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The Role of Linguistics in a Theory of Poetry

OF ALL ART FORMS, literature, and especially poetry, has the greatest continuity of form in the Western tradition.[1] Since classical antiquity, the visual arts and music have been changed profoundly through the introduction of entirely new forms of expression and organization. Consider, for example, how painting was changed in the Renaissance by the discovery of perspective, or how music was changed by the development of chordal harmony. It is impossible, however, to point to any such spectacular enrichments of technique in poetry. Styles and conventions have shifted, but no truly new forms have emerged. Both of the fundamental stylistic elements of poetry—figurative expression, using, for example, metaphor and metonymy, and schemes of formal organization such as those of parallelism, meter, rhyme, and alliteration—have existed from the beginning.

It is true that their relative importance changes all the time. In particular, the rules governing what must, may, and cannot be obligatory in a piece of verse vary from one age to the next. For example, alliteration was obligatory in Old English poetry a thousand years ago, but cannot be obligatory today, and rhyme, which was never an obligatory formal element in Old English, can and in certain forms of verse must be used now. Many such seemingly radical changes in poetic form are actually more or less automatic responses to linguistic change. Alliteration, for example, seems to be found as an obligatory formal element only in languages where the stress regularly falls on the same syllable in the word, which then must be the alliterating syllable. Old English was such a language, for the stress fell predictably on the root syllable. In modern English, on the other hand, words with the same root can be stressed in many different places (take, for example, *ób li gate, ob líg a tor y,* and *ob li gá tion*). When this kind of stress system was established in English, verse forms with fixed alliteration were abandoned. The rhymed verse forms which took their place were made possible, or at least more natural, by the evolution of English, specifically by the fact that English lost most of its inflectional endings. Most richly inflected languages do not use rhyme, and those that do, like Russian, tend to avoid rhymes that depend on grammatical endings.

When a particular element ceases to be obligatory, it remains as an optional element in the poetic repertoire of a language. In fact, optional elements of form in a poem are more significant than obligatory elements, precisely because the poet has chosen to use them. In plain rhymed verse, a pair of rhyming words may or may not be related in meaning.[2] Where rhyme is not obligatory, on the other hand, those words which do rhyme are almost always significantly related, as they are, for example, in the internal rhyme in Hopkins' line,

> And all is seared with trade; bleared, smeared with toil. . . .

Similarly, compare the obligatory and therefore only potentially meaningful repetition of lines in refrains or blues verses, with the free and therefore necessarily significant repetition of the line, in Frost's "Stopping by Woods,"

> And miles to go before I sleep.

In obligatory formulaic parallelism, like that found in the Finnish *Kalevala*, the parallel lines may contrast with or complement each other, but they may also be little more than paraphrases. But where parallelism is used as a free feature, it is always essential to the meaning, as in George Starbuck's "Of Late,"

> "Stephen Smith, University of Iowa sophomore, burned what he said was his draft card"
> and Norman Morrison, Quaker, of Baltimore Maryland, burned what he said was himself.
> You, Robert McNamara, burned what you said was a concentration of the Enemy Aggressor.
> No news medium troubled to put it in quotes.

As a further example, consider Starbuck's use of rhythm. Because he has not tied himself down to a fixed meter, he can use rhythmic variation to reinforce his meaning. The slow regular dactylic rhythm of the second line breaks down completely when McNamara's lies are cited in the third and fourth lines. The changed rhythm also contributes to the sense by directing an accusing stress onto the second "you" in the line,

> Yóu, Róbert McNamára, búrned what yóu said wás a cóncentrátion
> of the Énemy Aggréssor.

In such ways, "free verse" actually frees verse schemas for significant use; hence it can be a more difficult and a more expressive poetic form than regulated verse.

Perhaps our first impulse is to attribute the fact that the forms of poetic expression have not changed much to the sheer weight of the Western literary tradition. However, there are several reasons for believing that we must attribute it, at least in part, to the intrinsic nature of verbal art. In the first place, from the available information it appears that all literary tra-

ditions, including those of primitive societies in many of which oral poetry plays an important role, utilize the same elements of form as Western poetry, and no exotically different ones. In fact it is not clear that there is any such thing as "primitive literature." Furthermore, many of the changes in poetic form, at least in the last 200 years, have been conscious innovations made by poets deliberately breaking with tradition. Yet even this conscious search for new forms has left the basic elements of expression essentially unchanged. Certain schemas have gone from obligatory to free or vice versa, and the grammar of poetic language has changed, for example, in its treatment of inversions. The reason, as I will try to show here, is that a good number of what we think of as traditional and arbitrary conventions are anchored in grammatical form, and seem to be, at bottom, a consequence of how language itself is structured.

The *theory of literature* usually concerns itself with classifying, analyzing, and comparing forms of verbal art which do, in fact, exist. But one could ask what characterizes existing forms of verbal art that differentiates them from forms which have never actually come into existence. Could we develop, in other words, a counterpart in the theory of literature to universal grammar in linguistics?[3] Although certain limits are implicit in traditional esthetics and rhetoric, neither poets nor students of literature have thought much about the intrinsic limits of poetry, any more than football players or spectators think much about gravity. The limits of poetic form are simply psychological givens, just as gravity is a physical given. In trying to define them we will have to make the effort, required wherever man studies his own nature, of not taking the "natural" for granted.

Our starting point will be the observation that various aspects of form all involve some kind of recurrence of equivalent linguistic elements.[4] They differ only in what linguistic element is repeated. Recurrence of *syntactic* elements is called *parallelism;* recurrence of *stress* and *quantity* (and, in some languages, *tone*), is called *meter;* and various kinds of recurrence of *vocalic* and *consonantal* sounds are called *rhyme, alliteration, assonance,* or *consonance.*

We can therefore conceive of poetic form in terms of certain *patterns,* such as *aa, aab, abab,* which are filled by *linguistic* (syntactic and phonological) *elements.* A pattern which is filled in a particular way may be termed a *schema.* A given pattern therefore underlies many potential schemas. For example, *abab* is a *rhyme schema* if *a* and *b* are units which are phonological sames of the kind we commonly called rhyme. If they are units of stress or quantity it is a *metrical schema.* For example, if *a* is an unstressed syllable, and *b* is a stressed syllable, the pattern *abab* represents iambic dimeter.[5] The same pattern, *abab,* can also be a *schema of syntactic parallelism,* such as that found in the first verse of Shelley's "Song to the Men of England."

Men of England, wherefore plow
For the lords who lay ye low?
Wherefore weave with toil and care
The rich robes your tyrants wear?

Understanding this distinction between the abstract pattern and the linguistic sames that are used to fill it will help us to approach in a more precise way the question of the intrinsic limits of poetic form.

The range of patterns in actual poetic use is small. Surprisingly enough, certain patterns of considerable formal simplicity are never utilized in the construction of verse. For example, one rarely encounters patterns which call for repeating sequences of more than three elements. The pattern *abcdabcd*, for example, is rarely used either as a rhyme schema, or as a pattern of parallelism. The choice of pattern, of course, depends in some measure on what sort of linguistic element is to fill it. For example, the pattern *abcabc* is common in short-term, line-internal recurrence, such as meter, but not so common in cross-line recurrence such as parallelism and rhyme, evidently because it is psychologically easier to keep track of as many as three elements if they recur fairly quickly. However, the fact remains that overriding constraints prevent the use of some potential patterns, regardless of the linguistic elements which might be used to fill them.

The range of linguistic *sames* actually in poetic use is likewise limited. One can easily dream up great numbers of plausible-looking principles of organization which no poet ever uses, and, more importantly, which even the most experimental poet would intuitively recognize as irrelevant were he introduced to a piece of work based on them. (Of course, if he were challenged to do so, he might detect them, by much the same process that a code is cracked.) For example, no one thinks of filling in a stanzaic pattern on the principle that the last words of certain lines must contain the same number of sounds. Nor do we find a type of rhyme in which the last sound or the last *n* sounds must be the same. (We will return to this question in the discussion of slant rhyme below). Naturally not, we might say. But a visiting Martian might find these nonexistent conventions no more peculiar than, for example, the Earthlings' custom of *rhyming*, whereby the last stressed vowel and anything that follows it must be the same.

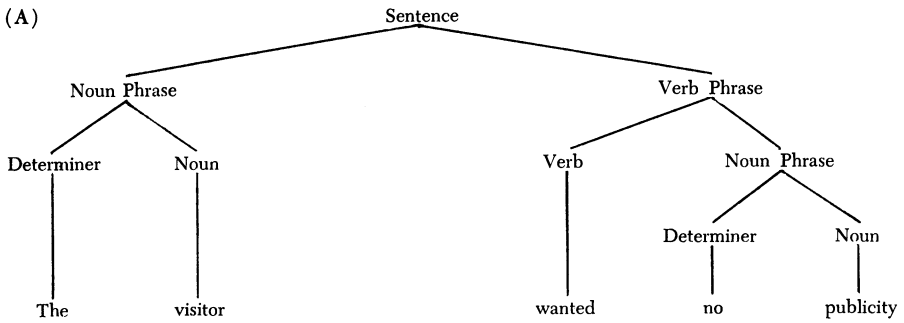
To answer our Martian's objection would require a theory of poetic form that included a precise answer to the following two questions:

What patterns are relevant in poetry?
What linguistic sames are relevant in poetry?

Such a theory does not exist, although we do have certain useful bits and pieces. In what follows I should like to sketch out a partial answer to the second of these questions, in which I will argue that linguistics has a key role to play.

An initial tentative answer is this: *the linguistic sames which are potentially relevant in poetry are just those which are potentially relevant in grammar.* Since one part of the theory of generative grammar is a precise characterization of what sames are relevant in grammar, we can test this hypothesis very specifically. In fact, the hypothesis is so rich that its implications can hardly be grasped yet, let alone fully tested. All we can do here is to explore its consequences in particular areas. By doing so, we can clarify some long-standing questions of poetics as well as some that have thus far gone unasked.

Transformational grammar defines "grammatically relevant sameness" in terms of syntax by analyzing the constituent structure of sentences. First of all sentences are analyzed according to tree diagrams like this one:



Such a tree structure shows how a sentence can be analyzed on various different levels. For example, depending on which level of the tree one looks at, the above sentence is described as made up of

Determiner + Noun + Verb + Determiner + Noun

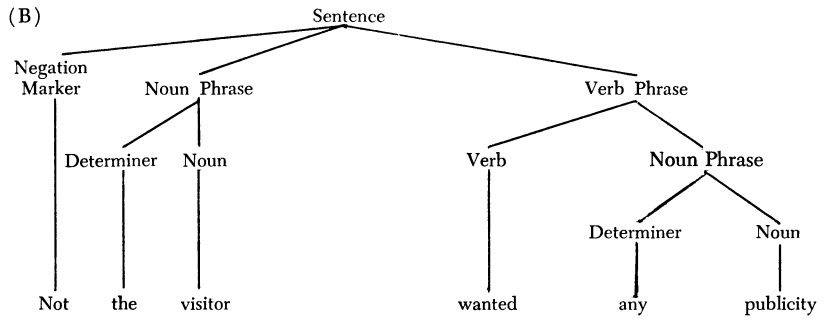
or of

Noun Phrase + Verb + Noun Phrase

or of

Noun Phrase + Verb Phrase.

Such trees can be turned into other trees according to *transformational rules.* The tree above is a surface structure and has undergone a number of transformations; it derives directly, for instance, from another tree, shown on the next page, which is one step closer to the original, or *deep structure,* a tree in which the negation marker stands at the beginning of the sentence. The transformational rule moves the negation marker "not" into the determiner "any" of tree (B), and the resulting "not any" becomes "no" in the phrase "no publicity" of sentence (A). In this transformation, "any publicity" is changed at the Determiner + Noun level of the tree. Other



transformations, such as the passive transformation, would treat it at the Noun Phrase level.

A transformational syntax of a language provides a derivation from a deep structure via many intermediate trees to a surface structure for each sentence in the language. These derivations say what elements can and cannot count as the same with respect to syntax: two elements count as the same at a given stage in the transformational derivation if they are labeled alike in the tree for that stage. My hypothesis is that those syntactic elements which are counted as parallel for purpose of verse are, at some point in the derivation, counted as sames according to transformational grammar. Let me now map out existing varieties of syntactic parallelism in poetry, using the syntactic notions of constituent structure and transformational rules.

The poetry of both Walt Whitman and Dylan Thomas abounds in parallelism; this is one reason for the driving, incantatory quality which they have in common. But there is a big difference between the parallelism of the poets, as is clear from these excerpts.

> Where the striped and starred flag is borne at the
> head of the regiments;
> Approaching Manhattan, up by the long-stretching
> island,
> Under Niagara, the cataract falling like a veil
> over my countenance;
> Upon a door-step . . . . upon the horse-block of hard
> wood outside,
> Upon the race-course, or enjoying pic-nics or
> jigs or a good game of base-ball. . . .
>
> Whitman, *Leaves of Grass*

> A process in the weather of the heart
> Turns damp to dry; the golden shot
> Storms in the freezing tomb.
> A weather in the quarter of the veins
> Turns night to day; blood in their suns
> Lights up the living worm.
>
> Thomas, "A Process in the Weather of the Heart"

The difference derives from the level of constituent structure for which the parallelism holds. Walt Whitman characteristically uses what we may call *loose* parallelism, in which only the highest syntactic constituents of the tree diagram are the same; although he uses a place adverbial in every line, each one differs from the others in form and complexity. In contrast, Dylan Thomas uses a *strict* parallelism, in which even constituents on the lower levels of the tree diagram are parallel. In other words, Whitman uses larger syntactic blocks to build his parallel structure. Now all form in poetry is potentially functional: this syntactic difference, for example, corresponds directly to the contrast between the "metonymic" Whitman and the typically "metaphoric" Thomas.

But parallelism can vary stylistically not only with respect to the level in the tree at which it is determined, but also with respect to the stage in the syntactic derivation from deep to surface structure for which it holds. Aside from actual repetition (as in refrains or blues verses) no syntactic parallelism is ever required to be complete on the level of surface structure. Even the strictest parallelism allows divergence of surface structure according to certain types of transformational rules that delete and reorder constituents. Thus, Dylan Thomas'

> The force that through the green fuse drives the flower
> Drives my green age,

is strictly parallel to

> The force that drives the water through the rocks
> Drives my red blood,

in spite of the fact that the constituents are crossed. Even in the obligatory strict parallelism of Finnish folk poetry, word order may vary freely.

Similar observations may be made about syntactic deletion. In Finnish folk poetry a verb is frequently "missing" in the second line. In nearly all such cases, the second line is derived from a structural parallel to that of the first by a transformational process (the *Gapping* rule) which calls for the deletion of a repeated verb in the second of two parallel sentences.

So far, we have discussed three variables pertinent to the analysis of poetic form:

1. The choice of abstract pattern: How is the recurrence of linguistic elements organized? For example, do we have symmetry *(abab, aabb)*, antisymmetry *(abba)*, or closure *(aab, ababcc)*? Is the structure hierarchical (stanzas) or linear (stichic verse)?

The other two variables have to do with how the abstract pattern is matched with linguistic elements.

2. The choice of linguistic elements: What are the syntactic or phonological building blocks which are subject to patterned recurrence? For example, do we have strict parallelism, where identity is maintained down

to the smaller constituents of the tree, or loose parallelism, involving only the major constituents?

3. The choice of the derivational stage: Where in the transformational or phonological derivation do we make the match between linguistic elements and abstract patterns? For example, do we define parallel structure before or after the passive transformation has been applied—that is, is an active sentence regarded as parallel in structure to a corresponding passive one?

These three variables are, in principle, independent of each other. Theoretically, either strict or loose parallelism in terms of linguistic elements could hold either at a point in the transformational derivation near the deep structure or closer to surface structure. However, there is in fact a close relationship among the three. The tighter the constraints on the abstract pattern, the stricter the parallelism tends to be, and the closer it holds to surface structure.

There is still a fourth variable, namely the grammar itself. Poetic language differs grammatically from regular speech. Poetry may use stylistic inversions not allowed in prose, as in "The force that through the green fuse drives. . . ." Such inversions are not imitations of Latin, as is sometimes claimed. Rather they are applications of transformational rules that have only limited existence in standard English prose. The extent to which special rules for poetic language have been acceptable is an important stylistic variable in English poetry. From Gray to Wordsworth, poets sought a more "natural" poetic diction and a major aspect of their effort was the conscious elimination of inversions. A hundred and fifty years later, however, inversions were brought back with a vengeance by E. E. Cummings, in whose hands they once again became an integral structural device.[6]

Poetic language differs, however, from Standard English in far more than word-order transformations. Perhaps the most striking characteristic of modern poetry is the stretching of grammar. This has led, in recent discussions of poetic language in the framework of generative grammar, to what has at times been a somewhat simplistic reliance on the concept of *ungrammaticality* or *deviance*. Metaphor, in particular, is frequently linked with a certain type of semantic deviance. However, it is clear that nondeviant sentences can have metaphorical interpretations: take, for example, "He came out smelling like a rose." In fact, the processes by which we give metaphorical interpretations to deviant sentences are the same as those by which we understand latent meaning in nondeviant sentences. Semantic deviance does not cause metaphorical meaning, but rather brings out what is already latent by blocking out a literal meaning, just as an eclipse of the sun does not "cause" the moon to shine, but makes its light perceptible by blocking out the sun. In general, then, deviance is a device of *foregrounding*. However, not all grammatical foregrounding involves changing the rules of grammar. Existing rules can also be utilized in new ways. For ex-

ample, in Starbuck's poem, cited above, the striking phrase "burned what he said was himself" is not ungrammatical, but it is an unusual construction which may never have been used before.

We turn now from the syntactic to the phonological side of the language, where an examination of patterns has some rather surprising consequences, especially with regard to our habit of thinking of rhyme and alliteration as the simple repetition of sounds. We will find that the same four variables we distinguish in syntax also hold in phonology.

In addition to a set of transformational rules by which the syntax of sentences derives from a deep structure, grammar contains a set of phonological rules[7] by which the phonetic forms of words are derived from more basic underlying forms. The word "publicity," for example, which could be transcribed phonetically as /pəblísətī/, is derived, by a series of steps, from the more basic form /publik + iti/. The *k* is the basic form (which we can hear in the related words "public" and "publication") is converted to an *s* sound (indicated in the spelling by *c*) before front vowels such as *i*. Other rules place the stress on the third syllable from the end, and weaken all unstressed vowels except the last, which gets lengthened. Thus the *phonological derivation* of "publicity" is as follows:

/publik + iti/	basic form
publis + iti	change of *k* to *s*
publís + iti	placement of stress
publís + itī	lengthening of final i
pəblís + ətī	weakening of unstressed vowels

Investigation of the way such rules work has become the primary concern of phonologists in recent years, replacing their earlier preoccupation with problems of determining and classifying the phonemes of a language. This research is beginning to make clear that a surprising amount of the system of phonological rules of a language, which one might have thought was a rather arbitrary and unstructured part of its grammar, is actually determined by general principles. Phonological rules ring changes on a fixed repertoire of rules which, though very large in absolute terms, is still only a tiny portion of the huge total which could be imagined. Hence my hypothesis, that the linguistic elements which can count as sames in verse are just those which can count as sames in grammar, can be tested in phonology as well as in syntax. A comparison of the repertoire of phonological rules with the repertoire of metrical and rhyme schemas used in verse does indeed reveal a number of striking homologies.

Consider first this simple example. We know that "having the same number of sounds" is of no relevance whatever in versification, whereas "having the same number of syllables" is of fundamental importance. There is no explanation for this fact in the theory of prosody. But the fact has an

exact counterpart in phonology. There are no known phonological rules which differentiate among words on the basis of how many sounds they have. The class of words containing exactly three phonemes (for example, "end," "shock," "Anna") is a linguistically irrelevant pseudoclass which plays no role in grammar. But there are, of course, rules which count syllables: in many languages stress falls on the *n*th syllable from the beginning or end of a word, monosyllabic words have special phonological properties, and so on. Therefore, it seems that rules of versification are based on facts which are at bottom linguistic, and that systems of metrics must be explained by phonology.

Consider rhyme and alliteration, which are often defined as involving "repetition of sounds." This definition is, in fact, inaccurate. It fails to cover, for example, the type of rhyme known as *slant rhyme*, which is widely used by Dylan Thomas and Sylvia Plath. In slant rhyme, consonants after the last vowel must be the same, but words ending in vowels are considered to rhyme regardless of what the vowels are.

In Sylvia Plath's *Medallion*, which uses terza rima with slant rhyme throughout, we find rhymes like

wood/dead/crooked/
him/flame/time
light/that/trout
ocher/fire/there

but we also find

jaw/arrow/eye

where the requirement is satisfied without any "repetition of sounds."

Alliteration of consonants, as found, for example, in the old Germanic languages including Old English, is a mirror image of slant rhyme. In Old English, words alliterate if their stressed syllables begin with the same consonant (with the special proviso that *sp*, *st*, and *sk* behave as if they were single consonants). But words whose stressed syllables begin with vowels alliterate freely with each other (*Atol ȳđa geswing*, "terrible swirl of waves"). Thus the rule for alliteration (and its inverse, slant rhyme) is *not* that syllables must begin (or end) with the same sound, but rather that *if* the syllables begin (or end) with a consonant, then the consonants must be the same. If they begin (or end) with a vowel, they need not repeat the same sound.

How is it possible that certain words rhyme and alliterate without having any sounds in common? This question again has no answer in the theory of prosody. The fact that all vowels alliterate with each other has in fact provoked many ingenious but unsuccessful attempts to conjure up word-initial ghost consonants of some kind to "carry" the alliteration (which would imply similar ghost consonants at the ends of words to "carry" slant rhyme). But the problem is not merely that some rhyme and alliteration

does not fit the traditional definitions of these concepts, but more importantly, that when the sound in question is a vowel the pattern which one would expect to be normal, that in which the first or last sounds are identical, does not seem to occur at all.

Let us turn to a grammatical analogue of rhyme and alliteration to see if corresponding phenomena are found there. Consider phonological processes of *reduplication*, which copy part of a word for grammatical purposes. It is interesting that we never find among them rules of the form "reduplicate the first (or last) sound of a word," just as we found no such rules for rhyme and alliteration. Rather, the typical form of reduplication is that of Gothic, where some verbs make their past tense by doubling their initial stem consonant, *if any*, and adding *ai* (pronounce like *e* in *get*):

saltan	"salt"	*sai-salt*	"salted"
haitan	"call"	*hai-hait*	"called"
slepan	"sleep"	*sai-slep*	"slept"
aukan	"increase"	*ai-auk*	"increased"
aikan	"renounce"	*ai-aik*	"renounced"
(ga) staldan	"obtain"	*(ga) stai-stald*	"obtained"

Note that this is very reminiscent of old Germanic alliteration, and even parallels the special treatment of *sk*, *sp*, and *st* as single units. Thus, the reduplication rules of phonology serve as well to circumscribe the kinds of rhyme and alliteration used in poetry.

Again, we have seen how a fact about the structure of verse derives from a fact about the structure of language. The question of how all initial vowels can alliterate with each other is a parallel question to that of how the *ai-* of *ai-auk* can be considered a reduplication of *auk*. Our answer is that language allows certain ways of organizing sounds, and that poetic form must draw on this organization.

More generally, consider how a word can be broken down into parts relevant to verse patterns. We can represent these patterns (or "analyses") by means of the standard notations used in phonology. For example, letting C stand for *consonant*, V for *vowel*, and # for *word boundary* (indicating whether the sound is an initial or a final sound), we can form the following notations:

#C	"a word-initial consonant"
#CV	"a word-initial consonant followed by a vowel"
V#	"a word-final vowel"
C_0	"any number of consonants"

Each of these expressions defines a class which might be referred to in a phonological rule.

The word "flash," for example, could pattern, for purposes of rhyme and alliteration, in the following ways:

#C	f.	alliteration
$\#C_0$	fl.	alliteration
$\#C_0V$	fla.	alliteration
$VC_0\#$	.ash	rhyme
V	.a.	assonance
$C_0\#$ or C#	.sh	slant rhyme
$\#C_0 \ldots C_0\#$	fl.sh	pararhyme (as in Wilfred Owen's poetry)
$\#C \ldots . C_0\#$	f.sh	pararhyme (as in Wilfred Owen's poetry)

Now each of these patterns is potentially a pattern in a linguistic rule as well as a rule of versification. The first three represent types of *reduplication* which occur in various languages of the world. The others are found in English in sound symbolism (*phonesthemes*).[8] Thus, an example of a sound symbolism pattern of the form C# is "fuzz," "buzz," "fizz," "razz," "jazz." An example of $VC_0\#$ is "smash," "crash," "bash," "dash." And $\#C \ldots C_0\#$ is illustrated by "pitter," "patter," "putter," or "tick," "tack," "tock."

We have seen that elements are considered to be syntactically parallel even after certain syntactic transformations have reordered or deleted constituents. In other words, to match them exactly we would have to imagine them as they were before they were so transformed. This phenomenon has a counterpart in phonology. It sometimes happens that phonological schemes such as meter and rhyme must be matched to linguistic forms *before* certain phonological rules have been applied to them.

We already made this assumption implicitly in speaking of the slant rhyme of vowel-final words like "arrow and "eye." While it is true that these words end in a vowel in their basic phonological form, this vowel gets a consonantal glide sound inserted after it by a rule of English phonology, so that "arrow," as it is actually pronounced, ends with a *w* sound and "eye" ends with a *y* sound. For purposes of versification, however, we treat these words as if they really ended in vowel sounds—that is, we apply the rhyme schemes to them before the glide insertion rule is applied.

Examples in which poetic form "looks back" at phonological forms which are not phonetic, can be cited from many languages. In German, most poets rhyme *Mund* "mouth" and *bunt* "colorful" (both pronounced with *t*, but different in basic form, since when you add an ending, such as *e*, *Munde* is pronounced with a *d*). Some poets, however, like Stefan George, who strove to achieve unusually pure poetic language, consistently avoid such rhymes. In other words, Stefan George's poetry rhymes according to forms more basic than that in which final stops are unvoiced.

There are cases where a whole block of phonological rules must be peeled away in this fashion before the schema which underlies a given meter is revealed. This is true of the Finnish *Kalevala* as recited by the bards of Ingermanland, and of the *Rigveda* of ancient India. The complexity in these traditions of the interaction between phonological and metrical struc-

ture makes them a kind of laser beam with which we can probe into the way language is structured in the mind, via the way it is structured in poetry.[9]

Thus phonological identity in poetry is not a matter of phonetics alone, any more than syntactic identity is a matter of surface structure. In fact, we have arrived at the somewhat surprising conclusion that identity of sound is neither a necessary nor a sufficient condition for rhyme and alliteration.

These observations suggest that at least some constants of poetic form are dependent on the structure of language itself. The intrinsic structure of language, the raw material of poetry, is carried over into poetry. By virtue of the nature of the patterns that are relevant in poetry, the structures involved are primarily those which are universal rather than those which apply only to a particular language. Hence the homologies between grammar and poetry account, at least in part, for the universality of poetic form.

To be sure, that summary of my thesis is rather more sweeping than is justified by the concrete examples analyzed here. I have, after all, dealt only with external form, and hardly touched on such deeper questions as figurative language. Although I believe that it is in these areas that linguistics will make its greatest contribution to literary studies, I have here chosen more tangible aspects of poetic form since the linguistic approach can be more clearly illustrated with them. Furthermore, the linguistic semantics needed to tackle problems such as metaphor is only now beginning to exist. The current work which is being done in this area is highly encouraging, as are many other applications of linguistics to literary problems: Ohmann's syntactically based studies of prose style, for example, and the approach to the structure of narrative initiated in V. Propp's classic work on folktales.[10]

References

1. This work was supported in part by grants from the National Institutes of Health (5 TO1 HD00111) and the National Institute of Mental Health (2 PO1 MH13390).

2. On the potential semantic function of rhyme, see W. K. Wimsatt, *The Verbal Icon* (Lexington, Ky.: Kentucky University Press, 1954).

3. An initial attempt, modeled on linguistic theory, is Manfred Bierwisch, "Poetics and Linguistics," *Linguistics and Literary Style,* ed. D. Freeman (New York: Holt, Rinehart & Winston, 1968).

4. This is expressed in Roman Jakobson's famous statement: "The poetic function projects the principle of equivalence from the axis of selection into the axis of combination." "Linguistics and Poetics," *Style in Language,* ed. T. Sebeok (Cambridge, Mass.: M.I.T. Press, 1960).

   Note the caesurae (obligatory clause boundaries at a certain point of the line) could be considered either as patterned recurrence of sentence boundaries, or perhaps better as a form of parallelism at the level of sentences. Enjambment may be considered simply as absence of "caesura" at the end of a line.

5. The distinction between the abstract pattern and its linguistic implementation in the domain of meter has been drawn particularly clearly by Morris Halle and S. J. Keyser, "Chaucer and the Study of Prosody," *Linguistics and Literary Style.*

6. In her unpublished Harvard dissertion, Irene Fairley shows that Cummings employs several syntactic systems, one of which is quite traditional in the form of its inversion rules.

7. A detailed analysis of the rules of English phonology is given in Noam Chomsky and M. Halle, *Sound Pattern of English* (New York: Harper & Row, 1968).

8. R. Wellek and A. Warren, *Theory of Literature* (New York: Harvest Books, Harcourt, Brace & World, 1961), p. 148.

9. P. Kiparsky, "Metrics and Morphophonemics in the Kalevala," *Linguistics and Literary Style,* "Metrics and Morphophonemics in the Rigveda," *Contributions to Generative Phonology,* ed. M. Brame (Austin: University of Texas Press, 1972); Howard Lasnik, "Metrics and Morphophonemics in Old English Verse," *Linguistic Inquiry,* forthcoming; Stephen Anderson, "U-Umlaut and Skaldic Verse," *Festschrift for Morris Halle,* eds. S. Anderson and P. Kiparsky (New York: Holt, Rinehart and Winston).

10. R. Ohmann, "Generative Grammars and the Concept of Literary Style," *Word,* XX (1964), 423–439; V. Propp, *Morphology of the Folktale* (Austin: University of Texas Press, 1968). For a new linguistic approach to the question of modes of narrative, such as "narrated monolog," see S. Y. Kuroda, "Where Epistemology, Style and Grammar Meet," *Festschrift for Morris Halle.*