

A PSYCHOLINGUISTIC FRAME OF REFERENCE FOR FOCUS AND TOPIC IN PHILIPPINE LANGUAGES

JOSEPH F. KESS

A considerable amount of research time and effort has gone into understanding how sentences are understood. Linguists, of course, are interested in the set of rules which underlies the production of such sentences not from the point of view of their cognitive origins, but rather in terms of a logical analogue to what such rules must contain. Some of course have taken this concept further and have claimed that linguistic rules match up in some strong or weak way with linguistic constructs. This is not an acceptable position to most psycholinguists of late and one must accept the fact that transformational processes in linguistic descriptions have no psychological reality. They have a reality of their own as heuristic devices, but that reality does not match in any direct fashion with cognitive strategies. Still interesting, however, is the attention now being paid by some to sentence recall and sentence production. This is especially pertinent in view of the history of the description of Philippine languages where a great deal of emphasis has been placed on the analysis of the so-called focus-type verbal constructions and what they may be taken to imply in terms of semantic function.

It would appear that the several basic research questions face reassessment here. First of all, exactly what is topic? Secondly, exactly what is focus? Thirdly, what is their relationship, and fourthly, what function do they serve in the production of sentences? Is it as simple as the fact that the function of the focus-topic verbal construction is one in which a given referent is highlighted as the centre of attention? Or is it, as newer studies have suggested, that topic provides a stage upon which the relationships between given and

new information are acted out? Exactly what is their function from the encoding and the decoding point of view? Can we assume that in memory storage and recall the focus-topic relationship is amalgamated into a unified semantic representation which is stored in the language of the brain, a language which we have incidentally yet to analyse. In terms of processing sentences which come in as different focus types it may be that the answer to production will help our understanding of processing as well, and perhaps we should direct our efforts to research investigations of the former question first. Some considerations for possible fruitful avenues of research follow, drawing on both the psycholinguistic literature and Philippine descriptive literature.

It is true to say that much linguistic research, both in the structural era and the generative transformational era, has been characterised by a desire to learn what language is rather than to discover what language does and why it does it. The analysis of Philippine languages and their verb paradigms is no exception to this general rule. It would seem that the morphology of the verbal paradigm in Philippine languages is fairly well elaborated by this point. The morphological affixes are easily counted and fairly straightforward; the syntactic constructions in which they occur are also largely analysed and relatively restricted. However, the one basic question which has proved nettlesome to Philippine studies ever since Totanes' (1745) earliest observations and Blake's (1906) re-echoing is why a particular passive occurs at all. What has been an overriding theme in Philippine studies has been speculation as to what these constructions do. That basic question is perhaps now more appropriately placed before us than ever before. With information about the morphology of the verbal type well before us, the syntactic constructions well laid out, and detailed investigation of the case structure of Philippine verbs proceeding well apace, it may be timely to inquire into the discourse functions of these particular linguistic devices. With this information conveniently at hand it may be finally possible to understand the discourse function of such devices and how they link up with universal devices of discourse across language types. Like Dean's (1958) seminal treatment of case, voice or focus, and emphasis in Bilaan, it may be appropriate to consider linguistic and psycholinguistic aspects of each separately before returning to write up our descriptions. It may also serve to bring such descriptions into line with or reconcile them to other uses of the terms (see Sgall, n.d., for a discussion of topic as an element not belonging to the focus of a sentence).

Even so, too much attention may have been paid to the actual format of the verb morphology, and not enough attention paid to the actual semantic uses of the resultant constructions. Even this approach has its shortcomings. For example, in a recent treatment of the semantics of Inibaloi verbal affixes, Ballard (1974:181) notes that "there has been little difference between the grammar of clauses and the grammar of verbs, both being regarded as different aspects of the same phenomenon, namely, focus or voice". Ballard observes that there is a common misconception held by Philippine linguists that verb roots themselves are the sole exponents of meanings. In fact, roots tend to supply part of the meaning, perhaps an abstractive meaning, and the affix another part of the meaning; thus "the meaning of a verb is the combination of the meaning of the verb root plus the meaning added by affixation" (Ballard 1974:184). Verb affixes are probably as much derivational as inflectional in nature.

The reason I call attention to Ballard's description is because he takes great pains to introduce a primary principle of compatibility between semantic values of roots with semantic values of affixes, how they can be listed, and the degree to which they might be predicted. This particular approach is most attractive to me in that it has always represented the first and not the final step in the logistics of describing Philippine languages.

Returning to production-and-processing considerations in the Philippine focus-topic-voice paradigm, let me note that McKaughan (1973) has already chronicled the use of 'subject versus topic' terminology and I have no wish to repeat this history. Suffice it to say that many have used the two terms in either separate or overlapping fashion; some, like Schachter (1976:515) even claim that sentences in Philippine languages do not have subjects. Emphasis may be accomplished by still other devices and not necessarily those traditionally taken to be focus. For example, in Tagalog the inversion of topic and verbal or adjectival predicate and *ay* insertion is one such device (McKaughan 1973:124) describes similar devices in Maranao).

Despite McKaughan's (1973) preliminary reluctance to talk of active and passive for Philippine languages one may note that their similarity in general terms to passives in other languages may allow us to compare them in some general sense. Certainly they are similar in that the same constraints on truth conditions which characterise actives and passives in Indo-European are the same for actives and passives in Philippine languages. With this caveat as to their possible skin-deep-only similarity in mind, it may be instructive to refer to some of the psycholinguistic literature on actives and passives in English.

There is a substantial body of psycholinguistic evidence which suggests the fact that sentential focus is related to conceptual focus. For example, Tannenbaum and Williams (1968) found that placing the conceptual focus on either the actor subject or the acted-upon object would affect the readiness to employ active or passive sentence forms in generating descriptions of the situation. This finding matches the common sense observation that if two forms exist in a language they must not be perfectly redundant, for otherwise they would serve exactly the same function; one might expect that one would be quickly replaced by the other. In English, the passive-active voice distinction is such that the basic logical structure of the sentence is identical, but they appear to differ in terms of their style, their intent, and their discourse function. The two are not redundant to the degree that both may adequately and equally represent the same given situation. It would also appear that the difference is more than just an aesthetic or stylistic difference, although there can be little doubt that the passive in English has special stylistic functions. This is indeed what needs to be established in the case of the various Philippine focus types - what is the functional distribution between the focus types and the different characteristics of the encoding situation which seems to elicit their use?

Tannenbaum and Williams (1968) also noted another interesting finding. They observed that preceding sentences had some tendency to interact with the generation of succeeding sentences and whether they were in the active or passive voice. This suggests interesting and worthwhile avenues to pursue in further research. Suppose that depending on the formal context of the preceding sentence, one may expect a greater proportion of actives as opposed to passives in English. Is it possible that the same is true for Philippine focus types? Suppose that once a focus type is chosen at the discourse onset, this then provides formal thematic constraints on the form in which succeeding sentences are generated. The degree to which this is true, if it is, would complement our understanding of focus as being partially form and partially content. The degree of each is a question which we have not fully answered.

Similar work has been done by Wright (1969) who examined questions and noted that answering active or passive questions is directly related to whether or not answers correspond to the surface structure of the sentence that questions were being asked about (see also Kearsley 1976). This seems to tie in with the notion of preceding formal context and a question seems to provide some key as to what preceding sentences might have been. One of course knows this in a

pedagogical sense, and in teaching and learning a language like Tagalog, an important cue has always been simply to follow what the preceding sentence happened to be and then matching the answer up with the same verbal construction type.

Wright (1972) also discovered that errors are fewer in answering questions when both the sentence and the question asked have the same voice. She suggested that generating answers to match the question may require more re-organisation if they do not match in sentence voice. Given the number of passives in Philippine languages, questions asked in a particular voice may generate answers in a particular voice. Vice versa, a topic which has been presented in a given voice may then elicit questions in that very same voice, so that there is a congruity of mode in terms of the particular form of the focus or voice construction.

Layton and Simpson (1975) also found less errors when sentence and question voice were the same. However, when the number of sentences increased to four and eight, less errors occurred when the question was in the active rather than in the passive voice. Their results are suggestive of the fact that surface structures for single sentences are retained for question-answering, but then when a number of sentences intervene, only the deep structures are retained. The direct link between voice type in question and answer seems to be limited to between one and two sentences. Anything larger than this seems to shunt the sentence processing mechanism into high gear and only deep structures are retained.

There has been a long history of argumentation over whether actives and passives are entirely synonymous in English. In Philippine languages the problem is compounded because the number of passives is not only larger but their functions often overlap. We do know that in English actives and passives serve different functions in communicative tasks and that some actives and passives are even not reversible with the same kinds of meanings. Most active-passive sentence relationships are such that the basic logical structure underlying the sentences is the same. However, in certain actives and passives one form may even have different and quite separate interpretations. Take, for example, sentences like those raised by Johnson-Laird (1968b:15): '*Some girls are liked by all the boys*' versus '*All the boys like some girls*'. This pair, although they seem to be active-passive on the surface, do not exhibit the same sets of interpretations.

Johnson-Laird (1968a; 1968b) has also noted the stylistic qualities of the passive voice, noting that the passive is used for emphasis and

the item which is focused for that emphasis is the element placed first in the sentence. While in English this is the logical object which becomes the grammatical subject, in Philippine languages the verb comes first. Emphasis is shown in other ways like inversion and fronting, intonation, and so forth. One can probably largely discount arguments about relative syntactic complexity differences between the focus types. By analogy, the weight of psycholinguistic opinion has shifted, and one no longer argues the merits of the derivational theory of complexity. Chomsky's syntactic model simply does not match up in any substantially meaningful way to the cognitive steps which appear to go on in the processing and perception of sentences. Even in the one single volume in which one might have expected to see the strong theory of the relationship between linguistic theory and psycholinguistic strategies stoutly defended (Fodor, Bever and Garrett 1974), this position is gingerly cast aside (see Kess 1976). Indeed, even the weaker version of a relationship between linguistic theory and cognitive processing is not supported as strongly as some might have expected it to be; Wanner (1977) even feels that this is too strong and the relationship should be entirely abandoned.

Suffice it to say that while passives in Chomsky's early syntactic model were held to be more complex than active sentences, this is not shown to be true in any cognitive sense. Numerous experiments have shown that other factors may largely wash out the difference in syntactic complexity between active and passive sentences. For example, Slobin (1966) argued that nonreversibility makes passives just as easy to comprehend as active sentences. The question we may ask is whether this is true for focus as well? One would expect so on the basis of the fact that the relationship between the various focus sentence types is not always a straightforward one nor are all focus constructions easily transformed into others. This only seems to work for a subset of verbs while other verbs may only take a subset of the total range of focus affixes. Obviously, we have learned that syntax is not everything and that if form does not entirely correlate with meaning in Philippine languages, neither does form with form (see Ramos 1974). Just as nonreversibility makes actives and passives in English equivalent in terms of their comprehensibility, it may be that for the various focus constructions in Philippine languages some other factor may be equally important. It may be that case features for verbs are what are applied first in processing sentences as they come in. The verb occurs first in Philippine languages and the verb's meaning immediately cues the hearer to access his encyclopedic knowledge of

the universe; this immediately tells him which activities, to whom, with what, for whom or what a given verb can be used. Whether or not the verb happens to be in a given so-called focus construction type is perhaps a piece of information which is secondary to this first scanning of the mental dictionary and yet it has been the one which has first claimed our attention to date.

Herriot (1969) also investigated the comprehension of active and passive sentences and found comprehension to be related to pragmatic expectations. He noted that such pragmatic expectations are not only an important cue to comprehension but that they are independent of grammatical order and in many instances may be expected to provide us with a prior cue as to the sentence's interpretation. One could reason, for example, that this is why some seemingly agent-focus Tagalog sentences (actually environment or ambience sentences) involving verbs like *Umulan* 'It rained' and *Umaraw* 'It was sunny' are easily interpretable and why they do not have a direct relationship with other agentives of this particular sentence set. It might also answer other seeming discrepancies in the actual surface structures of verbal predicate sentences. For example, Cena (1977) claims that some agentless sentences like *Pinatid si Fred* 'Fred was tripped' and *Kinuto si Fred* 'Fred has lice' should be represented at a single underlying syntactic level together with regular agentive sentences. If they are to be coalesced at some underlying level of representation, it is because of pragmatic and not syntactic expectations. Speakers know about sunny days, being rained upon, tripping, having lice, and so forth, and it is their knowledge of their surroundings that makes these sentences immediately interpretable and not their syntax search of focus constructions.

Other studies like Olson and Filby 1972 found that the ease of processing active and passive sentences was related to the prior coding of perceptual events. Thus, "when the event was coded in terms of the actor, active sentences were more easily verified, when the event was coded in terms of the receiver of the action, passive sentences were more easily verified" (Olson and Filby 1972:361). This also seemed to hold true for answering active and passive questions. Apparently, sentences which are contextually appropriate are better comprehended in terms of their surface grammatical structure. If the active or passive sentence happens to be appropriate to the situation in terms of its coding, then actives or passives are in turn more easily comprehended. Contrary to the derivational theory of complexity, one need not go through the transformational history of a sentence to find

the psychological processes actually involved in using a sentence. Passive forms can be dealt with directly, and with the half-dozen Philippine passives, this may mean that each passive is directly comprehended in line with the semantic possibilities that a given verb affords. There are some important differences between Indo-European and Philippine passives, but it does provide an interesting start from a universals' point of view, noting that different sentence types can be as easily comprehended depending upon context, semantic congruity, and coding expectations.

Another interesting approach was taken by Johnson-Laird (1968b) in assessing the choice of the passive voice in a communicative task. Student subjects presented with a diagram were asked to choose an appropriate description for it from a set which included active as well as passive sentences. Johnson-Laird reasoned that such a task would bear some resemblance to what speakers normally do in choosing sentences to describe something. Of course, this is exactly the task that speakers of any language must initiate and, in the case of Philippine passives, provides an interesting suggestion for testing generation of specific focus types. One would expect that if certain focus constructions do correlate highly with certain communicative tasks, syntactic focus can be defined as conceptual focus. A byproduct might be to learn exactly what their relative frequencies are. This may also have some relationship to how speakers go about interpreting sentences which come in to be processed, although it does not automatically follow that this is the case.

The object of such an investigation would be to take a variety of samples of Philippine discourse and to find out exactly what the relative frequency of these passives happens to be. This has been carried out for English by Goldman-Eisler and Cohen (1970), with the finding that simple active affirmative declarative sentences constituted from 80 to 90 percent of verbal output in English, negatives and passives were in the range of .7 to 10 percent, and passive negatives were practically a non-event. Some useful information could be gleaned from investigating the relative frequency of passives, from the point of view of their performance output, as well as helping to establish the link between what the function is that they do serve in discourse. Many, like Keenan (1976:311) have observed that

... while passive sentences may be non-basic in English they are at least much more basic ... in Malayo-Polynesian Ls such as Maori, Tagalog, Malgasy. In particular the privileges of occurrence of passives in those Ls are much greater than in English.

What we need to know is just how basic they are! Such frequency factors might be tied up with syntactic function in the same fashion that it is with negatives. For example, Wason's studies (1959, 1965) have indicated that though negative sentences in English both take longer to evaluate and complete than affirmative sentences, they are appropriate and equivalent in contexts of plausible denial. If negatives serve a particular function, why not the same for different kinds of passives in Philippine languages? A first step in this direction would be to gather samples of spontaneous speech based, say on excerpts of a hundred to two hundred clauses apiece, representative of speakers of various levels of social, intellectual and chronological age differences, and obtain some metric evaluation of their frequency of occurrence.

Such statistical frequency considerations may also account for the notion of passive supremacy over actives in Tagalog in children's acquisition of focus types in Tagalog. Segalowitz and Galang (1978) note that "in contrast to the usual English developmental pattern with actives and passives, the Tagalog children generally showed better mastery of patient focus sentences than agent focus sentences". A statistical survey may give us a simple and ready answer to this interesting developmental finding.

It would also be interesting if we were to discover, for example, that focused sentences of certain kinds were more accessible in memory than other kinds of sentential constructions. Geiselman (1974) has found this to be true for English sentences in terms of the kinds of instructions that are given on tests. He found that sentences which were cued to be remembered were found to be more accessible than those cued to be forgotten. The same holds true for the possibilities that certain kinds of focus may affect how information is retrieved.

Just and Brownell (1974) have also found that concreteness in terms of descriptions provides a greater mnemonic power than abstract prose descriptions. Subjects were quicker to provide responses for concrete paragraphs than they were for abstract prose paragraphs. There is a long history of research which shows that concrete words, words which conjure up specific images in the mind, have an edge in terms of both learning and memory over words which are abstract. This has led some (see Paivio 1971) to propose a dual-coding hypothesis, i.e. concrete words are stored in terms of their images, but abstract words and concepts which are not easily imageable are stored in terms of their verbal descriptions. Perhaps a given focus construction type is applied to a variety of verbs which are different in terms of their learning and their memory recall because their imagery quotient dictates ultimately how they are processed and stored. Other studies on imagery

have noted that high imagery prompts act more effectively than prompts that exhibit low imagery (see Danks and Sorce 1973). Perhaps part of the problem with trying to find a single unifying semantic characteristic for a given focus-construction type or a given affix within that focus-type (for example, Tagalog actor-focus, mag-, -um- or mang-) is because their topics differ in relative imagery. Topics may either be high imagery or low imagery nouns with this semantic imagery spilling over on the verbal predicate.

Even so, some research suggests that it is unlikely that Philippine subjects would remember the particular focus of the sentences that they were exposed to. It is a commonplace observation that memory for the gist of a particular sentence or passage is always better than verbatim memory, except when the latter is specifically called for. Indeed, outside investigative settings, it is only the gist of the passage which is usually called for. Recall of material is thus meaning-preserving, while extremely forgetful of the linguistic devices by which they were delivered (see, for example, Fillenbaum 1966).

Bransford and Franks (1971, 1972) found that subjects, unless specifically instructed to remember sentences verbatim, were unlikely to distinguish between sentences which they had previously been exposed to; even closely related sentences which they had not actually heard were accepted and included in this finding. What subjects reported appeared to be a unified semantic representation in which the individual sentential inputs were melded into a coherent and congruent cognitive episodic entry. In terms of recall, one can speculate that the verbal constructions in Philippine languages are probably like English constructions in that they may and often do serve a communicative function, but once that function is served the concepts are stored in other than the verbatim linguistic format. The curious point is that if little or no information about individual sentences which are carved out of the entire semantic message is retained, then what is the purpose of focus in a memory retrieval system. One would speculate that it may have little purpose in storage, perhaps less in retrieval, and that ultimately its function is to be found in the discourse setting which it normally comes as part of. This would suggest that our attention should be directed at exactly what the purpose of focus and topicalisation happens to be in terms of discourse setting itself.

Another interesting subject would be to investigate exactly what the relationship between focus and topicalisation is for topics. Much has been written on what the topic may be in an isolated sentence, but not a great deal has appeared on what relationship the appearance of

topics in Philippine verbal constructions has in common with themes for discourse paragraphs. Thematisation (see Perfetti 1973) refers to the referential theme that speakers employ when producing as well as when processing discourse. One could, for example, measure the relative frequency of sentences containing reference to a given noun phrase; this could then be construed as the theme of a given length of discourse. One could then calculate the number of times this particular referent appears in topic position in Philippine verbal constructions. One would thus be able to assess to what degree theme and topic correlate and whether topic is in any way a device used to highlight or to continue reference to a given topic. If the correlation is high, the function of topic can be said to be like the function of recurring theme and serves to highlight given, rather than new information. If so, the topic simply repeats old information and consistently provides a frame of reference which refers to the overall theme of discourse paragraphs on discourse contexts.

Obviously we very rarely have need to process sentences in absolute isolation. Sentences usually appear in discourse context and they usually say something about specific topics. There is a contradiction in terms between the use of Philippine focus as it has often been designated as the centre of attention and new evidence in respect to what can be considered given and new information. Given information obviously deals with what the listener is expected to know and what speakers are framing their new contributions in the light of. New information, on the other hand, is information that listeners are not expected to know already and provides the structure within which speakers are allowed to elaborate and embroider their conversational contributions (see Haviland and Clark 1974). If the speaker does provide new information to his audience and we can expect him to syntactically identify it by a given device, then the Philippine topic may be such a device. Topic as given information may simply address information already present in the memory. New information, on the other hand, would be part of the comment side of the topic-comment relationship and would thus be the rest of the predicate, verbal or otherwise. Topic may be the singularly most available device in Philippine languages for demarcating the boundaries between given vs. new information. It also seems to match with the fact that once nouns are mentioned in discourse, they are mentioned in an indefinite fashion the first time; they are usually mentioned in a definite fashion the second time and thereafter. What one also needs here is some investigation as to how sentences begin discourse - how are the very first

sentences in the opening discourse generated, what are their topics and corresponding verbal constructions, and how do following sentences mirror this? It may be that topic markers are definitivising markers constantly prompting access to information already present in the memory as the discourse flows along. The old topic information then merely serves as a backdrop against which the new information is displayed. Indeed, if there is any perceptual centre of attention, it is the new information which is the centre of attention as the contribution to further elaboration of the basic theme. Others (see Schachter 1976: 496) have also noted that the topic constituent "need not represent the center of attention", for the discourse context may direct attention to a referent which is represented by a non-topic nominal in the surface structure.

Other ideas on thematisation, sentence storage and retrieval come from Perfetti and Goldman (1974). Perfetti and Goldman found that sentences presented in isolation without context elicited no differences between nouns which occurred as subjects and nouns which occurred as objects as prompts to recall the sample sentences. However, when sentences appeared at the end of paragraphs the retrieval power of both types of nouns was greatly enhanced. When subject nouns were the paragraph themes, subject nouns were much better prompts than object nouns. When the object was the theme, subject and object were equal in their effectiveness as prompts. This suggests that theme may play the key part in the storage and retrieval of information and it may also produce constraints as to how speakers handle and encode given and new information. Thematisation is a process by which a given referent comes to be developed as the central subject of a given piece of discourse, and there may be various ways in which this is done; for example, it may not be a specific word which is thematised, but rather a number of words may refer to the same referent. Perfetti and Goldman (1974) note that one might have expected grammatical subjects for sentences in isolation, either because of their syntactic function as subject or their semantic role as typically filled by agent, to have some kind of favoured status over objects in the memory for sentence meaning and serve as better retrieval prompts for single sentences. However, one of the key results of their set of experiments indicates that there is no support for this expectation. One wonders whether the Philippine topic exhibits some of the same constraints. It appears to have a favoured syntactic status like the English subject, but for certain tasks like memory storage and memory retrieval, it may turn out not to have any special status over agents at all. Such prompt

relationships may even be tied to paragraph thematisation instead, and normal discourse conditions are of course more like these conditions anyway. Focus as it has been used in Philippine descriptions may not be as simple and straightforward as a single device for single sentences.

Perfetti (1973) thus found that cued recall for sentences where the semantic function of actor coincided with the syntactic function of deep subject was better than for sentences that did not have this correlation. He also found the same to be true for the relationship between recipient and object. For example, in '*Virgil experienced humiliation at the hands of the soldiers*', '*Virgil*' may be the subject but '*the soldiers*' are in fact the underlying actors in the logical sense. Perfetti inquired whether in such sentences '*Virgil*' or '*the soldiers*' are the more potent clues for retrieving the sentence in its entirety. (Obviously, one can also have congruencies, as in sentences like '*The soldiers humiliated Virgil*' where '*the soldiers*' are both actor and deep structure subject and '*Virgil*' both patient and deep structure object.) The question was whether agents were the most effective prompts in retrieving sentences or whether deep structure subjects would be the most powerful prompts. In cases where they overlap one would have expected these prompts to be the most powerful of all. This promises to be an interesting line of investigation for Philippine sentences insomuch as one wonders how syntactic marking as topic cuts across other semantico-syntactic categories like agent, and how these affect sentence processing and storage.

Before concluding, allow me to comment that I have in this paper tried to present some alternative suggestions as to how the key issue in Philippine descriptions may be approached for a clearer understanding of exactly what the verbal paradigm does. In essence, I fully agree with Fodor, Bever and Garrett's (1974:512) assessment that

... since the adequacy of a grammar depends on the psychological reality of the structural descriptions that it postulates, it may well be that only direct experimentation on psychological reality will ultimately choose between competing syntactic theories.

Where the linguistic arguments are equivocal, and they certainly are in the Philippine verbal paradigm, one is grateful for any metric device by which one can better grasp the essence of the linguistic facts. It may just be that for this case some psycholinguistic investigation may provide exactly the kind of footing that we need. This is especially true in this case, for so much of the discussion about the focus-topic syntactic device has been couched in what are essentially psychological terms.

In conclusion, my approach here has been to meld some of the traditional approaches in Philippine linguistics with some of the mainstream activities in current psycholinguistic research, hoping that the latter might stimulate new outlooks on the former and suggest possible avenues of research which may provide us with answers to some of our basic syntactic and semantic problems. Though this paper has taken somewhat the position of Cyrano's early monologue piquing Valvert on how to approach the question of the nose, my intention was only to present research perspectives on how to approach the question of focus and topic. Herein must lie not only interesting possibilities, but possibly also the answer to the key semantic and pragmatic difficulties we encounter with syntax in Philippine languages.

BIBLIOGRAPHY

BALLARD, D.L.

- 1974 'The Semantics of Inibaloi Verbal Affixes'. *Lingua* 34:
181-218.

BLAKE, Frank R.

- 1906 'Expression of Case by the Verb in Tagalog'. *JAOS* 27:
183-9.

BRANSFORD, J.D. and J.J. FRANKS

- 1971 'The Abstraction of Linguistic Ideas'. *Cognitive
Psychology* 2:331-50.

- 1972 'The Abstraction of Linguistic Ideas: A Review'. *Cognition*
1:211-49.

CENA, R.M.

- 1977 On Resurrecting Buried Agents in the Tagalog Verb. MS.

DANKS, J.H. and P.A. SORCE

- 1973 'Imagery and Deep Structure in the Prompted Recall of
Passive Sentences'. *Journal of Verbal Learning and Verbal
Behavior* 12:114-17.

DEAN, J.C.

- 1958 'Some Principal Grammatical Relations of Bilaan'. *OLM* 3:
59-64.

FILLENBAUM, S.

- 1966 'Memory for Gist: Some Relevant Variables'. *Language and
Speech* 9:217-27.

FODOR, J.A., T.G. BEVER and M.F. GARRETT

- 1974 *The Psychology of Language: An Introduction to Psycholinguistics and Generative Grammar*. New York: McGraw-Hill.

GEISELMAN, R.E.

- 1974 'Positive Forgetting of Sentence Material'. *Memory and Cognition* 2/4:677-82.

GOLDMAN-EISLER, F. and M. COHEN

- 1970 'Is N, P, and PN Difficulty a Valid Criterion of Transformational Operations?'. *Journal of Verbal Learning and Verbal Behavior* 9:161-6.

HAVILAND, S.E. and H.H. CLARK

- 1974 'What's New? Acquiring New Information as a Process in Comprehension'. *Journal of Verbal Learning and Verbal Behavior* 13:512-21.

HERRIOT, P.

- 1969 'The Comprehension of Active and Passive Sentences as a Function of Pragmatic Expectations'. *Journal of Verbal Learning and Verbal Behavior* 8:166-9.

JOHNSON-LAIRD, P.N.

- 1968a 'The Interpretation of the Passive Voice'. *Quarterly Journal of Experimental Psychology* 20:69-73.
- 1968b 'The Choice of the Passive Voice in a Communicative Task'. *British Journal of Psychology* 59/1:7-15.

JUST, M.A. and H.H. BROWNELL

- 1974 'Retrieval of Concrete and Abstract Prose Descriptions from Memory'. *Canadian Journal of Psychology* 28/3:339-50.

KEARSLEY, G.P.

- 1976 'Questions and Question Asking in Verbal Discourse: A Cross-disciplinary Review'. *Journal of Psycholinguistic Research* 5/4:355-75.

KEENAN, E.L.

- 1976 'Towards a Universal Definition of "Subject"'. In: Charles N. Li, ed. *Subject and Topic*, 303-33. New York: Academic Press.

KESS, J.F.

- 1976 Review of *The Psychology of Language* by J.A. Fodor, T.G. Bever, and M.F. Garrett. *CJL* 21/1:126-31.

LAYTON, P. and A.J. SIMPSON

- 1975 'Surface and Deep Structure in Sentence Comprehension'. *Journal of Verbal Learning and Verbal Behavior* 14:658-64.

McKAUGHAN, H.P.

- 1973 'Subject Versus Topic'. *WPLUH* 5/1:121-31.

OLSON, D.R. and N. FILBY

- 1972 'On the Comprehension of Active and Passive Sentences'. *Cognitive Psychology* 3:361-81.

PAIVIO, A.

- 1971 *Imagery and Verbal Processes*. New York: Holt, Rinehart & Winston.

PAIVIO, A. and I. BEGG

- 1971 'Imagery and Comprehension Latencies as a Function of Sentence Concreteness and Structure'. *Perception & Psychophysics* 10:408-12.

PERFETTI, C.A.

- 1973 'Retrieval of Sentence Relations: Semantic vs. Syntactic Deep Structure'. *Cognition* 2/1:95-105.

PERFETTI, C.A. and S.R. GOLDMAN

- 1974 'Thematization and Sentence Retrieval'. *Journal of Verbal Learning and Verbal Behavior* 13:70-9.
- 1975 'Discourse Functions of Thematization and Topicalization'. *Journal of Psycholinguistic Research* 4/3:257-71.

- RAMOS, T.V.
1974 *The Case System of Tagalog Verbs*. PL, B-27.
- SCHACHTER, P.
1976 'The Subject in Philippine Languages: Topic, Actor, Actor-topic, or None of the Above?'. In: C.N. Li, ed. *Subject and Topic*, 491-518. New York: Academic Press.
- SEGALOWITZ, N.S. and R.G. GALANG
1978 'Agent-patient Word-order Preference in the Acquisition of Tagalog'. *Journal of Child Language* 5/1:47-64.
- SGALL, P.
n.d. Conditions on the Use of Sentences and a Semantic Representation of Topic and Focus. MS. Prague.
- SLOBIN, D.I.
1966 'Grammatical Transformations and Sentence Comprehension in Childhood and Adulthood'. *Journal of Verbal Learning and Verbal Behavior* 5:219-27.
- TANNENBAUM, P.H. and F. WILLIAMS
1968 'Generation of Active and Passive Sentences as a Function of Subject or Object Focus'. *Journal of Verbal Learning and Verbal Behavior* 7:246-50.
- TOTANES, S. de
1865 *Arte de la lengua tagala*. 4th edition. Binondo: Miguel Sanchez y Ca. (1st edn 1745.)
- WANNER, E.
1977 Review of *The Psychology of Language* by J.A. Fodor, T.G. Bever, and M.F. Garrett. *Journal of Psycholinguistic Research* 6/3:261-70.
- WASON, P.C.
1959 'The Processing of Positive and Negative Information'. *Quarterly Journal of Experimental Psychology* 11:92-107.
1965 'The Contexts of Plausible Denial'. *Journal of Verbal Learning and Verbal Behavior* 4:7-11.

WRIGHT, P.

- 1969 'Transformations and the Understanding of Sentences'.
Language and Speech 12:156-66.
- 1972 'Some Observations on How People Answer Questions about
Sentences'. *Journal of Verbal Learning and Verbal
Behavior* 11:188-95.

