Sociolinguistics and Transformational Grammar*

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1. The success of transformational grammar owes a great deal to its high degree of idealization. By assuming an unrealistic ideal speaker/hearer in a homogeneous linguistic community, and by proposing the explication of this speaker's linguistic ability to be its ultimate goal, transformational grammar devised a system of grammar which has even become one of the standard notions of the discipline today. Sociolinguistics, on the other hand, is a discipline that has developed itself with a methodology which diametrically opposes that of transformational grammar. Its remarkable progress in recent years has led Dell Hymes, William Labov, and M.A.K. Halliday to assert that sociolinguistics *is* linguistics, and hence the prefix "socio-" is redundant and unnecessary (Halliday, 1974: 81). The recent rise of sociolinguistics is not unrelated to inherent problems in the transformational approach. In fact, Labovian sociolinguistics has developed by challenging the methodology utilized in transformational grammar. In this paper I want to attempt an analysis of reasons behind this rise of sociolinguistics, focusing particularly on those aspects of transformational grammar which are questioned by sociolinguists and others.

2. The fundamental difference between transformationally-based linguistics and sociolinguistics is found in the extent of idealization with respect to their data. As mentioned in the beginning, transformational grammar determines its subject of investigation to be the ideal speaker/hearer (hereinafter referred to as the 'speaker') in an idealized, or completely homogeneous linguistic community. In other words, such a speaker is never subject to dialectal variations, memory limitation, and attention distraction, and is one who never makes any mistake in his linguistic production.

The problem that emerges in attempting to explicate the linguistic competence of such an idealized speaker lies in the specification of the data base for investigation. Noam Chomsky saw the possibility of the actual linguistic production being greatly altered by a variety of factors involved in linguistic performance. He, therefore, determined his data for analyses to be the linguistic intuition and introspective judgements by the native speaker of a particular language. In his own words, "Intuitive and introspective judgements are the primary data for the descriptive grammarian, hence also the linguistic theorist (Parret, 1974: 40, Chomsky)."

Such a format of investigation based on the idealization of the linguistic community

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and its speaker, as well as on the speaker's intuitive and introspective judgements, has greatly contributed in explicating language structures. By idealizing the community as well as the speaker, dialectal differences, linguistic variations due to the speaker's sex and to socio-economic status, and other factors of interpersonal relations are all left unconsidered. This enabled transformational grammarians to regard the homogeneized (and often abstract) language data to be the subject of their investigations. This, in turn, allowed for a high degree of formalization, and transformational grammar succeeded in obtaining unprecedented results through its analyses. In addition, by considering not the actual linguistic production, but instead the speaker's intuitive and introspective judgements, such an approach included in its data base not only grammatical sentences but also ungrammatical sentences and other sentence types crucial for developing various arguments as well. Access to native speaker judgements on these latter sentence types facilitated the evaluation of any proposed hypothesis.

The methodology found in sociolinguistics sharply contrasts with that of the transformational approach. In sociolinguistics, its data are sought in real, existing communities due to its recognition that variations in linguistic forms themselves, and the correlation between linguistic forms and social structures reflect the germane nature of language.

Chomsky regards his idea of "linguistic competence" to be the equivalent of the concept of "langue" advocated by F. de Saussure. "Langue" is what is possessed by all the members of a given linguistic community. Since Chomsky assumes linguistic competence of the speaker in a homogeneous linguistic community, it follows that he also postulates linguistic competence to be something that is homogeneous among different speakers. William Labov challenges both the assumption of homogeneous linguistic competence as well as the methodological characteristics of tranformational grammar; namely, its dependence on the native speaker's intuitive and introspective judgements.

3. While transformational grammar attempts to construct a system which generates only the grammatical sentences and which eliminates all the ungrammatical sentences, it faces the problem of determining which sequences of words to be grammatical and which to be ungrammatical. Apparently, in 1957 Chomsky had already noted the ambiguous instances of the "grammaticality" of certain sentences, but evidently he believed that those sentences were rare, and that the specification of more definite cases would eventually determine their grammaticality (Chomsky, 1957: 14). In other words, if the grammar, constructed on the basis of clearly grammatical sentences, generates the sentences in question, then they are grammatical, if not, they are considered ungrammatical. However, the actual consequences of proceeding with the research based on native speaker judgements of grammaticality are far from what Chomsky expected.

As anyone who has taken a course in syntax or has attended linguistic conferences in the United States may have experienced, it is evident that the grammaticality judgements of a group of native English speakers are far from being homogeneous. At linguistic

meetings, unless commenting on grammaticality of certain sentences is prohibited, the discussion often tends to become entirely unproductive. It is also common to witness instances where it is only after the pre-establishment of the condition, "given this sentence to be grammatical," that the speaker can proceed on to his core arguments.

These observations not only question the validity of Chomskyan assumption of homogeneous linguistic competence, but also bring about the problems inherent in the methodology of linguistic investigation based on native speaker's intuitive and introspective judgements. In fact, some of the transformationalists themselves acknowledged these problems and conducted some studies which focused precisely on this issue of variation in native speaker judgements. The study done by Eliot et al. (1969) is one of them. Given below is an extract of the results obtained in this particular study.

The following four sentences were presented to 27 subjects in order to survey their grammaticaity (acceptability).[1]

(1) a. Sophia Loren was seen by the people while enjoying herself.
b. The people saw Sophia Loren while enjoying themselves.
c. Judy was seen by the people while enjoying themselves.
d. The people saw Karen while enjoying herself.

This study examined the extent to which the subject of the embedded *while*-clause may be deleted, and investigated the possible implicational relationship between sentence structure and its acceptability. The following are the results relating only with respect to the issue of acceptability. First, 4 out of 27 subjects regarded sentence (a) to be impossible in the English language. 5 subjects regarded sentence (b) as being impossible. For sentence (c), approximately half of the subjects, or 15 of them, judged it as impossible. And finally, only 6 subjects regarded sentence (d), possible.

While Eliot et al. focused on sentence acceptability, Carden's study (Carden (1970)) examined the variation found in native English speaker's semantic interpretations. This study surveyed the probable interpretation of sentence (a) below, whether it is interpreted as (b) or as (c). The results confirmed the existence of three idiolect groups.

(2) a. All the boys didn't leave.
b. Not all the boys left.
c. All the boys (didn't leave).=None of the boys left.

The three idiolect groups were comprised of those who interpret sentence (a) as (b), as (c), and those who claim both (b) and (c) to be the possible interpretations of (a).

A similar type of survey was conducted with Japanese speakers. S.I. Harada (1971)

[1] Chomsky distinguishes between grammaticality and acceptability. However, since memory limitation, center-embedding and others, which Chomsky considers relevant for acceptability, are not involved here, the terms grammaticality and acceptability are used synonymously hereafter.

identified two idiolect groups concernirg the acceptability of sentence (b) below.

(3) a. Watasi-wa Nikuson-ga uso-o tuiteiru koto-o satotta.
I -TOP Nixon -NOM lie-ACC saying that-ACC realized
'I realized that Nixon was lying.'

b. Watasi-wa Nikuson-*no* uso-o tuiteiru koto-o satotta.
I -TOP Nixon lie-ACC saying that-ACC realize
'I realized that Nixon was lying.'

The Chomskyan assumptyon of homogeneous linguistic competence has thus been shown untenable through these kinds of studies performed by transformational grammarians. Although it may be possible to counterargue that the concept of homogeneity is only applicable to each unique dialect group, it is inappropriate to bring in the notion of "dialectal" variation in the cases of the results of the studies cited above. Normally, dialects are identified when a bundle of linguistic features delineate between two or more language groups. It is difficult, therefore, to introduce the concept of "dialect" in situations where the variation in speaker's reactions is observed only with respect to an individual rule or phenomenon. It is equally invalid to assert that: "the true objective of our investigation is idiolects." First of all, there actually exist various groups of speakers who make similar judgements about certain linguistic data. Secondly, if idiolect, or the individual linguistic competence, is in fact the sole object to be investigated, it is unnecessary to assimilate the notion of "competence" to that of "langue" by stating, "an ideal speaker in a perfectly homogeneous community."

The discussions above demonstrated apparent variations among native speakers' judgements of grammaticality/acceptability of certain types of sentences. What is more problematic with regards to the Chomskyan assumption, however, is the fact that native speaker intuition and introspective judgements about a certain sentence oscillate depending upon its contextual information. The study done by Heringer (1970) shows this point rather effectively. This study re-examined the results previously obtained in Carden's study (referred to above) concerning native speaker judgement on the relationship between a quantifier and the scope of negation. Unlike the previous study, however, Heringer supplied contextual information for each of the sentences presented to his subjects. Instead of just presenting the sentence such as (2a) and asking for its semantic interpretatin (as Carden did), he supplied the possible semantic interpretation and asked the subjects if the sentence is possible or not with the given interpretation. For example, to parallel (2b) and (2c), the two possible interpretations of sentence (2a), he presented the following data.

(4) a. All the boys didn't leave.
(Used in the situation where some of the boys remained.)

b. All the treasure seekers didn't find the chest of gold.
(Used in the situation where none of them found it.)

The results demonstrated the following. First, the idiolect group unidentified in Carden's study was found. Out of 54 subjects, as many as 9 subjects did not find either (4a) or (4b) aceeptable. Next, with respect to those who found (4b) acceptable but (4a) unacceptable, while this group comprised the majority in Carden's study, only 3 subjects were identified this time. A great difference in results was witnessed therefore, between simple ellicitation of the possible semantic interpretation of a given sentence and cases where the subjects were asked if the sentence is possible or acceptable in the given context.

In the same study, Heringer also discusses an even more dramatic finding than his demonstration of the fluctuation in speakers' judgements by the inclusion of contextual information described above. When the sentence, "John left until 6 P.M." was given to one group of informants together with the contextual information that it describes the situation where "John left earlier and is going to come back at 6 P.M.," 15 out of 37 informants found the sentence acceptable, and out of those 15, 11 responded that it is perfectly grammatical. On the other hand, when the same sentence was given to another group of informants without supplying any contextual information, only 2 out of 28 found it acceptable. Such an observation clearly demonstrates that speakers' judgements change according to the availability of contextual information, and hence it points up the problems involved in any linguistic analysis that depends solely upon speakers' judgements.

Labov also examined the issue of grammaticality of sentences with a quantifier and the scope of negation. As in Heringer's study, Labov concluded that one can greatly alter speakers' judgements through controlling the possible contextual information describing the situation in which a particular sentence is used. In addition, Labov also noted the discrepancy between one's introspective judgements and his actual usage (Labov, 1972: ch. 8).

Variations in native speaker judgements are observed in any language. In my own experience dealing with Korean informants, I have had varying reactions toward the double accusative sentences. While the informants accepted the sentences in (5) consistently, there were considerable disagreements about the grammaticality of the sentences in (6). Some even offered an opinion that though some of the sentences in (6) sound strange, pepole do use them.

(5) a. Na nin ai *ril* pab *il* məkke hetta.
I TOP child ACC rice ACC eat do
'I made a child eat rice.'

b. Na nin hanguk-mar *il* koŋbu *ril* hetta.
I TOP Korean ACC study ACC do
'I studied Korean.'

(6) a. Na nin ai *ril* hanguk-mar *il* karitʃʰiətta.
I TOP child ACC Korean ACC taught
'I taught the child Korean.'

b. Na nin ai *ril* tʃʰɛg *il* tʃuətta.
I TOP child ACC book ACC gave
'I gave the child a book.'

c. Na nin ai *ril* məri *ril* ttɛliətta.
I TOP child ACC head ACC hit
'I hit the child on his head.'

The problem here lies in deciding whether to regard the speaker's judgements, or the actual language use as the subject of investigation. Chomsky, for instance, claims that speakers' actual utterances found in the real world are "contaminated" by various factors of linguistic performance and therefore they do not directly reflect linguistic competence (Chomsky, 1964: 4). In the light of the results of the studies mentioned above, however, it is very possible that the speakers' introspective judgements themselves are vulnerable to contextual and other factors engendered by linguistic performance.[2] To this Labov asserts that native speaker intuition is far less systematic than actual usage, and therefore difficult to interpret. He concludes that if one wants to effectively take advantage of native speaker judgements, one needs to interpret the judgements unconsciously produced (Labov, 1972: 199).

In either case, in the process of writing a grammatical description while discriminating between grammatical and ungrammatical sentences, it is difficult to accept Chomsky's argument, and his remark that "'grammatical sentences' are those generated by the grammar (Parret, 1974: 39)" is completely circular.

4. Along with those developments cited above, there was another movement supporting the sociolinguistic approach to linguistics. A group of original transformationalists shifted their objectives to a direction different from that of Chomsky. Such was the emergence of the "generative semanticists" with George Lakoff and James D. McCawley being the leading figures. Since 1957, Chomsky has been arguing for the "independence of grammar," and has been pursuing his characterization of syntax independent of semantics, and of grammar independent of context. According to the generative semanticists, however, grammar is comprised of three components; namely, sentence, logical structure, and context (Parret, 1974: 156, G. Lakoff). Such an attempt at bringing sentence into the realm of context naturally leads one to the areas traditionally considered within sociolinguistics.

First, the generative semanticists abandon the notion of "grammaticality". While the above mentioned studies demonstrated the difficulty of determining the speaker's

[2] After finishing the Japanese version of this article, I had a chance to go over T.G. Bever and D.T. Langendoen's paper "A dynamic model of the evolution of language" in *Linguistic Inquiry* 2 (1971, 433-463), in which I encountered the following remarks: "...but judgments about potential sentences are also behavioral manifestations of linguistic knowledge, and as such are no different in principle from the more ordinary uses of linguistic structures. Even though predictions about sentences may be the most direct evidence we have concerning linguistic structures, such judgments are not entierly free from behavioral effects." (433)

linguistic competence on the basis of his intuitive and introspective judgements, McCawley (1976, 153) insists that neither intuitive nor introspective judgements are judgements of "grammaticality". Rather, he maintains, they reflect the speaker's capacity of mentally visualizing the context in which a sentence may be utilized, or else they indicate the speaker's ability to seek out the appropriate use of such a sentence. This claim is supported by Heringer's study, where an increase in acceptability was demonstrated when the subjects were provided with an additional explanation saying "this sentence is used in so and so context."

According to Lakoff also, the notion of grammaticality is insignificant, and he asserts that there exists instead, the concept of "appropriateness" with regards to the three grammatical components, sentence, logical structure, and context. He presents a number of examples which demonstrate the interaction between appropriateness and the context in which a sentence is used (Parret, 1974: 156-163, G. Lakoff). Some of his examples are reproduced below.

First, in order to demonstrate that the form of the preceding sentence is crucial in determining the appropriateness, Lakoff gives the following examples.

(7) Did you give a present to someone?
A. Yes, Zelda.
B. Yes, to Zelda.

(8) Did you give someone a present?
A. Yes, Zelda.
B. *Yes, to Zelda.

The difference between ordinary passive and *get*-passive sentences are presented to show the significance of the speaker's psychological reaction to a described event (Lakoff (1971)).

(9) Fred Snurdley was arrested yesterday on a marijuana charge.
(10) Fred Snurdley got arrested yesterday on a marijuana charge.

When the speaker is objectively reporting the event he is likely to use sentence (9). If the speaker, on the other hand, is sympathizing with Snurdley, it is (10) which is more likely to be used. It follows, therefore, that newspaper reports and such are written using the form of (9) rather than of (10).

Lakoff also holds that the concept of polite/impolite interacts with the appropriateness of a sentence. In situations where politeness is required, sentence (a) below is appropriate but (b) is not.

(11) a. Can you take out the garbage?
b. You can take out the garbage.

In addition, he mentions that the appropriateness of a sentence is not independent

of linguistic style in which a certain event is described. While sentence (a) below is thus acceptable as a narrative in a story, it is only (b) which can be utilized in daily conversations.

(12) a. Noon found Harry standing in front of the Blue Parrot Saloon.
b. At noon, Harry was standing in front of the Blue Parrot Saloon.

The kinds of phenomena discussed above are even more evident in a language like Japanese. For instance, if one asks for the appropriateness of the sentence "Atasi iku wa yo" (I'm going), to a native speaker of Japanese, a definitive response probably cannot be obtained unless its contextual information is provided. First of all, whether the speaker of the utterance is a female or a male, in other words the speaker's sex must be specified. The utterance is acceptable only when uttered by a woman. In addition, unless one has access to the information concerning whether any expressions of respect are required or not in the situation in which the sentence is uttered, it is not possible to decide on the appropriateness of the sentence. The above utterance is only appropriate in a situation where expressions of respect are not required.

Also in Japanese, there are syntactic rules applicable only to female speakers. One of those involves the deletion of the copula "da" before the sentence final particle "yo". Sentence (a) below can be used by both male and female speakers, though it would be a rather blunt expression for the latter. On the other hand, the *da*-deleted form represented by (b) is exclusively for female speakers.

(13) a. Kirei da yo.
pretty COP Part.
'(It) is pretty.'
b. Kirei yo.
pretty Part.
'(It) is prety.'

As a summary to his arguments for the interrelationship between the sentence appropriateness and its context, Lakoff says that, except for the decade from 1957 to 1967, when transformational grammar dominated the field, linguistics has always been sociolinguistics (Parret, 1974: 161).

Along with George Lakoff, Robin Lakoff also argues for the need to consider the interaction between language and context through her studies of honorific expressions and female language. In her book, *Language and Woman's Place*, which is responsible for the recent popularity in the studies dealing with the issues of language and sex, she argues that there is nothing more closely related to the construction of linguistic theory than language use. She concludes that linguists must therefore professionally involve themselves in the areas of sociology.

While the generative semanticists were discussing in this manner the issue of

sentence appropriateness and its context, linguistic philosophers such as John Searle and H.P. Grice proceeded with their studies in identifying appropriateness conditions (felicity conditions) with regards to speech acts, and rules necessary for carrying out appropriate conversations (rules of conversation). A number of linguists also engaged themselves in investigating from these perspectives the relationship among utterance, context, and meaning.

Dell Hymes' concept of the speaker's communicative competence (Hymes (1971)) attempts to globally schematize all the considerations presented above. For a child to become a competent native speaker of any one language, he needs not only linguistic competence in Chomsky's sense, but also must acquire various aspects of language use. For one to become a full-fledged native speaker of Japanese, for instance, it is indispensable for him to acquire such aspects as the difference between male versus femal language, as well as the appropriate usage of polite expressions. According to Hymes, to give a true account of linguistic competence, one must set the goal at explicating total linguistic competence essential for individuals to communicate competently with one another.

To summarize, the rise of sociolinguistics today is due to its critical evaluation of Chomskyan methodology, and at the same time, it owes a great deal to the activities of the generative semanticists as well as the linguistic philosophers, who have made their contributions through their interests in the relationship between language and context.

5. Finally, let me comment of the statement, "sociolinguistics is the lingusitics," mentioned in the beginning of this paper.

When one objectively considers the nature of language, it soon becomes apparent that it is simultaneously comprised of psychological and socio-cultural aspects. Anyone who is engaged in the study of language, however, tends to concentrate on one or the other of the two, because of one's personal preference in interests and because of time limitation. Chomsky is interested in psychological aspects of language and regards linguistics as an area of psychology (Parret, 1974: 40). Halliday, on the other hand, focuses on social aspects of language and considers linguistics as a sub-field of sociology (Halliday, 1974: 85). If one acknowledges, however, the dual nature of language, linguistic investigations devoid either of sociological or of psychological considerations cannot be regarded as linguistics in the true sense. John Ross gave the following analogy in his recent talk, which, I believe, illustrates my final points very well. If one wants to study the music by Johann Sebastian Bach, one cannot study only the violin parts and ignore all the rest. Similarly, Ross said, if one is to undertake a study of language, one must not investigate only one aspect and ignore the other relevant areas.

The idealization in Chomskyan linguistic investigations has recently been advanced to an even greater extent. His core grammar is a grammar envisaged at a level more abstract than that of the grammar hypothesized to exist in the speaker's brain (Chomsky, 1981: 40). The question of validity of such an abstraction as a way of investigating the

psychological aspects of language aside, one must remember that while idealization is necessary in any scientific study, those factors which are extracted in the process of idealization must be eventually explained. The recent rise of sociolinguistics can then be understood as due to the recognition in the field that those factors which have been put aside by Chomsky are far too important to be left unexamined, if true linguistic investigations should be pursued.

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