POETIC DEVIANCE AND GENERATIVE GRAMMAR*

JOHN M. LIPSKI

Dept. of Romance Languages, Michigan State University

1. One of the most significant potential contributions of modern linguistics to literary studies is the notion of a generative grammar, embodying the concept of the competence-performance dichotomy, and the proposed division between deep and surface structure, mediated by generative transformational rules. Of central importance to the theoretical application of the theory, and indeed central to TG itself, is a characterization of "deviance" or "ungrammaticality." One of the major contributions of TG grammar to linguistic theory has been a rigorous notion of ungrammaticality, in terms of violation of basic deep or surface relations. Refinement of the notions of transformation and deep structure has led to a more precise view of grammatical deviance, and it was hoped that a logical extension of such methodology would be used to characterize the notion of deviance in literature, particularly in poetry, and thus to establish a truly linguistic stylistics.[1]

The bibliography of linguistic stylistics has grown enormously since its inception, and a comprehensive review would far exceed the scope of a single essay. The present note will therefore confine itself to a single topic, the notion of deviance in poetry, and various attempts to deal with such deviance within the framework of TG grammar. Since a general lack of agreement prevails concerning the precise role of a generative grammar in a description of poetic deviance, it was felt that a brief review of the currently available proposals might place matters in a somewhat clearer perspective. Following this survey will be some reflections on the adequacy of the

---

[1] In a purely linguistic description, however, ungrammaticality or deviance is defined with respect to a pre-established grammar; a deviant utterance is one which is not generated by the grammar, for whatever reason. In literary studies, in contrast, deviance of style is generally defined as a departure from a contextual *norm*, which may be internal to the particular work itself, or may include other texts.

available models and the prospects for future applications of linguistic theory to literary studies.

2. In order to discuss the various possible models of description of a deviant text, one must first establish the presence of a true example of deviance. Attempting to characterize deviance in terms of failure to comply with grammatical prerequisites is a circular procedure if one later wishes to describe the deviance as ungrammaticality. In practice, the investigator is guided by intuitive feelings about unacceptability or ungrammaticalness, in terms of deviation from more "normal" patterns of discourse, since "the effect of deviant poetry is based on comparison between deviant and normal expressions" (Enkvist (1973: 103). As an example, we may consider E. E. Cummings's now classic line *he danced his did*, from the poem "anyone lived in a pretty how town," which has formed the basis for much of the recent linguistic discussion of poetic deviance. Given such a phrase, three fundamental methods of approach have appeared within generative theory. Each presupposes the previous existence of a complete generative grammar of the standard language in question, in this case modern English, and thus the following discussion will be restricted to those analyses which have appeared within the framework of generative grammar, to the exclusion of more general studies of poetic deviance. The three strategies are as follows. First, given a generative grammar of the standard language, one may make note of those points where the deviant example departs from the grammatical structure of the language, in terms of the rules and category restrictions. Secondly, the deviant example itself may be regarded as a text writtten in a new language, cognate with, but not identical to, the standard language. This premise may then be utilized to write a generative.grammar which will directly produce the deviant text. Finally, given both the deviant structures and the generative grammar of the standard language, one may seek to interpret the deviant utterances in terms of congruences with acceptable utterances in the standard language, through association or interpretation via "transition rules." Clearly, these three approaches are not mutually exclusive, but may at times overlap or intersect; they merely represent prevalent methodological tendencies.

The first-mentioned approach, that of describing points of difference between deviant and normal text, is best exemplified in the work of Samuel Levin. In his earliest work, Levin (1963: 285) defined deviance as simply ungrammaticalness, adding that the deviation is in some manner controlled to keep it from departing too drastically from the norm. Therefore, a deviant

phrase or structure may be characterized by describing the type and number of grammatical rules which have been violated. Levin offers no rules for the generation of specific deviant utterances, since such rules would be in effect ad hoc and meaningless (Levin, 1962: 26). Later, however, (Levin, 1964: 312-313) discusses the possibility of modifying the standard grammar to include rules which will actually generate the deviant utterances in question, the notion that "the degree of grammaticalness of any deviant sentence can be interpreted as a function of the number of unwanted consequences that the revised rule generates." Levin (1965) also adds that it is possible to take any deviant string and interpret it as a case of either word order or word category violation. In reality, however, the structure of the deviant sequence will generally indicate the correct interpretation.

Given both a deviant sequence and a generative grammar of the standard language, it is quite possible to describe those rule or category violations which result in the deviance. To do so, however, is to engage in a purely taxonomic procedure, in the style of earlier studies which made no use of the machinery of TG grammar. Simply to classify the grammatical violations within a deviant string only tells us why the string is interpreted as deviant, a matter which native speakers presumably already know, even if they cannot explicitly formulate the rules involved. However, in order to go beyond this purely taxonomic description and broach the more fundamental questions of the role of deviance in poetic expression, it is necessary to do more than merely list the errors which have gone into the production of a particular text, or attempt to modify the standard grammar to account for particular deviant examples.

The second approach to deviance is exemplified by the work of J. P. Thorne, who notes (1970: 192) that "the poet works under the restraint of self-imposed rules; that is, rules which do not form part of the grammar of a natural language." In a discussion of Levin's proposals, Thorne (1965) deals with the former's rules for the direct generation of the phrase *he danced his did*, while excluding other similar expressions like *he wrote his slept*, concluding that a more optimal grammar would involve a few rules excluding both strings rather than the cumbersome apparatus necessary to generate one but exclude the other. Thorne's answer to the problem lies in the construction of a separate grammar which would directly generate the required deviant sequences, not in relation to a standard grammar, but as a separate and independent language. The justification for such a procedure (1970: 194) is the idea that the poet has in effect created a new language or at least dialect, and the reader's task is akin to that of the language learner or dialectologist.

Thorne (1965: 55) admits, however, that this approach relies heavily on intuition, following from the analogy with the learning of a new language and the development of intuitions about that language. He also advocates the incorporation into the grammar of the greatest possible number of subjective impressions, in order to be most illuminating to the investigator. Thus, Thorne's grammar would directly generate examples such as *he danced his did*, or Dylan Thomas's *a grief ago*, each individual case being considered a grammar of a special language, e.g., "Cummingsese," "Thomasese," and so forth. Such an approach immediately raises the question of the relationship between these independent grammars and the grammar of the standard language. Despite the deviations from the standard language to be found in his poetry, E. E. Cummings, for example, presumably wrote in English, at least from his own point of view, and thus it is unclear precisely what value accrues from considering a grammar distinct from that of English in order to generate his poems. Roger Fowler (1971: 18) has remarked that "if a poem is read by someone who knows the same language as its author, every sentence is as much the property of the reader as of the poet: the poet does no more than exploit linguistic resources that the reader also has at his command." Roland Harweg (1973), during a discussion of text-grammars to generate literary texts, considers Thorne's proposals, but questions the logical possibility of writing a grammar for deviations from a grammar. Harweg does not think that it is possible, and prefers instead the notion of "deviation stylistics," and of "competential" and "performantial" grammars of given literary texts, the latter indicating the transition from the underlying grammatical structures to the concrete and often somewhat unusual structures of the textual surface. Quirk (1964) in commenting on Levin's proposals had similarly noted that the task of the investigator is to describe poetic usage and not to generate it. More important, as with Thorne's own criticisms of Levin's attempts to modify the standard grammar, the creation of a grammar which will directly generate sequences which are deviant with respect to the standard language raises the problem of "over-generation," that is, any grammar which will directly produce *he danced his did* will presumably also turn out *he jumped his said, he washed his had*, etc., in infinite combinations unattested in the poetry of Cummings or anywhere else. The only means of blocking such over-generation is to return to highly specific ad hoc rules which constrain the grammar to the point where only the desired sequences are produced; to do so, however, is to return to the purely descriptive analysis of specific points of deviation, and precludes the writing of a special grammar. The only conceivable benefit to

be derived from such over-generation is the possibility for creating pastiches of a particular author's style, thereby gaining further insight into specific grammatical manipulations which result in identifiable styles. However interesting such possibilities may be, they are nonetheless beside the point when attempting to analyze a particular instance of grammatical deviance; thus, in its present state, the proposed special grammar for individual poems is seen to result in an uncontrollable output of extraneous material.[2]

It is apparent that, no matter how great the deviance exhibited by a sample of poetic language, the reader is going to interpret this sample as best he can utilizing the only linguistic model at his command, his native language (and that of the poet). Therefore, many investigators have tried to characterize poetic deviance in terms of the success or failure of attempts at interpretation based on the standard grammar. A modification of Thorne's position is suggested by Fowler (1969: 77), who proposes the analogy of understanding an unfamiliar dialect of one's own language, since "one is not simply processing new linguistic data as in language acquisition but is at the same time establishing some kind of relation to the grammar one knows." Rejecting Katz's (1964) division of ungrammatical strings into the mutually exclusive categories or "semi-sentences" and "nonsense strings," Fowler argues for a single interpretive mechanism for all ungrammatical strings, which is independent of linguistic competence. Fowler's position further differs from that of Katz, who regarded grammatical deviance as a function of grammatical competence, in the presence of "sufficient structure," which relates the ungrammatical sentences to known grammatical sequences via a series of comprehension sets and transfer rules. Fowler accepts a modified version of the comprehension sets, by means of which the structure of a deviant sequence can be apprehended, and also the notion of transfer rules; he differs, however, in his belief that the interpretation of deviant strings is essentially a performance capability. In Fowler's conception, the reader starts with a series of "source sentences," i.e., a sort of new structure, to which are applied the transfer rules leading to the deviant utterances in question.

Ronald Butters (1970) in turn questioned whether, in cases of severe

---

[2] A somewhat different approach has been suggested by Hendricks (1969), who criticizes Thorne's proposals, suggesting in turn that emphasis needs to be shifted from considerations of poetic *language* to poetic *texts*. Hendricks thus proposes a lexical approach, along the lines of Riffaterre (1966), but stands in contrast with both Riffaterre and Thorne, who accept the poetic-non poetic dichotomy, Riffaterre in his conception of uniquely "poetic" language, and Thorne with his proposal of separate grammars for individual texts.

ungrammaticalness, there is not a difference in the kind of the various possible interpretations, rather than merely a difference of degree. As a final note, Aarts (1971) suggested that Fowler's interpretations of Cummings's line could be fitted into the framework of Katz, by noting that a consideration of the metaphorical usage of *dance*, through the addition of missing feature specifications, permits the possible variant reading "he rejoiced in his past actions," thus corresponding to one of Fowler's interpretations.[3]

Katz's conception of "semi-sentences" and their resulting interpretation stems from an earlier remark by Chomsky (1961), that "given a grammatical deviant utterance, we attempt to impose an interpretation on it, exploiting whatever features of grammatical structures it preserves and whatever analogies we can construct with perfectly well-formed utterances." At no point, however, in the models of Chomsky, Riffaterre, Fowler, Hendricks, or Aarts, investigators who have suggested that deviant utterances are interpreted by virtue of their similarity to existing grammatical sequences, does one find explicit criteria for establishing the transitions necessary to effect the required interpretation, thus making it impossible to accurately determine the adequacy of such models. Indeed, reference to intuition abounds, and the resulting interpretations are often controversial and empirically unmotivated, as in the case of Cummings's *he danced his did*, which has yet to receive a unanimously acceptable reading from linguists.

Although most attempts to deal with grammatical deviance in terms of congruence with grammatical patterns have suffered from lack of sufficient detail, the work of Weinreich (1972) offered several explicit criteria for the interpretation of deviant strings. Weinreich's semantic model is based on the operation of the "semantic calculator." According to Weinreich's views, an interpretation is placed upon a deviant string through comparison with wholly grammatical strings through the operation of "transfer features." Thus, in a phrase such as *a red house occurred twice*, the verb *occur* contains the inherent feature [+time], while *house* is inherently [−time]. In this particular string, however, the contradictory specification results in transfer of the feature [+time] to *house*; the result is the operation of a "construal rule," which interprets the phrase as referring to the event of perceiving a house. Similarly, the phrase *he trues the rumor* triggers a construal rule which verbalizes the adjective *true*, according to the transitive schema "causes

---

[3] This is similar to the remarks by Thorne (1969: 148) that in good poetry the differences from standard language lie in the deep structure, while in poetry of lesser quality, the differences exist only in the surface structure. Similar observations are found in Matthews (1971), Loewenberg (1975) and Sanders (1973).

(NP) to be Adj." The semantic calculator assigns various measures of deviance to such re-construed phrases, depending upon the degree of severity of the inherent contradictions. These measures may in turn be related in some way to absolute values of poetic deviance.

Weinreich's model represents a great improvement over the sketchy suggestions offered previously. The concept of transfer features and construal rules allows for explicit portrayal of the manner in which interpretations have been attempted on contradictory or deviant strings. Since Weinreich's theory was, unfortunately, never extended beyond the level described above, one must extrapolate from the available observations in order to provide an interpretation for the phrase *he danced his did*. Presumably, *did* contains the features [−noun] and [+verb], contradicting both the features of *danced* and those of *his*. Therefore, transferring the feature [+noun] to *did*, we arrive at a situation in which the verb *dance* has become transitive, with *did* as the direct object. On the other hand, since *dance* does not normally take a DO other than as a cognate, such as *dance, waltz*, etc., the phrase as it stands also exhibits a feature contradiction between *his*, signalling a following object, and *dance*, normally intransitive, thus calling for an additional feature transfer and construal rule. Therefore, at least two contradictions are exhibited by this string, with only the relatively minor words *he* and *his* remaining as unchanged pivotal points during the semantic re-construal, a result not wholly consistent with Weinreich's model, at least in its explicit formulation.

In any event, given the grammatical re-formulation offered by the operation of the semantic calculator, we only arrive at the configuration *he danced his DO (did)*, with *did* still exhibiting all the confusing uncertainty and ambiguity of interpretation as with the earlier attempts at semantic analysis. We have in fact achieved nothing more than an analysis based totally on morphophonemic shape, totally disregarding the meaning of the individual morphemes, much as in the Jabberwocky, since we are not even certain what *dance* means in such a phrase, much less *did*. It is as though we were confronted with *he glurped his blop*.

Further reflection reveals that, whereas Weinreich's model provides a highly satisfactory interpretation of strings such as *a red house occurred twice*, it does so only because the semantic structure of the string in question is known *in advance of* the operation of the semantic calculator. That is, in order to construe the syntactic means by which *red house* is interpreted as referring to an individual event, we must have beforehand a general idea of the underlying meaning of this string. Thus, given the phrase *he danced his*

did, a syntactic reconstrual is useless without prior semantic knowledge, which in this particular case would probably have required reading the author's mind. The conclusion which must be drawn is that Weinreich's model, for all its explicitness and sophistication, is a secondary stage of a more involved process of semantic interpretation, the first part of which consists in actually predetermining an underlying semantic configuration.

In the case of the interpretation of received deviant strings, it is clear that some sort of reference to the standard grammar must be made in any event, since the reader is not interpreting such sequences in a vacuum, but must utilize the knowledge shared by himself and the writer, namely their common language. It is not equally clear, however, that the reader must, especially in cases of severe deviation, utilize some form of a generative grammar to effect this interpretation, at least in the initial stages. In cases of mild deviance, such as violations of certain category restrictions, or comparatively tame deviation of word order, it is quite likely that the reader makes direct mental reference to comparable grammatical sequences in the standard language, thus providing a nearly instantaneous matching and allowing the deviant sequences to be interpreted as a metaphor or example of poetic license. This has been noted, for example, by Chomsky (1965: 228), in reference to another poem by Cummings. On the other hand, a sequence such as *he danced his did*, despite the various attempts at interpretation, fails to find a congruence within the set of possible grammatical strings, thus casting doubt on the ability of a generative grammar to adequately account for its interpretation. In more extreme examples, such as Concretist poetry, spatial arrangements and juxtapositions often form part of the prerequisites for interpretation, thus suggesting the use of some sort of topological model for the initial processing (see Lipski, 1974). Again, in works such as Michaux's *L'Infini turbulent* and *Miserable miracle*, stream of consciousness narrative is supplemented by a continual series of marginal notes, made to be read and interpreted as nearly simultaneously as possible with the body of the text. In all such cases, it is unlikely that interpretation is effected by comparison with completely generated grammatical sequences, since in many cases the degree of deviation seems to preclude the formation of explicit transition rules, and the failure of critical unanimity of interpretation speaks eloquently against the formation of "source sentences."

The above discussion, while far from complete, reveals the basic points of convergence and controversy among the possible methods of interpreting poetic deviance within the theory of generative grammar. By fixing the standard grammar to include selected deviant phrases, one runs the risk of

over-generating an uncontrollable number of useless deviant strings, and of merely cataloguing points of anomaly. Conversely, considering each deviant poetic text to represent a unique language and writing a grammar to account for this special "language" results in a high degree of parochialism, making comparison with the standard language difficult if not impossible. Finally, by considering that deviant strings are interpreted by virtue of associations with known acceptable forms, many of the problems of the other models appear to be avoided, but in order to further discuss such a proposal, we shall need a more explicit discussion of the nature of the semantic transfer rules. Before pursuing this approach, however, it is necessary to briefly digress in order to touch upon an important procedural matter.

3. Most noteworthy among the accounts of poetic deviance surveyed above have been the attempts to make a generative grammar *directly* account for the deviant sequences in question, in terms of violations of rules or category restrictions. Lacking in all accounts, however, is a clear distinction between the *productive* and the *receptive* aspects of generative grammars. Given the as yet unresolved question of the "directionality" of generative grammars (cf. Eliasson, 1975), it is necessary to consider, in the description of grammatical deviance, the separate but related notions of the actual generation of a particular poetic text, and its interpretation by a reader/listener, distinct from the author. By drawing this distinction from the outset, it will be possible to examine in greater detail the relevance of the generative model to the questions posed by grammatical deviance.

Directing our attention first to the problem of the generation of deviant texts, it has been seen that neither modification of the standard grammar nor the writing of special grammars to account for individual texts provides an adequate model, since the first allows for the over-generation of extraneous material, while the second obscures the fact that the poet is, despite his deviation from more established patterns, creating a poetic expression utilizing as a vehicle his own native language, that is, some variant of the standard grammar, and not a special privately invented language. If one does not assume a common linguistic basis for all examples of literary production within a given language, comparison becomes impossible, and the goals of linguistic and literary theory are defeated from the outset. Thus, two of the three major models for the description of poetic deviance in terms of generative grammars fail in principle to account for the actual production of deviant texts, while the third model is not immediately applicable, since it deals primarily with the side of interpretation.

The above shortcomings seem to be a direct result of the impossibility of incorporating, into a generative grammar, a decision process which will selectively produce deviations from the standard grammar, while at the same time maintaining intact the fundamental characteristics of this same grammar.[4] This is the "human factor" which differentiates the poet from a machine, and, for that matter, from other writers, since the poet is presumed to have a principled reason for each instance of deviation from the norm. A generative grammar is in effect an automaton or computing device, which can produce linguistic sequences only in accordance with a pre-programmed set of instructions; thus, such a program must either instruct the grammar to produce "all and only" the "grammatical" sequences of the language, or relax certain restrictions and allow the grammar to over-generate an infinitude of "deviant" strings. It is, however, impossible in principle to incorporate into a grammar the inherent decision making which characterizes true poetic production, short of some sort of random generator which might sporadically produce deviant utterances within the context of more grammatical surroundings, but which would fail to illuminate the intricacies of the poetic process [5]

4. A useful point of departure in pursuing the interpretation of deviant strings is the notion that the reader/listener, in approaching such a string, behaves as though in the presence of an unknown dialect or segment of his own language. Given such a supposition, it seems feasible to bring into consideration models dealing directly with language perception (and possibly also acquisition[6]), since such models may conceivably be of use in tracing the interpretation of highly deviant sequences. One candidate, not specifically designed for the problem at hand, but which promises to be of use in dealing with the problems posed by highly deviant strings, is the prelinguistic processing model of Neisser, who has developed an analysis-by-

---

[4] Cf. also the following works, which deal with selective generation of poetic deviance: Lord (1966, 1975); Di Pietro (1969); Saha (1968).

[5] For an example of a generative grammar with a built-in random generator, see Klein (1965).

[6] In the study of first and second language acquisition, a traditional problem has revolved around the common observation that learners' receptive competence generally exceeds their productive competence throughout the learning process. This naturally leads to the question of whether it is necessary to write two competence grammars, one to represent the productive competence, the other, the more complete receptive competence. While many investigators have seen in such an approach the only means of resolving the data, the drawbacks of a dualistic model are many, and have recently been surveyed by Tarone (1974).

---

synthesis model of speech perception, based on the pre-processing of input in terms of rhythmic structure. Neisser notes (1967: 262) that "the rhythm of speech [...] is very nearly the structure itself, corresponding intimately to the listener's internal representation" (cf. Ervin-Tripp, 1970). In a more complete statement, worth quoting at length, Neisser explains:

It has long been known that meaningful sentences are easier to learn than random strings of words [...] the explanation is simple enough [...] real sentences have a structure which nonsense does not, and thus permit the subjects to synthesize phrase-markers in which the words can be embedded. We can extend this approach further by taking account of the old observation that poetry is more easily learned than prose. This superiority is hard to explain in terms of sequential probabilities, since poets tend to prefer *un*usual word combinations. It can be explained, however, if we assume that the rhythm of the poem provides additional structure, above and beyond the syntax of its sentences (1967: 265).

As an aside at this point, it may be noted that Tarone adapts Neisser's model and proposes that in second language acquisition, it is unnecessary to postulate two separate *linguistic* grammars, since in effect those received sentences which may be comprehended but not produced are interpreted through various pre-linguistic mechanisms, based on the formation of hypotheses:

Based on the rhythmic structures of the utterance [...] potentially *meaningful* distinctive features, syllables, words or even linguistic constituents are picked out and the speaker formulates a hypothesis as to the possible meaning of the utterance on the basis of familiarity, expectation, preference and the context of the situation [...] thé analysis of the utterance in Active Verbal Memory in terms of selected meaningful features forms an incomplete Gestalt — a Gestalt which is actively 'filled in' by the hearer's own conceptual system. This 'filling in' may occur fairly accurately without explicit knowledge of the language's linguistic rules, due to the redundancy of natural language and the context of situation [...] key semantic items and their logical relation to one another, are abstracted from short-term memory and become the basis for a constructed hypothesis as to meaning (1974: 228).

Some non-linguistic or pre-linguistic strategies for extracting meaning from partially comprehensible utterances have also been proposed by Bever in a fashion similar to Neisser's model. Bever notes (1970: 297) that "most normal perceptual processing of sentences is probably carried out with little regard to actual sequence or structure; rather the basic relational functions (actor-action-object-modifier) are assigned on the basis of temporary [...] and generic [...] semantic probabilities." Thus, Neisser, Tarone and Bever have proposed models of first/second language perception in which prelimi-

nary processing is done in terms of non-linguistic strategies based upon heuristic analyses and the formation of hypotheses based on rhythmic and semantic categories. Following such pre-processing, provided that sufficient data have been collected to warrant the formation of a hypothesis as to structure and meaning, the linguistic rules of the language may be allowed to enter the interpretive process, i.e., the same rules the hearer might utilize in producing the strings in question. A similar model was also produced by Wales & Marshall (1966),[7] whereby recognition proceeds via the following states: (1) a preliminary analysis or recognition; (2) state of readiness threshold mechanism; (3) preliminary analysis of surface structure; (4) deep structure analysis.

The concept of speech processing by pre-linguistic strategies seems to yield a fruitful area of future inquiry into the interpretation of poetically deviant strings, since such a notion would eliminate many of the problems currently associated with available generative models, especially those facing the incorporation of Weinreich's study. What is being suggested is that, when approaching a highly deviant string upon which he feels the need to impose a rational interpretation, the listener/reader first attempt to analyze the string in terms of its general semantic and/or rhythmic properties, in order to form a preliminary hypothesis as to its content. Only in the event that such a hypothesis can be formed may any sort of transition to patterns in the standard grammar be contemplated, but even at this juncture the emphasis does not appear to be on deviation from standard strings, but rather on the immediate assignment of a deep-semantic interpretation to the deviant string in question, which in most cases would completely bypass the syntactic categories involved in a generative grammar.

In the lines from Cummings's poems which have been used in examples of poetic deviance, all investigators have shared a basic interpretation of the *meaning* of phrases like *with up so floating many bells down*, but differ as to the means for formally characterizing such a string in terms of a generative grammar. Presumably, the reader gets the separated semantic notions of "bells," "floating," "up" and "down," and in the absence of further clues, is free to juggle these bits of information like pieces of a puzzle in order to arrive at an interpretation. However, unlike the case of a puzzle, there is nothing equivalent to the knowledge of "correctness of fit," thus allowing for varying interpretation. In view of our present lack of knowledge as to the

[7] For additional thought, see also Thorne (1966), Fodor and Garrett (1966) and Cohen (1965). All of these studies treat ungrammaticalness as a function of linguistic competence.

precise details of speech processing, it is impossible to offer explicit rules for arriving at such interpretations. Indeed, given the highly individual nature of cognitive strategies, it may in fact be the case that no generalized schemata will even be possible to describe the processes of interpretation, other than simple, almost tautological observations. Weinreich himself (1972: 18, 46) makes oblique reference to this fact on several occasions.

Some of Cummings's later poems, especially from the volume *73 poems* (1963), exhibit this phenomenon to an even greater degree. For example, poem 44 begins with the line "Now i lay (with everywhere around)/me(the great dim deep sound," and gradually expands the opening phrase to "now i lay me down" (1. 5), "now i lay me down to dream of" (1. 10), and finally "now i lay me down to dream of Spring" (1. 14), all the while interspersing "now i lay me down to dream of Spring" (1. 14), all the while interspersing "now i lay me down to dream of" other material which contributes to the reader's growing awareness of the poem's semantic underpinnings. Except for the final line, however, in which the phrase begun in the first line is finally completely given, the poem contains no complete sentences, and not even any "semi-sentences" which could be arrived at by applying currently available grammatical transformations to underlying sentences. This provides further evidence that the first stage in the processing of such a phrase is not based on a generative syntactic mode, since the reader is left to synthesize the meaning of the poem by semantic juxtapositions and images, almost completely bypassing the syntactic level.

As a further example, we may consider poem 69 "!hope," which does contain what might be analyzed as complete sentences, but also inherently independent stanzas like:

····.drift
bells glide
seethe
glow

(undering proudly
humbly overing
all bright all
things swim climb minds

In this sequence the reader, while necessarily relying on the syntax of the preceding and following stanzas, is able to form an image based on this grammatically deviant but vivid series of words, based solely on semantic associations. Each individual reader, however, will presumably come up with a different image, given the impossibility of an unequivocal syntac-

tic/semantic reconstruction. A survey of readers' interpretations of this and similar fragments suffices to demonstrate that the syntactic analysis is being completely bypassed in processing such strings; there is rather a direct jump to the level of semantic juxtapositions, which are allowed to circulate in the mind, producing at times coherent images and at other times merely fleeting partial syntheses. The overall effect of reading such poetry is similar to that of watching a reflection on an agitated surface of water, where instants of lucidity are succeeded by a more general partially revealing chaos.[8]

Finally, one may consider a somewhat more coherent example, from Joyce's *Ulysses*: "Hunger toothache. *Encore deux minutes*. Look clock. Must get. *Ferme*. Hired dog! Shoot him to bloody bits with a bang shotgun, bits man, splattered walls all brass buttons. Bits all khrrrrklak in place clack back.. Not hurt? O, that's all right." Here it would be quite possible to reestablish the omitted syntactic constructions, and thus restore a grammatical basis to the sequence. Nonetheless, it is possible to arrive at a perfect grasp of the imagery without doing so; in fact, this is what Joyce wished the reader to do: to follow Stephen Dedalus's verbal jumps as they occur, without intervening connectives, but rather as a series of disconnected thoughts which, without the aid of grammatical re-synthesis, combine to form a coherent mental image. This approach is in fact similar, if not identical, to the interpretation of the holophrastic or telegraphic utterances of children, foreigners, newspaper headlines, etc., where instead of mentally reconstructing the missing syntactic links, an image often springs directly to mind directly upon presentation of the verbal material.

By regarding the interpretation of deviant strings as a form of language processing by the linguistically uninitiated, it is possible to avoid many of the problems associated with establishing a grammar to directly generate the deviance. The processing of unfamiliar deviant linguistic segments is different from that of common or stereotyped utterances, for in the former case the listener possesses no ready template against which the received phrase may be matched, but rather must use a set of strategies which enable him to form a series of hypotheses concerning the received material. Moreover, the strategies themselves appear to evolve through time during the learning process, becoming successively more refined and capable of more and more

[8] For some similar descriptions, again based on Cummings's poem "anyone lived in a pretty how town," see Fowler (1967), who notes the "very homogeneous list of nouns and verbs which habitually go together, chiefly in texts which describe ordinary human behaviour or make a survey of human life [...] the most important thing about their relationship is simply their occurrance all together [...] actual details of lexical juxtaposition are also important."

accurate information retrieval as the learner's proficiency increases. In the same fashion, the reader faced with numerous examples of poetic deviance in the works of the same author, like Cummings for example, soon begins to recognize recurring patterns of expression which facilitate interpretation, even in the face of deviance from the standard grammar. It is noticed that the appearance of strangeness associated with such poetic texts decreases in proportion to the number of such texts which have been read.

The concept of generative grammar is of unquestioned usefulness to literary investigation, in the characterization of certain elements of literary style, as has been amply demonstrated in recent years. In the realm of highly deviant expression, however, given the idiosyncratic and non-formalizable nature of poetic deviance, it is likely that generative grammars will be at best irrelevant, and at worst misleading, when attempting to explicate the decoding and interpretation of such texts. Additional models, dealing directly with the matter of linguistic processing and production, are called for to deal with those cases where the standard grammar has been so deformed as to have been effectively abandoned. The preceding remarks, in view of their highly tentative nature, are not to be construed as a model for poetic processing, but rather as a suggestion for future research paradigms. At present, it has merely been suggested that when faced with an instance of severe grammatical deviance, the listener makes use of a set of pre-grammatical strategies for arriving at the basic semantic structure before establishing formal relations with purely grammatical strings. Further elaboration of such a proposal will only result from a joint endeavor involving students of language, literature, and human cognition.

REFERENCES

AARTS, JAN, 1971. "A Note on the Interpretation of 'he danced his did'," *Journal of Linguistics* 7:71-73.

BEVER, T., 1970. "The Cognitive Basis for Linguistic Structures," in: Hayes, ed., 1970.

BUTTERS, RONALD, 1970. "On the Interpretation of 'Deviant Utterances'," *Journal of Linguistics* 6:105-110.

CHOMSKY, NOAM, 1961. "Some Methodological Remarks on Generative Grammar," *Word* 17:219-239.

1965 *Aspects of the Theory of Syntax*. (Cambridge: M.I.T. Press).

COHEN, L. JONATHAN, 1965. "On a Concept of Degree of Grammaticalness," *Logique et Analyse* 8:141-153.

DIPIETRO, ROBERT, 1969. "A Transformational Note on a Few Types of Joycean Sentences," *Style* 3:156-181.

ELIASSON, STIG, 1975. "On the Issue of Directionality," in: Dahlstedt, ed., *The Nordic Languages and Modern Linguistics* (Stockholm: Almqvist & Wiksell), 421-445.

ENKVIST, NILS, 1973. *Linguistic Stylistics* (The Hague: Mouton).

ERVIN-TRIPP, SUSAN, 1970. "Structure and Process in Language Acquisition," *Monograph 23, Report of the 21st Annual Round Table Meeting on Languages and Linguistics* (Washington, D.C.: Georgetown Univ.), 313-353.

FODOR, J. & M. GARRETT, 1966. "Some Reflections on Competence and Performance." in: Lyons and Wales, 1966, 133-179.

FOWLER, ROGER, 1967. "Linguistics and the Analysis of Poetry," *Critical Survey* 3:78-89.
1969 "On the Interpretation of Nonsense Strings," *Journal of Linguistics* 5:75-83.
1971 *The Languages of Literature* (New York: Barnes & Noble).

HARWEG, R., 1973. "Text Grammar and Literary Texts: Remarks on a Grammatical Science of Literature." *Poetics* 9:65-91.

HAYES, J., ed., 1970. *Cognition and the Development of Language* (New York: Wiley).

KATZ, J.J., 1964. "Semi-Sentences," in: *The Structure of Language*, Katz & Fodor, eds., (Englewood Cliffs: Prentice-Hall), 400-416.

KLEIN, SHELDON, 1965. "Control of Style With a Generative Grammar." *Language* 41:619-631.

LEVIN, SAMUEL, 1962. *Linguistic Structures in Poetry* (The Hague: Mouton).
1963 "Deviation—Statistical and Determinate—in Poetic Language," *Lingua* 12:276-290.
1964 "Poetry and Grammaticalness," in: *Proceedings of the 9th International Congress of Linguists* (The Hague: Mouton), 308-315.
1965 "Internal and External Deviation in Poetry," *Word* 21:225-237.

LIPSKI, JOHN, 1974. "Towards a Topology of Natural Languages," *Poetics* 4:5-17.

LOEWENBERG, INA, 1975. "Identifying Metaphors," *Foundations of Language* 12:315-338.

LORD, JOHN B., Sr., 1966. "Paragrammatical Structures in a Poem of E. E. Cummings," *Pacific Coast Philology* 1:66-73.
1975 "Syntax and Phonology in Poetic Style," *Style* 9:1-31.

LYONS, J. & R. WALES, eds., 1966. *Psycholinguistics Papers* (Edinburgh: Edinburgh Univ.).

MATTHEWS, ROBERT, 1971. "Concerning a 'Linguistic Theory' of Metaphor," *Foundations of Language* 7:417.

NEISSER, ULRICH, 1967. *Cognitive Psychology* (New York: Appleton-Century, Crofts).

QUIRK, RANDOLPH, 1964. [Comments] appended to Levin, 1964.

RIFATERRE, MICHAEL, 1966. "Describing Poetic Structures: Two Approaches to Baudelaire's 'Les Chats'." *Yale French Studies* 36/37:200-242.

SAHA, P.K., 1968. "A Linguistic Approach to Style," *Style* 2:7-31.

SANDERS, ROBERT, 1973. "Aspects of Figurative Language," *Linguistics* 96.

TARONE, ELAINE, 1974. "Speech Perception in Second Language Acquisition: A Suggested Model," *Language Learning* 24:223-233.

THORNE, J.P., 1965. "Stylistics and Generative Grammars," *Journal of Linguistics* 1:49-59.
1966 "On Hearing Sentences," in: Lyons & Wales, 1966, 1-25.
1969 "Poetry, Stylistics and Imaginary Grammars," *Journal of Linguistics* 5:147-150.
1970 "Generative Grammar and Stylistic Analysis," in: *New Horizons in Linguistics*, J. Lyons, ed., (Penguin Books), 185-197.

WALES, R. J. & J. C. MARSHALL, 1966. "The Organization of Linguistic Performance," in: Lyons & Wales, 1966, 27-95.

WEINREICH, URIEL, 1972. *Explorations in Semantic Theory* (The Hague: Mouton).