", but are distinguished from the case-markers in that their specific function is to link qualifiers to the topic.

I—Monadic Structures: expressions which contain one topic and nothing else. e.g.

umuulan 'it is raining'

aray! 'ouch!'

sulong! 'forward!'

isa, dalawa 'one, two...'

II—Diadic Structures: expressions which contain at least one topic and at least one qualifier:

a. Subordination—Attributive constructions.

b. Co-ordination—Serial constructions.

Perceptions of Some Laguna Rice Farmers About the ^{of} Masagana Rice Culture

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Every innovation, when viewed in the light of agricultural economic development, must not be a simple fad that flares up, fizzles and eventually dies. Apparent is every agricultural innovation's investment quality—the government outlays resources in the form of capital and manpower so that the change may release incentives to the rural folks for future increments in national production. All aspects contributory to a new technique's fad-like color points to colossal losses in terms of wasted government funds and efforts and the loss of faith of the farmers.

But why the common waste? Why the inhibitions of farmers to adopt new, fully-tested techniques? When these questions are left unanswered in spite of optimum economic programmings and models, rational cost and returns analysis, and so on down to the minutest economic variable, the only primordial origin might be the human essence in economic development. The attitudes maintained by the farmers may answer for the ephemeral sustenance

of innovations introduced, the reaction being more predominant in an underdeveloped economy like the Philippines!

The rising problem between increasing material expectations and social attitudes is a great truism in underdeveloped countries like the Philippines. Eugene Black,¹ in the "Diplomacy of Economic Development" mentions: "However inadequate the traditional ways of the rural population may be on the onslaughts of technology, the hold of tradition on these people is a very strong one. And it is not wholly illogical by any means; the traditional societies of the world supplied many fundamental requirements for the human being which no amount of material progress has enabled him to live contentedly without. People living in these societies were accepted by their neighbors without question: they knew where they stood. If they are now attracted by the trappings and trinkets of modern economic life, we have no reason to think they desire to give up the security of their old ways for these

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¹ Eugene R. Black, *The Diplomacy of Economic Development* (Cambridge: Harvard University Press, 1961).