LINGUISTIC METRICS

The term "linguistic" as applied to only two specific treatments of English meter is something of a misnomer based on the rather tenuous justification that their practitioners have been mainly professional linguists. But in fact all treatments of metrics are linguistics, since meter is composed of language: No Metric Without Its Phonetic. In this respect George Gascoigne's attempt to explain what he hears in 1575 is as much "linguistic" as is Paul Kiparsky's in 1975.

Structural Metrics

Structural linguists explore language by constituent analysis: they divide speech into discrete units, sort these into categories, and then examine their relationships. Similarly, structural metrics applies the same method to the analysis of verse by constructing (1) a description of the abstract pattern of a metrical line (the "norm"), (2) a list of the elements which may fill this structure, and (3) a list of their acceptable-- and unacceptable—combinations (i.e. the "variations" against the norm). Following the structural phonology of Trager and Smith (D32), structural metrists postulate a metrical system of two degrees (stressed, unstressed; i.e. ictic, non-ictic) against a system of stresses in the language itself having four degrees (primary, secondary, tertiary, and weak). Thus a "tension" is created between the simplified abstract metrical pattern and the manifold variations of linguistic stress-patterns in speech: the two medial degrees of linguistic stress are available for "promotion" or "suppression" to the two extreme degrees depending on the metrical environment. Structural metrics, then, explicates the various possibilities for interaction between these two systems in lines of verse. But the general concept of metrical tension has been so attractive that even scholars not themselves committed to the entire structural framework have adopted its general assumptions in the last two decades, as can be seen in the work of Wimsatt (E814), McAuley (E578), Malof (E581), and Thompson (E91). The structural account was then succeeded by the generative in metrics as in grammar, though the generative analysis has not yet produced anything nearly so useful or persuasive as the structural concept of tension. One must remember, though, that the Trager-Smith description of four levels of linguistic stress is no less conventional than the artifice of meter; it is a purely descriptive schema, designed for descriptive convenience. The evidence that auditors actually discriminate four levels of stress in speech is ambivalent at best.

More a systematic argument in the theory than an inductive comparison of the metrical styles of Donne and Pope at Satires. Chatman follows an unimpeachable definition of meter--"a systematic literary convention whereby certain aspects of phonology are organized for aesthetic purposes"--with an enumeration of the types of metrical variation--"intra-systemic variation," either by displacement of metrical points or a change in syllable-count, or "countermetrical variation," either by weak stresses under ictus or strong stresses outside of ictus or else by the choice of junctures--an explanation of "the impression of speed" in verse (if it is not a "lexically-induced illusion" it is caused by addition of extra syllables or else weak stresses under ictus), a very succinct survey of the types of elision, and a distinction between poetic style, interpretation, and performative style. On sound-patterning he deprecates...
mimesis, offers an anatomy of devices, and observes that "the rhyme actually may provide information by limiting the possibilities of interpretation." Close analyses of the poets are interpolated. N. B.: "I have never been able to discover a good reason for assuming that a metrical accent point has any closer connection with the zero that it follows than with the one that it precedes." Very important essay.

E710 -----. "Mr. Stein on Donne." Kenyon Review 18 (1956): 443-51.
A part of the symposium "English Verse And What It Sounds Like" and a reply to Arnold Stein's notes on Donne's meters (E1070). Applying the Trager-Smith inventory, Chatman is insistent that there can be no ambiguity or ambivalent "hovering" in meter (as Stein maintains); any ambiguity in traditional scansion "is a paper ambiguity only. . . . [it] demands a resolution in oral performance." "The very act of performance . . . forces the reader to resolve ambiguities, to decide between alternatives . . . ambiguity can only exist between the printed page and the reader's eye. . . ." Cf. Levin (I35).

A simplified, clear, direct discussion of rhythmicity in verbal structures and that higher ordering, meter, which is "a species of rhythm." In a sequence of regularly recurring events, the key aspect is the prominences which mark regularity; for languages, specifically English, these seem to be stresses. But though it is true to insist, No metric without its phonetic, still no amount of phonetic analysis can discover, explain, or produce meter, since meter is a convention arbitrarily imposed on the language. Chatman sketches out the two most recent linguistic accounts of meter, Trager-Smith and Bolinger. The latter has so far been scarcely explored, but its early findings are intriguing.

The first published application of structural linguistics to metrics, an analysis "envisioning a tension between two systems: the abstract metrical pattern . . . and the ordinary stress-pitch-juncture system of spoken English" which "incorporates both formula and performance." The Tager-Smith system can elucidate the actual performance, so Chatman transcribes eight readings of the Frost poem (one of them Frost's) and marks their intonation patterns in order to resolve ambiguities of interpretation. The principle of tension between oral performance and abstract metrical pattern is the central concept in structural-linguistic metrics. See also John Crowe Ransom's summary comments at E627.

Up to its time the most significant treatise in the field of metrics since Bridges (E491); Chatman provides a full-scale theory of an order which has been rarely matched. His procedure is empirical throughout, and the study never strays very far from its data. "Meter itself is a system, parallel to and actualized by, but not to be confused with, the linguistic system." Chapter 2 surveys the psychology of rhythm, since meter is, by general consensus, a species of rhythm. A very long Ch. 3 reviews elementary phonology, since the relevant event or unit-object in meter is the syllable, followed by the nature of prominence or idus in meter; length, stress, and pitch are closely examined,
"stress" is defined, and the importance of pitch in stress is emphasized (following Bolinger). Chapter 4 reviews earlier Objective studies of meter as well as Russian Formalist/American Structural-Linguistic work. Chapter 5, the crux, states the theory: inductively, we do scan poems—meter is agreed to exist—but no one linguistic feature can be shown to be an invariable signal of metrical ictus. "Lexical stress unambiguously marks metrical ictus... unless overridden by [phrasal stress]; in confusing or ambiguous contexts, the "metrical set" of expectations will then act to denominate the ictus and preserve meter. Sanson is a notation of the meter of a recitation, while metrical analysis is a composite summing of all the scansions, "the meter in this sense is a consensus, not a normative formulation." The foot is defended on grounds of theoretical elegance and the psychological reality of grouping. Four degrees of syllable-stress are denoted (a, b, c, d) producing thirty-two varieties of disyllabic feet, excluding spondees, pyrrhics, ambiguous feet, and mono- and trisyllabic substitutions [hence, no "metrical pause"], which are also allowed. Chapter 6 provides a sample analysis of Shakespeare's Sonnet 18; eleven professional recordings are analyzed on a sound spectrograph then checked against the judgments of a panel of expert judges; conclusions, pp. 182-83. A final chapter speculates on the functions of meter—an important and much-neglected subject. See also Wode (E703).

The famous and influential Kenyon symposium which inaugurated the new structural-linguistic approach to metrics in essays by Harold Whitehall (E735) and Seymour Chatman (E712, E710), followed by responses and appraisals by two of the most distinguished of traditional literary critics, Arnold Stein (E667 and E1070) and John Crowe Ransom (E627).

The monograph which constitutes the formal application of the methods of structural linguistics (the Trager-Smith phonology; see D32) to English metrics. Dispensing with the traditional binary metrical system (stressed-unstressed), the structural analysis notates all the intonational features present in the normal production of speech, in four degrees of each:

<table>
<thead>
<tr>
<th>stress:</th>
<th>pitch:</th>
<th>juncture:</th>
</tr>
</thead>
<tbody>
<tr>
<td>primary</td>
<td>highest</td>
<td>end-of-word</td>
</tr>
<tr>
<td>secondary</td>
<td>high</td>
<td>end of phrase</td>
</tr>
<tr>
<td>tertiary</td>
<td>mid</td>
<td>end-of-clause</td>
</tr>
<tr>
<td>weak</td>
<td>lowest</td>
<td>end-of-sentence</td>
</tr>
</tbody>
</table>

A assuming also, then, the Relative Stress Principle (stress differences on syllables are relevant only within, not across, the boundaries of the metrical foot) and what later came to be called the Allophonic Principle (the second of two objectively equal syllables will be heard as louder—subsequently a much-disputed rule), the iambic foot may be redefined as "weaker-stronger," and if the metrical pause is allowed as well, the Epstein-Hawkes analysis yields 186 types of possible iambic feet (taking into consideration only stress and juncture; adding pause yields another 44, and the inclusion of pitch as well [the authors consider pitch peripheral, however] produces a total of "only" !) 6,236 types of iambic feet in English). The method is applied to Samson Agonistes. Varieties of trochees 96 (stress and juncture only), besides 86 more (pause), or a total of 2,460 (including pitch). Possibilities for the anapest run several thousand higher, with those for the dactyl being somewhat less, though in both cases the
stress differences between the three syllables of the foot are characteristically quite pronounced. And though the authors define the metrical line typographically, as a line of print, they reiterate that the basic patterning (unit) in meter must be binary for sheer simplicity of description. Probably the strongest feature of the whole structural-metric analysis is its efficacious demolition of larger metrical units in favor of the traditional binary and ternary units, even of binary alone (the ternary may be subsumed under the binary isochronically). The authors conclude that English verse is fundamentally iambic. On the strophic leve they recognize that the context controls the scansion of specific problematic lines, under a principle of greatest prevailing metrical consistency. 

"This is the difference between fine and coarse analysis," true enough, but structural metrics also clearly proceeds from an assumption not that meter is made out of language but that meter is language. In practice the authors ignore the conventionality of meter, in its reduction of the linguistic system. This represents, in Jakobson's terms noted by Fowler, a confusion of verse design and verse instance. No reader perceives six thousand types of iambs. Meter, both to be written and to be read, must be a very simple pattern, underneath its elaborations.

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Fowler, Roger. "'Prose Rhythm' and Meter." Fowler (A14), pp. 82-99; rpt in Freeman (A22), pp. 347-65.

This lambent essay adapts the recent insights and concepts of structural metrics to explain how meter interacts with grammar at both its higher and its lower levels, syntax and phonology. The "counterpoint" of meter against syntax is essentially that of the line against the sentence, and Fowler shows through examples that it would be possible to construct a "scale of enjambement," an index sensitive to the force of the meter, essentially discontinuous, pulling against the force of the syntax, toward continuity. (Note that "counterpoint" must be sustained to deserve its name.) The play of metrical paradigm against the phonological structure of the language (stress), however, is properly termed "syncope" not "counterpoint." The metrical pattern must be kept visible in order for tension to be created; otherwise the rhythm is "sprung" out of its proper sphere of concessions and aggressions into a simple stress verse.

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A thorough, careful review of Seymour Chatman's A Theory of Meter (E713), exploring not only the book and its arguments but also the assumptions and methods of structural metrics in America since 1951. Fowler's own differences from Chatman's principles and conclusions are twofold, but not severe: he worries about systems in which "metrical tension becomes practicable for a text" (see p. 49), an index which would score gradations in its features both above and below the norm ("matrix").

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A pocket-sized student's manual, the first of that sort to explicitly adopt the Trager-Smith four-level stress system. Chapters on Stress Metres, Syllable-
Stress Meters, Quantitative and Syllabic Meters, Rhyme, and Free Verse. Clear, non-technical explanations. Fraser allows six actualizations of the metrical iamb (weaker-stronger), taking 4 as the weakest stress and 1 as the strongest: 4-3, 4-2, 4-1, 3-2, 3-1, and 2-1 (Epstein and Hawkes (E715) allowed fourteen).


Michel, Laurence. "The Emperor's Clothes (Again) or, Is Criticism Possible? (Again)." EIC 15 (1965): 239-43; reply by Richard Stack, "Contre Michel, Or, the Atomist as Contextualist," pp. 471-73. Finally:


Hawkes' review of Thompson (E91) complains of inadequacy and inconsistency in his application of the Trager-Smith system, as if Thompson did not quite understand how to use his tools, as it were. Bateson observes that the Trager-Smith system will allow comparisons of the weights of different metrical feet and lines, but he also identifies the effort "to detach metre from poetry" as "the prosodic fallacy," and he rejects the Allophonic Principle (the second of two equal sounds will be heard as louder). This last he reiterates. Ridland interjects that meter is more conventional than linguistic; metrical rules are like the rules of any game. Bateson seconds that by stipulating a necessary intermediary between speech and meter, Line. Michel also criticizes Thompson but in the process thoroughly discredits himself (as Stack shows) by a flagrant misrepresentation, for which he later apologizes. The entries in vols. 15 and 16 may be ignored.

E720 -----. "The Problems of Prosody." Review of English Literature 3 (1962): 32-49. Are the results of unwieldy and inaccurate conceptual machinery. The Trager-Smith analysis is substituted, yielding fourteen types of iambs, six trochees, ten anapests, and two dactyls, or thirty-two altogether. This system certainly allows better description of the linguistic texture of a line, but it rests on the false assumption that the metrical system is identical to the linguistic system underneath it.

E721 Hewitt, Elizabeth K. "Prosody: A Structuralist Approach." Style 6 (1972): 229-59. An expansion and refinement of her earlier presentation of a structuralist metric (below). Hewitt criticizes the Halle-Keyser framework for failing to admit first trochaic feet in iambic lines, final iambic feet in trochaic lines, contiguous strong stresses, and the allophonic-stress principle; Magnuson and Ryder for mistakenly basing their metric on syntax; and Beaver for the convenient optional status of the stress-exchange rule. She then presents a refined version of her own theory, which contains three levels - Meter (marking ictus), Cadence (juncture and strong stress), and Measure (pitch pattern and stress). Thus she has a tripartite criterion for evaluating the metricality of a line: unmetrical, uncadenced, unmeasured. A line that fails all three is "irregular." Finally, she tests the efficacy of her system against Halle-Keyser and Magnuson-Ryder in twenty-three lines from Shakespeare's Sonnets, with detailed analysis.
The scansion system of traditional metrics is too primitive, Hewitt argues, to describe the complex transactions and levels of English language and verse, and so she produces a "three-level prosodic analysis," and levels--meter, measure, and cadence--showing (respectively)--ictus, stress, and pitch, and stress and juncture. The meter level is binary; measure is rising or falling and comprises units of one stress and up to four slacks; cadence comprises eleven poetic and five prose feet (in Eliot).

The analysis of the poem correlates these metrical forms with meaning, particularly the "fixity and flux" Eliot contemplates in "Reflections on Vers Libre." These scannings are easily the most complex I have seen.

Argues that a scansion which denotes (four degrees of metrical) stress, juncture, and (isochronous periods of) time should supplant the two inadequate, "pre-phonemic" metrical systems which cause such confusion in metrics--the one using the classical terminology, the other based on music.

The authors contest Seymour Chatman's reading of "And like a Persian mitre on her head/She wore" (in C45), citing parallel examples from Spenser as support, and defending both the necessity of linguistic analysis of verselines and also the value of the Trager-Smith notation of specific features against the criticisms of these procedures by Wimsatt and Beardsley (E700).

Trager-Smith analysis of Thomas's recordings of six of his major poems, vis à vis rhythm, meter, and sound patterning. The poems seen to be in both syllabic- and foot-verse, with some tendency toward dipodism.

A full Trager-Smith scansion of the poem reveals that it is generally isochronous, with two differing durations between stresses. A full analysis of segmental patterning shows general features of regularity, complementarity, and overlapping. Other matters of interest: Keats shows a surprising preference for only a few vowels on the seventh syllable in the line; there is a variance in distribution between those sounds that pattern horizontally and those vertically; y-glide are frequent in rhymes; phonemes tend to be patterned in groups of threes.

Applies traditional metrical analysis to the poem, treating it as if it were in accentual-syllabic meter, to discover that no discernible pattern of traditional feet appears. Mosher insists that the Trager-Smith system is the only adequate approach. Close analysis of rhyme, alliteration, and consonance round out the paper.

Amplification and reassertion of the author's view that "all of English 'metered'
verse is predominantly iambic." This thesis he bases on the structural-linguistic framework (four degrees of stress) and two principles, the Relative Stress Principle (ictus falls on the syllable bearing the stronger of any two of the four stress phonemes) and the Allophonic Principle (it also falls on the second of two successive syllables bearing the same stress phoneme). Examples from Donne.

E729 Stack, Richard C. "From Sweetness to Strength: A Study of the Development of Metrical Style in the English Renaissance." D A 29 (1968): 616A (Stanford). Stack distinguishes two broad metrical traditions in the Renaissance: one, running from Surrey to Spenser, sought to develop viruosity by adapting the syntax to the meter as mellifluously as possible; the other, best exemplified by Donne, sought to exploit the possibilities for contrast, tension, and clash between the rhythm and the meter. Trager-Smith notation of suprasegmentals is employed throughout to render more precise prosodic descriptions. Concludes that Donne's verse reveals not metrical roughness or license but a remarkable assimilation of natural speech within complex, severely constraining formal structures.

E730 Stein, Arnold. "George Herbert's Prosody." Language and Style 1 (1968): 1-38. No American critic has so successfully assimilated the precise descriptive instruments of Trager and Smith into graceful yet incisive critical analysis as has Arnold Stein; this essay is a showpiece of method [though protracted at times, one feels], explicating the rhythmic focus and control of "the particular discriminations of . . . meanings" in "Employment" and "The Crosse." Following the first four pages justifying his ways to men, Stein identifies three types of phrasing--metrical, colloquial, and rhythmical [these terms are inaccurate]--in order to show "the inventive ease with which [Herbert] adjusts colloquial and metrical phrasing to each other," isolating also an important principle of "advancing intensity of stress" characteristic of Herbert.

E731 ------. The Movement of Words." In his George Herbert's Lyrics. Baltimore: Johns Hopkins U niversity Press, 1968. pp. 45-84. Stein's consistently articulate prose and steady insight is here reinforced with the precise descriptive apparatus of Trager and Smith (D 32), using the numbers 1-4 to denote stress and the standard bars and cross-hatches for juncture. Stein's purpose here, though, is less to pursue a reading of Herbert than to establish the apparatus, and to show how Herbert's meters and rhythms function "in both establishing and discovering meanings."


E733 Taylor, Clyde R. "Developments in English Prosody." R eve de l'U niversité de S herbrooke (Q uebec) 3 (1962): 9-20. Taylor establishes the very salient point that traditional metrics (a la Saintsbury) and structural-linguistic metrics are in fact "describing different aspects of
prosody [the first, meter, the second, rhythm], and are not at all in competition with each other." Rejecting the musical theory of meter and the analysis of stress-verse, Taylor then reviews the linguistic work, questioning the selection of the subjects chosen to perform poems for recording and analysis. The problem of poetic ontology at the end.

Wells, Rulon, et al. "Comments to Part Five." Sebeok (A19), pp. 197-200; rpt in Chatman and Levin (A21), pp. 127-31. Responses and general discussion follow on pp. 200-9 (in Sebeok), and notice also the summary comments on metrics by John Hollander (pp. 402-3) and René Wellek (pp. 413-14).

Actually a study in poetic ontology (or epistomology), alternatively: Wells distinguishes carefully between the poem, the (original) record of the poem, all exact copies thereof, and adequacy vs. inadequacy in records of the poem. Conventional orthography gives only a fairly adequate record; a phonetic transcription would be a much better version. Though rules for determining meter can be given, the problem for the reader of poetry is that he has to (1) infer an adequate record and (2) determine the meter simultaneously, usually forcing him to use hypotheses about each problem to help solve the other.

In the ensuing discussion, the participants all manage to ignore each other at length.

Whitehall, Harold. "From Linguistics to Criticism." Kenyon Review 13 (1951): 710-14. Reprinted in the symposium on "English Verse and What It Sounds Like" (E714), pp. 411-21. The essay reviews and anatomizes Trager and Smith's Outline of English Structure (D32), adding a section on "Prosodic Implications." Whitehall's position: "as no science can go beyond mathematics, no criticism can go beyond its linguistics." He illustrates how the Trager-Smith 4-level stress system can be adapted to the traditional 2-level system in metrics: the two middle levels of stress may be variously promoted to ictus or suppressed to nonictus depending on environment. English verse is (surprisingly?) also said to be isochronic, our language being "stress-timed." Whitehall concludes with an outline of global verse-systems:

```
syllabic rhythms
  non-configurational     configurational verse
     syllabic verse    isotonic    isoaccentual
      |             |        |                        |
      Vedic            quantitative     |
                      Chinese Greek Old English

non-syllabic rhythms
  isosyntactic         isochronic
           Hebrew     English
```

The configurational forms mark or weight with one feature. English verse he suggests is "isoaccentual counterpointed with isochronic."

work than in metrics." The components of meter are three: stress (using Trager-Smith's four levels in the language and two levels in meter), juncture (three levels--rising, falling, level--vulgarly known as "caesura"), and isochronism. Two primary metrical traditions in English are identified: the isochronous (the native form) and the isosyllabic (the foreign, syllable-counting form borrowed in Middle English); there are also two main theoretical traditions: the traditional metrists (with concepts derived from classical verse), whose system is adequate only for isosyllabic verse, and the musical metrists (Lanier, etc.), whose system only describes isochronous verse. Both systems are said to be prephonemic.

E737 Williams, Joseph M. "Caliban and Ariel Meet Trager and Smith, or Descriptive Linguistics and Teaching Literature." College English 24 (1962): 121-26. Reviews several studies which apply structural-linguistic methods to literature, especially on stress metrics, criticizing them for describing single features in isolation and mistaking description for interpretation. Offers a sample contrastive analysis of consonant clustering and light stresses in the speeches of Caliban and Ariel to support intuitions about verbal texture and characterization.

Generative Metrics

Generative Metrics applies the conceptual apparatus of Transformational Grammar to poetic meter. The abstract metrical pattern thus represents the deep structure and the actual poetic line the surface structure of verse; the business of the prosodist, then, is to state the rules of "correspondence" between the meter and the language which allow the formation of various possibilities of actual and metrical lines, while prohibiting unmetrical (compare "ungrammatical") lines. The system rests on the generative phonology given in Chomsky and Halle (D1). Three approaches have been proposed so far, one by Halle and Keyser, one by Magnuson and Ryder, and one by Kiparsky. All three have undergone major revision, so that each exists in two versions, the revised version being preferable to the original in every case.

i: Halle-Keyser


Both the original and revised theories of generative metrics are unsatisfactory, the authors argue, because they judge unmetrical all lines such as Keats's "How may bards gild the lapses of time" which pose the problem of "double trochee after syntactic juncture." But trochees are unquestionably admissible after juncture at the beginning of the line, so why not elsewhere? Subsequent trochees after juncture are simply generalizations of the line-initial case.

Beaver replies politely (and correctly) that the authors do not define "juncture" adequately. He does not mention the fact that they do not pursue their thesis to its logical end, where "Never, never, never, never, never" would then be an acceptable iambic pentameter.


The first to coin the term "generative metrics," Beaver here examines the problem which H-K describe as "emphatic stress" (known to traditional metrists as "inverted feet") and elaborates a rule for reversing stress which is to stand between the lexical and the phrasal stress rules in the phonological cycle. On restrictiveness (optional or obligatory) no conclusion is drawn. A theoretical essay on rule-ordering in a particular (the metrical) environment.

E740 MOVED to D44a.


Beaver rejects the "totally accommodating" "performance grammar" of Magnuson-Ryder (while approving the use of Distinctive Features). He purpose here is to establish a scale of metricality, so glaringly absent in Halle-Keyser, based on stress rules more effective than those ("correspondence rules") offered in "Illustration and Defense" (E778), including his "Stress-Exchange Rule." His approach differs markedly from the Halle-Keyser metric, since Beaver's rules disclose "several kinds of stress maxima." Throughout, careful and equanimitous intellection. For a fuller exposition of Beaver's rules, see his E748 below.


A summary review of the development of the school; Beaver elaborates the direct analogy between transformational-generative grammar and generative metrics, argues that the new theory is "more rigorous" than any of its predecessors, rebukes structural linguists ("the concept of stress is not a
phonetic one but a phonological one, and the theory is therefore in no direct
sense dependent on performance”), reviews the Magnuson-Ryder "Distinctive
Feature" alternative, and cites historical precedents for the generative
approach.

A later reassessment of the evolution of the theory and its problems; Beaver
generally defends his "extended original theory" against the original 1966
theory (E775) and the "revised theory" (E777). Triple meters, nursery-rhyme
verse, competence/performance, and free verse are topics also treated; the
section on nursery rhymes is particularly suggestive.

E744 ------. "Generative Metrics: Revised Version I and II." University of Illinois
Department of Linguistics Newsletter 3 (1972): 11-12.
A note which argues that the author's own modification of the original Halle-
Keyser system is more adequate than their own revised version.

(A22), pp. 427-47.
An influential early article providing revision, evaluation, and "critical
commentary" on the Halle-Keyser system. Beaver also turns to shorter-lined
and trochaic verse, finding that the "greater rhythmic regularity" in verse of
short lines may be explained generatively: short lines are 50% denser in stress
maxima. Triple meters seem to rely heavily on set syntactic formulae, such as
prepositional phrases, which put stress on the third syllable. The traditional
"foot," enjambment, initial inversion, and metric stylistics are then considered
in turn.
Beaver suggests revised stress rules but insists that Halle-Keyser's metrical
principles offer a "unified explanation" of the iambic pentameter line. The
generative system, however, is augmented by Chatman's analysis of five types
of syllables (E713).

E746 ------. "Progress and Problems in Generative Metrics." Papers from the Fourth
Regional Meeting Chicago Linguistic Society. Ed. B. J. Darden, C. J. N. Bailey,
and A. Davison. Chicago: University of Chicago Department of Linguistics,
An introduction, summary, and review of the work of Halle-Keyser (E775),
Beaver (E745), and Freeman (E766) on the conceptual structure of generative
metrics, concluded by brief discussion of the problems of phrasal stress rules,
contrastive stress, secondary accent, syntactic juncture, and vowels.

E747 ------. The Prosody of John Donne. Chicago: Northeastern Illinois University
Department of Linguistics, 1976. A bound typescript--not listed in MLA.

Recognizing that "stress maxima are created in different ways," Beaver
examines stress rules from Chomsky and Halle's Sound Pattern of English: The
Nuclear Stress Rule frequently and the Compound Stress Rules sometimes
place stress maxima in unmetrical positions.
Two additional rules are proposed--a Stress Exchange Rule and an
Alternating Stress Rule--to account for various causes of stress maxima. A
recognition of the possible rule combinations of all these rules, Beaver argues,
will account for "degrees of metricality."

Reviewing "three approaches to the problem of how to handle back-to-back strong stresses," Beaver again proposes his Stress Exchange Rule, whereby word-stress may be reversed due to metrical context. The three positions are Traditional Prosody vs. Generative, Magnuson-Ryder, and Chomsky-Hall stress rules. More interesting, though, is his comparison of variant abstract descriptions of the same empirical phenomena on pp. 6-7.


Noting that the Nuclear Stress Rule creates a dilemma for the Halle-Keyser system, Beaver proposes a later rule which would have the effect of exchanging stresses in cases where the NSR creates an unmetrical line--the rule is obligatory for metered verse and optional otherwise.


A very discursive survey of the uses of the new linguistics for literary analysis and theory, focusing at one point on metrics.


Argues that Halle and Keyser's conception of the "standard theory of metrics" (against which they are reacting) is erroneous: the perfect pentameter line is not the "norm" from which all variations (initial trochees, etc.) are deviations; rather, the consensus in traditional metrics has been that variations are a part of the norm. Nor is the perfect pentameter line any "ideal," since poets have so obviously labored to vary it. Thereafter, protracted attributions from Bridges, Saintsbury, Omond, and McAuley follow. Finally, Bowley offers his own set of four metrical rules, which will "account for all possible metrical patterns": these differ from the generative account in that "metrical variation is... accounted for by differences in the underlying metrical patterns, not by differences in the way the correspondence rules apply." A tumid article but a trenchant criticism.


A comparison of Halle-Keyser and Weismiller on trochaic feet in Milton, which are found to comprise less than 1% of the lines in the canon. Both the two approaches are corroborated, though Buss proposes an amended stress-placement rule, the effect of which is to suggest that "the traditional concept of the foot is a meaningful one." Finally, the problem of the "relative stress prominence" in two adjacent stressed syllables is examined in Pope and Milton, along the lines of Beaver's work.


Three substantial objections are raised: (1) the Halle-Keyser theory "assumes the adequacy of the system" a priori in order to judge the adequacy of poetic lines, rather than vice versa; (2) it makes "the assumption that there should be no violations, for the sake of meter, of the linguistic givens"--or, in other words, that rules for the general language will account for poetic language, there being no such thing as "poetic license" or poetic "deviation"; and (3) the theory excludes lines from actual poetry (Shelley) while admitting strings of
ordinary prose and other random discourse--i.e. it admits both too much and too little.

A lucid critique of generative work to 1976. Cable criticizes the Halle-Keyser theory for "two crucial flaws": (1) taking the stress maximum rather than the foot as the metrical unit, and (2) assuming that only stress ("segmental units") matter for meter, rather than other "linguistic given" (i.e. "suprasegmentals" such as pause, duration, pitch, juncture). The only progress [in Halle-Keyser] was the articulation of an explicit goal (R ules for determining M etricality) for the study of meter. Moreover, Cable argues persuasively that the generativists have been scornful of if not oblivious to much of the earlier scholarship of real value in metrics.

He considers Beaver's work to yield some progress, in that it tries explicitly to work out other and better rules for metrical generation. Magnuson and R yder's theory is dismissed because it lacks generalization altogether: any rule written applies only to that line and no other. Altogether, he concludes, the sole advance of the generative approach is the effort to make the metrical rules explicit.

Puckishly, Cable skewers the generative theory for two major flaws: the "Prosaic Fallacy" ("some linguists cannot read poetry" because of their dogma about N o V iolations of Linguistic Given for the Sake of M etre) and the "Inclusive Fallacy" (the theory will admit almost any random string as a metrical line). The objections to the generative metrics are "unanswerable."
The latter half of the article argues for the existence of the "metrical pause." In sum it is an elegantly written piece by a sometime Timer; cf. his position in the later Style article (previous entry).

A comparison of traditional and generative metrics in order to show that some traditional procedures are more effective than present generative ones and that the two might therefore be usefully conjoined. "Once traditional metrics is made explicit, it becomes evident that the label 'generative' is not really the prerogative of the so-called 'generative' approach to metrical theory." (The examples are taken from the Classical meters.)

A detailed anatomy of the concepts of stress, quantity, and pitch in Latin, Greek, English, and in the work of Bridges and Stone, coupled with a computed scansion based on Beaver's revised definition of the "stress maximum." A system for scanning stresses can be applied to Bridges' work because he produced "a combination of accentual and quantitative meter."

A computerized analysis of Hopkins, Bridges, and Patmore using a method of a "linguistic orientation" (no more is divulged); these three poets were selected because their metrical theories are concentrated on, respectively, stress, syllables, and time. Moreover, "Hopkins' Sprung Rhythm and Bridges' experiments in quantitative verse are examples of phonemic and nonphonemic
verse-conventions for which linguistic, as contrasted with traditional, prosody is [a] particularly suitable basis for analysis." The methodology is apparently generative. Computer programs provided as an appendix.


The assumption behind all of Dilligan's work is that the only way to avoid impressionism in prosodic studies is quantification: assertions are to be validated by distributions and percentages. This essay describes the computer-program for an analysis of Hopkins, following the revised theory presented in English Stress (E777) (since "in linguistics one finds a methodology . . . that satisfies the need for explicitness and logical consistency"). But Dilligan is clear about the recognition that "the statistics, then, are in no sense an interpretation within themselves; they are simply a significant preliminary to interpretation." All a computer can do is count and sort.


Description of the four phases of the computer analysis, particularly the third--cataloguing--since it is the computer's ability to sort very large files that is of use. A sample of the running tallies on thirty-eight metrical variables by poem and by corpus is shown.


A survey-commentary on the development of transformational-generative linguistics as applied to metrics: the linchpin of Fowler's argument is that the application is based on an analogy (there is a "grammar of prosody" equivalent to the grammar of the language) which has decided limitations. Most conspicuously, the linguistic model exaggerates the extent of poetry-as-a-piece-of-language: "although their basic material is linguistic and therefore subject to description in linguistic terms, metrical and literary conventions are non-linguistic aspects of form." Less conspicuously, the key concepts of T-G grammar, such as abstract pattern, transformational rules, deep structures, competence, or grammaticality, have shown only very limited uses in metrics. Fowler distinguishes between the methods of theoretical metrics and metrical stylistics and then enumerates advantages and disadvantages. A reflective essay which scores some hits and some misses.


Follows Ian Robinson (K318) in believing that "Chaucer's line is a non-pentameter, more dependent on the alliterative accentual tradition of native verse. . . ." Analysis of Heywood supports the further argument that his metric is better than most prosodists believe and that it represents a coherent and substantial (alliterative) tradition throughout late-medieval and early-Tudor poetry. His metrical unit, then, is neither the foot nor the (generative) position but the phrase, or half-line. Rules on p. 29.


Distinguishes the schools of metrists as Traditional (Shapiro, Beum, Fussell, Malof), Structural (Epstein, Hawkes, Chatman, Fowler) and Generative, offers a sample analysis of Dickinson's "Safe in Their Alabaster Cloisters" according
to each system, argues for the existence of a metrical "stressed rest", and concludes that the poem is a conflation of both the syllabontonic (iambic pentameter) and accentual (Germanic four-stress verse) systems, which only generative metrics can account for. The logic in all this is confused, and Freeman takes a more model Halle-Keyser 1966 (E775) rather than 1971 (E777).

Freeman is interested in synaloepha (metrical position:syllable = one:many) and diaeresis (position : syllable = many : one); the essay interprets the data provided in Sipe (E1304) on Shakespeare in order to derive the rules for permissible filling of metrical slots.

An early affirmative appraisal of Halle-Keyser, with application to Renaissance dramatic blank verse. Granting that the forte of generative metrics is its mechanism for sorting metrical from unmetrical lines, Freeman confronts the further, harder issue: "What are we to ask beyond metricality? What does such a theory allow us to say about metrical style?" An entire set of metrical-stylistic categories (a terminology) is needed which does not presently exist (none is given here). Freeman criticizes the stylistic adequacy of structural metrics and shows the stylistic "effects" of various stress-maxima realizations as the groundwork for a full-blown generative theory of metrical styles. Detailed interpretation of statistics and examples. A survey very extensive in scope and implication and superior to many that followed it.

Generative metrics is particularly useful for describing Dickinson's unusual verse because her enigmatic dashes "often serve to prevent unmetricality," but two rules need to be added to the system stipulating when "stress rests" need to be supplied, since in E. D.'s verse both the number and the positions of the stresses are important. Freeman concludes that Dickinson wrote in two modes-"syllabotonic rhythm" and "stress-rest rhythm." Surprisingly, she also applies Creed's rules for Beowulf (E71) to E. D., in order to establish a connection between the Germanic meter and the English ballad.

Plotting each degree of complexity on the Halle-Keyser scale against the number of lines rated at that degree produces a graphic distribution curve for Ben Jonson which turns out to be virtually identical to a standard Poisson distribution. Similar analyses of a reduced corpus sorted by genre for each of six major seventeenth-century poets shows that (1) all except Marvell vary their metrical style (as shown by complexity distributions) considerably among the different genres, though (2) all six poets treat each genre essentially the same way metrically. Genre exerts a "powerful" effect on metrical style.

An argument that generative metrics is superior to traditional metrics for quantitative (computer-counting) studies. Analysis of concepts and procedures.

Concludes in favor of Jonson.

E771 -----. "Variable Rules and Literary Style." Computers and the Humanities 11 (1977): 193-97. Interested in the concept of the variable rule in linguistics, the author analyzes 1136 pentameters of Herrick and Jonson, writing such a rule to test for Weak-position stress assignment. The rule is "systematically variable and context-sensitive" and states that the probability of stressing a W-position "increases when that position is preceded and/or followed by an unstressed syllable, or when no major syntactic break is adjacent to it."


E775 Halle, Morris, and Samuel J. Keyser. "Chaucer and the Study of Prosody." College English 28 (1966): 187-219; rpt in Freeman (A22), p. 366-426. The original statement of the theory of generative metrics, as applied to the iambic pentameter in Middle English; the definitions and concepts given here were much criticized and amended later, and this article has no final authority. See the revised version of the theory at E777. Halle and Keyser fix the fundamental aim of prosody as the distinguishing of metrical from unmetrical lines. To this end they define the abstract (deep) metrical pattern of the iambic pentameter line as having ten metrical positions, five even, five odd. Second, they define the conditions under which a position may be occupied by more than one (surface) syllable. Third, they define the stress maximum (a syllable with stress greater than that on both syllables adjacent to it), which may (or may not) occupy an even position but may not occupy an odd one, as the fundamental criterion of metricality. The stress rules to be applied are lexical, and a provision is made for caesurae (stress maxima undergo "neutralization" across "a major syntactic boundary"). Two Condition rules allow disyllabic occupancy of the metrical positions.

E776 -----. "English: III. The Iambic Pentameter." Wimsatt (A20), pp. 217-37. Since Wimsatt's anthology appeared (1972) after the publication of Halle and Keyser's English Stress (1971), this article takes account (in the Notes) of the additions to the theory by Hascall, Beaver, and Freeman, and the objections by Wimsatt and Magnuson-Ryder, even though the article itself is a simplified version of chapter 3 of English Stress (next entry).
For Old English verse

**ABSTRACT METRICAL PATTERN:**

(i) A verse line is composed of a first and second half-line

(ii) The first half-line is composed of \(X^*X\)

(iii) The second half-line is composed of \(X(W)^*\)

**CORRESPONDENCE RULES:**

(i) Each \(X\) corresponds to a single \(S\), or

One \(X\) in a half-line may correspond to an \(S\) and a \(W\) in either order

**DEFINITION:**

If in two or more stressed syllables the zero or more consonants that precede the vowel are identical or begin with an identical consonant or s-cluster, the syllables alliterate.

(ii) Syllables in \(S\) positions alliterate; syllables in \(W\) positions do not alliterate

For modern English verse

**ABSTRACT METRICAL PATTERN:**

\((W)^*S(W)S(W)S(W)S(X)\) (\(X\)) where elements enclosed in parentheses may be omitted and where each \(X\) position may be occupied only by an unstressed syllable

**CORRESPONDENCE RULES:**

A position (\(S\), \(W\), or \(X\)) corresponds to a single syllable or to a sonorant sequence incorporating at most two vowels (immediately adjoining or separated by a sonorant consonant)

**DEFINITION:**

When a fully stressed syllable occurs between two unstressed syllables in the same syntactic constituent within a line of verse, this syllable is called a "stress maximum"

(ii) Fully stressed syllables occur in \(S\) positions only and in all \(S\) positions, or

Fully stressed syllables occur in \(S\) positions only but not in all \(S\) positions, or

Stress maxima occur in \(S\) positions only but not in all \(S\) positions,

Since the Correspondence Rules are ordered from least to greatest generality, lines which violate them will be progressively less metrical in the same order. Lines violating rule (1) will normally be considered acceptable variations, while lines violating rule (iii) are simply unmetrical. Counting each infraction of each rule as one unit will give a numerical score of the metrical complexity (i.e. degree of metricality) of the line. (This procedure is unchanged from the original version of the theory.)
syllables"--i.e., that the meter can "tilt" the "linguistic givens." The Halle-Keyser view is that "meter is an abstract pattern embodied in linguistic material by virtue of specific correspondence rules"; Wimsatt's approach is "contentless." They defend the concept of the "stress maximum."

The Magnuson-Ryder theory is examined at length and dismissed, its rules having no applicable generalization beyond the separate lines they describe.

A modification of the Halle-Keyser scansion system, recognizing changes in the language between Chaucer and Lydgate; the original Halle-Keyser theory alone "does not work" for Lydgate. The conclusion is that Lydgate is more regular metrically than is usually assumed, and that he simply used, extensively, line types which are exceptional in Chaucer.

E779

E780

Close technical work: amendments to the Halle-Keyser 1966 rules (E775), and contravention of their position on rhyme and stress. Also contradicted is their "No Violations of the Linguistic Givens."

E781

A twofold study: Hascall argues for the teaching of meter in high-school poetry classes as the "only coherent internal structure" in poetry (à la Bruner); his method is "largely within the framework" of Halle-Keyser.
"The syllabic-accentual meters of English are determined as iambic, ballad, trochaic, and triple meters." Finally, he considers problems of line length, secondary stress in compounds, and rhyming of unstressed syllables, proposing solutions based on a redefinition of "relative stress" and other features.

E782

An extension of the generative framework: Hascall discovers that triple meters (1) have fewer applicable rule conditions, (2) depend much more heavily on phrasal stress than lexical for the rhythm, (3) employ contrastive stress more frequently, and (4) require, for the sacrifice in flexible line-length, stronger marking of stress in the ictus position.

E783

Taking Nowotny as his text, Hascall applies Halle-Keyser yet once again, this time to trochaics. The conditions turn out to apply much less often than in iambics, unmetrical trochaic lines are rare; the meter is fixed at the very outset of the line; more positions are fitted by stress maxima. There is "less distance, in trochaic verse, between the metrical line and the poetic line." Provocative suggestions near the end. See also Newton (E779), Steward (E331), Atkins (E467), and Creek (E18).

E784

A suggestion to revise the Halle-Keyser definition of "stress maximum" so as to allow its occurrence in position 10 of enjambed lines; in effect, therefore, a complete abandonment of the concept of "line" as "the ultimate domain" in the generative system. Under the revised definitions, the number of stress maxima rise sharply (12-16%) and the distribution patterns of course change.
Sharp criticism of Halle and Keyser's treatment of major syntactic junctures. Their later view--that juncture neutralizes stress maxima-contradicts their original position, prohibits their results from being compared with those of other researchers (Freeman), produces undesirable redundancies in the theory, is based on a flimsy definition of terms, and does not differentiate pauses from larger junctures, in sum creating more problems than it solves.

A metatheoretical and metaprocedural essay. Ihwe believes that in fact "generative metrics" is not particularly generative and that it will not become so until it establishes an adequately descriptive metalanguage. He examines the work of Kiparsky (E827) approvingly, and the work of Halle (E774), and others; the transformational framework must be more rigorously applied, he concludes, in order to explain precisely how "the structure of national languages permits the introduction and development of metrical systems and makes them thus accentually possible."

Jussell claims that the generative theory "does not deny the validity of any of the other critical approaches to the study of Pope." In fact "it supports them," since it "deals with placement of linguistic stress, not metrical stress." Also examined: the linguistic and metrical aspects of metaphor, tone, and stylistic development.

Keyser finds the precedent for prosodic rules in Bridges (E491). This article presents modifications of Halle-Keyser 1966 (E775); in general it is a simplified, non-technical introduction to the generative theory for iambic pentameter.

A "companion piece" to Halle-Keyser 1966 (E775), with rule-adjustments for accentual verse. In addition, a detailed response to Sievers, with glances at Pope (prosodist), Sir Gawain, and nursery rhymes. Notice that in the generative account of the OE verse only one full stress need appear in a half-line to confirm it as metrical. And the matter of "resolved stresses" is dispensed with. See the revised rules for Old English meter at E777. And see E807.

Beginning with the notion that "metrics deals with the order of marked and unmarked elements in discourse," Klein isolates fifteen questions any metrical theory must answer. He contrasts at length the generative theories to the earlier "taxonomical" (descriptive) ones and rejects the notion of a "metrical competence" in speakers analogous to the linguistic competence. "The main fault of standard theory is... that it tries to grasp all possible and allowable deviations by means of a list" (rather than a rule). But the generative theory, on the other hand, "is not able to distinguish between metrical and unmetrical lines," is flagrantly accommodating, and "cannot establish a difference between
The older empirical theory is to be preferred to the newer theory, which is "fundamentally inadequate" because its formulation is "a statement on the nature of the infinite set of possible iambic pentameters."

Küper, Christoph. "Möglicherkeiten und Grenzen der Generativen Metrik." Linguistische Berichte 27 (1973): 8-40. Reviews the standard and revised Halle-Keyser theories and the Magnuson-Ryder approach, then tests the standard and revised theories on the verse of Dylan Thomas and G. M. Hopkins in order to discover the limits of the Halle-Keyser theory's applicability. These limits turn out to be rather severe, though Thomas can be described more adequately than Hopkins: (1) lines in the same meter but with different lengths cannot be usefully compared; (2) intentional shifts of meter in mid-line, common in Hopkins, are classed as unmetrical; (3) mixed meters cannot be described; (4) the theory misunderstands Old English meter by not paying attention to the number of slacks; (5) Sprung Rhythm, in which the stress-count varies, cannot be adequately explained; (6) no adequate justification for a scale of complexity is given; and (7) no clear line is drawn between complex and unmetrical. Küper gives Correspondence Rules for Sprung Rhythm at the end.

Levin, Samuel R. "A Revision of the Halle-Keyser Metrical Theory." Language 49 (1973): 606-11. A cogent demonstration of the incoherence of Correspondence Rule 52bii in English Stress (E777). Levin offers a simplified, ordered, more conceptually elegant set of three rules, each of which "describes a metrical type," and defines the violation of the next more complex metrical type, thus producing a simpler and clearer index of metrical complexity.

Lynn, Karen. "Chaucer's Decasyllabic Line: The Myth of the Hundred-Year Hibernation." Chaucer Review 13 (1978): 116-27. Based on her dissertation, DAI 34 (1974): 4210A (U.S.C.). Computer analysis (using the Dilligan programs) of samples of the verse of the Post-Chaucerians disproves the thesis that these poets misunderstood the master's versification; rather, they extended metrical variation beyond the limits Chaucer allowed himself as well as adding new possibilities. Specifically, they more frequently (1) filled one metrical position with two syllables, expanding the range of permissible elisions, (2) elided unstressed suffixes to their roots, (3) dropped a syllable in position 5, leaving a rest after the caesura (Lydgate's "broken-backed" line), and (4) rhymed stressed syllables with unstressed. Metrical complexity scores: Chaucer, 1.8; Dunbar, 2.0; Hoccleve, 2.7; and Lydgate and Skelton, 3.0. Chaucer's grace and "lightness" of line result from stresses often falling under ictus; his followers, in contrast, often weighted their lines by spreading stresses into non-ictic positions. But more interesting still is the discovery that stress-neutralization by adjacent syntactic break is radically different from neutralization by adjacent stress, producing a much smoother effect stylistically.

Meyers, Gerald W. "Modern Theories of Meter: A Critical Review." DAI 30 (1970): 3912A (Michigan). After identifying the functions of a metrical theory as (1) historical analysis, (2) characterization of styles, and (3) close study of a text, Meyers distinguishes three schools of metrists: Traditional (e.g. Fussell, Wimsatt & Beardsley, Fowler), Performance (Charman, Epstein and Hawkes), and Language Competence (Halle-Keyser). Traditional metrics is "in essence a psychological theory" and "workable but unnecessarily complicated." The extreme variation in oral performances of poetry has not yet been adequately comprehended in a
notation system, and so Performance metrics is not yet successful. Linguistic metrics, however, is "the most promising of modern theories of meter," because it assumes that "the language . . . together with the shared competence of speakers of the language, provides sufficient information for describing the metrical situation." In short Meyer prefers the Halle-Keyser apparatus. He does however admit its difficulties and suggests as partial solutions a revised notation system and a reduction from Halle-Keyser's de facto three levels of stress to two by dismissing the notion of neutralization.

Arugs that the rules for "options" in poetry (i.e. various metrical styles) are identical to those for changes in language in general--i.e., rule relaxation, rule-reordering, rule generalization, and rule inversion. Distinguishes three types of complexity--linguistic, metrical, and rhythmic--and criticizes both Halle-Keyser and Kiparsky for measuring the wrong type of complexity and failing to define the domains of each type.

Chapter 3 constructs a model for "extending the Halle-Keyser metrical system to rhythmic verse," whatever that is.

E797  Napoli, Donna Jo. "A Note on Synalepha and Stress Maxima." Poetics n.s. 4,4(o.s. 16)(1975): 401-10.
Examines the interaction of two Correspondence Rules (Synalepha and the Stress Maximum Constraint), without any final resolution.

Demonstration that Halle and Keyser's generative theory for alliterative verse is seriously inadequate and should be replaced with a model, "based on the hypothesis that the phonological phrase is the basis of the traditional Germanic alliterative half-line," which will more adequately describe Langland's meter.

The author collects a number of apparently trochaic lines with initial iambic substitutions in order to show that they can be proven metrical by the Stress Maximum Principle though not by traditional scansion. [Note however that the examples are nearly all in tetrameter verse, that the percentages for occurrence in pentameter and tetrameter verse vary widely and consistently, and that Newton admits several of the sample poems are in mixed meters. Traditional metrics would say these lines are regular headless iambics.] Initial inversion is four times more prevalent in iambic verse than trochaic, and medial inversions have similar frequencies. Newton criticizes Hascall's approach (E783) and concludes that Structural Metrics by nature will never be able to give a coherent differentiation of "trochaic" and "iambic" lines. Halle and Keyser never will either until their generative rules are revised. Newton's own approach (summarized on pp. 146-52), based on the experiments of Snell, Woodrow, Warner Brown, and the like, specifies differences in rhythmical grouping: trochaic feet are shorter than iambic; the length of stress to slack is 2:1 in iambic but 1:1 in trochaic. An essay very wide in scope, but discomfittingly disorganized.
Cf. Hascall (E783), Creek (E18), Stewart (E331), and Atkins (E467).
The methodology is Halle-Keyser, using a computer program (developed by Dilligan) to examine stress maxima, assonance, alliteration, and elisions. Wordsworth and Milton turn out to be more similar to each other metrically than to the other three, and Wordsworth "nearly re-attains the level established by Milton" in "some quantitative supportable ways." Thomson and Cowper seem to compose verse using "syntactic formulas." Young's blank verse shows a strong influence from the couplet.

Includes a Halle-Keyser analysis of meters and a lexical-syntactic concordance.

Roach rebukes Keyser for failing both at accuracy and at completeness in his abstract "model-building" and suggests an alternative version of the Abstract M etrical R ules which will solve the problem. And, since Roach believes that all generative theories suffer "problems in bridging the gap between phonemics and syllabics," he offers a Saussurean phonemic rule. Keyser declines to reply.

Using the Halle-Keyser framework, Sapora proposes a system of twenty-three levels of metrical complexity for alliterative verse, based on the stressed (and alliterating) syllables but ignoring all unstressed syllables in between as metrically irrelevant. One wonders how anyone could wish to defend such a position, since Sievers, Pope, Cable, and others have shown that even in Old English "stressed verse" the weak syllables are metrically significant.

Conjoins Halle-Keyser scansion and Richard O hmann's notion of deep- and surface-structures vis à vis style in order to analyze the relationship of meter to meaning in M adfleckn o and T h e M etal.

Agrees with I hw e that generative-metrical rules have only taxonomic value and that what they predict is either tautological or nonexistent. The only new and valuable concept is that of the "filter." "Complexity" is attractive, too, though the counting-method of complexity ranking eliminates any possibility for an explanation of the nature of complexity. A study of the position of more complex lines in a poem would give us more information than the present "leveling" method.
Kiparsky's system has gaps and cannot indicate hierarchies of accentuation. His alternation rule will not serve even if refined because it pays insufficient attention to secondary stresses in W-positions. The "contrastive" and "emphatic" stresses of Bierwisch also will not do. Schultz argues that the cyclical application of the stress rules in classical generative phonology will suffice. Application to the verse of Stefan George.
A demonstration that although the poem appears to be Old English alliterative verse, "the underlying metrical pattern of the poem is iambic." This is accomplished by redividing the fourteen lines of the poem (into twenty-one) and scanning them via Halle-Keyser 1971 (E777).

Most immediately a response to Keyser’s "Old English Prosody" (E789). Sledd methodically demonstrates a "reprehensible irresponsibility" of scholarly method and concludes that the Halle-Keyser theory is an "unrelieved disaster," being "altogether too accommodating."
Reply by Keyser, pp. 74-80. Keyser’s argument in response is that Sledd’s demonstration of gross factual errors in scholarship in no way infringes the validity of the theory itself.

Would a Temporalist want his sister to marry a Generativist? Standop delivers a stinging criticism of the assumptions, aims and ends of the Halle-Keyser theory, particularly its treatment of lexical stress, but also of its conceptions of "stress maximum," "position," and "complexity." The generative theory is "a fatal step backwards" in metrics. More generally, Halle-Keyser are guilty of both ignoring rhythm (i.e. hebungen and pauses) altogether and also of an "assumption that the poet is guided principally by the verbal material." Deviations in the number of syllables... are felt to be rhythmically more seriously deviant than... deviations in stress." The Conclusion ("Do We Need a Generative Theory of Metrics?"), though, is (surprisingly) judicious and open. "The root of Halle-Keyser's failure is not in the generative idea itself but in the hypotheses and assumptions which have gone into their theory."

Citing both Halle-Keyser and Kiparsky as theories inadequate for Gawain, Stillings adjusts the rule categories, arguing that "if an iambic foot contains three syllables, the underlying metrical representation contains three positions." Metrical Base Rules are redefined as Lexical Constraints (Correspondence Rules).

Despite the date of publication, most of this theory was worked out from 1969-72; it represents an attempt to embed the basic Halle-Keyser framework within a much wider, more highly formalized psychological (Gestalt) theory of meter which integrates (1) some of the current understanding of human processing of perceptual patterns and (2) the concept of Performance at a fundamental level in the theory, in order to achieve greater refinements of explanatory power, i.e. greater "delicacy" of description, by converting Halle and Keyser's dichotomous metrical determinations (metrical, unmmetrical) to a continuum of finer discriminations of metrical complexity. The five fundamental categories of Tsur's theory along with their components are:
conventional--i.e. formal, as in meter

**DIMENSION:**
- linguistic--the phonological rules of stress and syntax
- performative--the set of conditions in which the elements of the conventional and linguistic dimensions tend to group into, and establish themselves as, perceptual units. Here the metrical set, syntactic set, and other perceptual characteristics of the auditor, the performer's style, and the prosodic givens pertain.

**CORRESPONDENCE:** (essentially the three Halle-Keyser Correspondence Rules) Linguistic stresses in relation to metrical positions may be: confirming, non-confirming, or infirming, the result of which may be compensation, violation, or neutralization of the meter. Grouping may be either backward or forward.

**UNIT:** Beat is the unit of stress, meter, and performance.

**STRUCTURE:** Systematic hierarchical ordering of units. The "foot" serves as the unit of both stress and meter; above it is the line. Normal stress-placement in meter creates a stress-maximum; stress-displacement to the left creates a stress-valley, to the right a stress-grade.

**STYLE:** At the highest level, convergent or divergent. A large number of specific types of metrical variations may be graded on both quantitative and qualitative scales in order to define, describe, and weigh features of style.

Chapters treat Metricality, Caesura, Iambic/Trochaic and Ternary meters, Rhythmical Performance, Perception of Poetic Rhythm [perhaps the core of the book], Perceptual Forces on meter, syntax, and sense, Convergent/Divergent Patterns, and the Stanza. A long Epilogue appraises the problem of critical estimation of metrical style. The general structure of the entire argument is set forth in a twenty-page prefatory Synopsis. Much more is treated in the text, of course, and in fact the theory goes far beyond the Halle-Keyser framework (Tsur manages to put considerable distance between himself and them in chapter 1). Section 8 on Performance is especially stimulating.

**References:**


"The theory of generative phonology does not need to modify its distinction of two levels in order to accommodate metrical structures, but . . . accommodations are necessary, albeit in a different direction, if the theory has to give a systematic account of metrical structures . . . . The structure of the line is a phonologically mixed one."


Generative metrics must establish a definition for the line ("if we are to discover how we intuit that a given line is metrical, we must first discover how we intuit that a line is a line") and also must clarify its notion of "major syntactic boundary." Line-end may be generated from caesura and the metered line therefore built up from syntax.
Taking Halle-Keyser as "the most cogent system available," the author tinkers a bit with the stress assignment rules then discovers via application that the correlation between stress-maximum actualization and complexity-score is actually inverse even when an improved treatment of stress neutralization is included.

The response of a distinguished Traditional prosodist to the generative theory. Wimsatt approves of the abstract concept of "position," objects to the negativeness of the definition of "stress maximum," and questions its entire validity by observing that the iambic pentameter has traditionally been defined precisely by its five stress-units. Several invented examples serve as "a challenge to the notion that a sweeping negative rule (plus a merely optional rule about major positive features) will render certain minor positive features irrelevant to a definition of a meter." The Halle-Keyser rules give description of metrical complications in the iambic pentameter line but not explanations how or why these particular complications should exist (and not others).
Wimsatt adopts the (Structural) position that the meter alters or adjusts the mid-range stresses in speech. But "rules of language do not include rules of meter. The meter . . . is something that the poet adds to the linguistic givens, without contravening them." Finally, Wimsatt urges the recognition of a difference between the rule (the outer limits of legitimacy) and the norm (the varying, average, inner realization).

An argument that Halle and Keyser's optional rules Conditions 1 and 2 are in fact constrained and need amplification. In a discussion of the excessive accommodation of the theory, Youmans insists on the importance of a stress-maximum in position 10: "There is probably no need to restrict the definition of the stress maximum to a single line of verse." The analysis of two versions of the Keats poem allows stylistic comparison, and Youmans proposes "a balance principle" in "our perception of meter" as an addition to the Halle-Keyser system.

The Halle-Keyser metrical theory is a superior analytical treatment to those of Schipper (A11) and Southworth (K367). The unusual line-initial stresses in this poem seem to "illuminate the abecedarian structure of the poem aurally."


ii: Magnuson-Ryder

Synopsis of and addenda to the author's monograph (next entry) on the
functions of syllabicity in meter: disyllables are "meter-fixing," whereas monosyllables are "meter-fixed." Since German is a highly polysyllabic language in comparison with English, it lends itself well to ternary meters, whereas English, originally and still heavily monosyllabic, naturally generates binary meters.

A Study in Comparative Prosody: English and German Jambic Pentameter.

The very substantial treatise examines the similarities and differences in English and German verse by applying the Magnuson-Ryder (E819-21) framework, as well as American Structural and Russian Formalist theories. The author observes the facts that English verse differs from German in that it has dropped unstressed syllables, resulting in the occurrence of contiguous (stressed) lexical stems in the verse, while German on the other hand, preserving its wider inflectional system, has preserved unstressed syllables between lexical stems, which "thus allows for a closer approximation to the metrical scheme." Thus English verse has a higher degree of apparent irregularity or "freedom." And in contrast to these two languages, Russian has "such a highly developed inflectional system and consequently such a high degree of poly-syllabicity that it does not allow for the occurrence of stress on alternate syllables."

The general assumption throughout the work is that the possibilities of metrical form "appear to be connected more with the distributional properties of the language itself than with constraints specifically of prosody." Perhaps this will turn out to be one of the axioms of comparative metrics. Too, the whole area of the relation of meter and morphology, explored here by Bjorklund, has been ignored traditionally and deserves further, more systematic investigation.

A re-view, in an effort to support the Magnuson-Ryder theory's adequacy of generalization. No conclusion.

In the second round, the authors conclude that all the various amendments to the original Halle-Keyser theory have "generally weakened" it. The article is a detailed comparison of the two competing generative theories, with long side glances at Jespersen, Wimsatt, and Beaver. Magnuson and Ryder state their own assumptions explicitly on p. 206. It is fair to say that so far their approach has been considered unfruitful by most metrists.

Magnuson-Ryder theory proposes a metrical grid of ten slots, five Even, five Odd; features marked are Word-Onset, Weak, Strong and Pre-Strong. Of these latter, there are sixteen possible combinations. Then a set of Base Rules states the relations between metrical slots.

iii: Kiparsky


A criticism of Kiparsky's first theory (E827) on both general and specific grounds. Generally, (1) his system finally reduces itself to his "monosyllable constraint," whereby "the metricality of a line of poetry depends solely on whether or not the odd positions—if they are stressed—are filled with monosyllabic words"; (2) a metrical theory based on the line as unit and on the counting of its syllables cannot very well distinguish iambic from trochaic. Specifically, (1) Kiparsky's rules are too narrow to be borne out in the corpus of English verse; (2) they are also too accommodating in other respects, admitting unmetrical lines; (3) they are "not explanatory of English metrical practices but rather give only a superficial description of the syntax"; and (4) his "prosodic rule," by grading out all stresses but primary, ignores metrically relevant secondary stresses. Note too the important recognition made on p. 219.


At once both a formidable and extended critique of Kiparsky (E827) and also an affirmation and modification of Magnuson-Ryder. Chisholm cites "serious flaws" in Kiparsky's theory, such as unacceptably weak constraints (e.g., an imprecise classification in the Monosyllable Constraint) and the use of four levels of metrical stresses instead of the customary two. But worst is Kiparsky's double-headed "failure to distinguish the three separate domains of music, meter, and language. On the one hand he equates musical rhythm with poetic meter; on the other he confuses meter with language...[since] his notation for the underlying metrical pattern consists of integers which designate stress-levels in the language... Above all, the Kiparsky theory fails to specify precisely...all the categories with which it operates."

In Chisholm's view the inadequacy of both Halle-Keyser and Kiparsky is their failure to postulate "an intermediate level of abstraction," the Prosodic, between the (surface) Linguistic and the (deep) Metrical. He then sets forth his modifications of Magnuson-Ryder based on the work in L319-21.


Finds striking similarity in the rules for pauses in syntax and the caesura in verse-lines in the work of Lord Kames (E566) and Kiparsky (E827). The rules state the syntactic "bonding force" between various constituents, or conversely the naturalness of pauses between these constituents. One rule of note is that inversion of syntactic elements will create pauses which were otherwise impermissible.


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In a major strategic revision of his 1975 theory, Kiparsky adapts the very recent work on phonological stress by Liberman (see Liberman and Prince, D83), the central feature of which is that stressing is derived and expressed via tree notation (as in transformational syntax) instead of by numbers. This procedure is adopted because it permits major simplifications in the design of the theory, but more importantly because "superficially identical stress patterns are differentiated in the Liberman notation in a way that point by point corresponds to distinctions in versification." The basic pattern for the iambic pentameter in its most neutral realization is established as

```
\ /    \ /    \ /    \ /    \ /    
STRESS  W S    W S    W S    W S    W S
Of hand, of foot, of lip, of eye, of brow
\ /    \ /    \ /    \ /    \ /    
METER   W S    W S    W S    W S    W S
```

The metrical complexity of the line, or the degree of its metricality, is then a function of the matching of these two trees. Mismatches may be either permissible or impermissible. Kiparsky's sole criterion for impermissible matching - i.e. the one situation that will render a line unmetrical - is a lexical stress (S) over a metrical slack (W). That is, lexical stresses must always fall on metrical ictuses. Such vertical mismatches are termed labeling types; bracketing types (horizontal mismatches, as it were), e.g.

```
\ /    \ /    \ /    \ /    \ /    
STRESS  W S    W S    W S    W S    W S
or summer, winter, autumn
\ /    \ /    \ /    \ /    \ /    
METER   W S    W S    W S    W S    W S
```

[i.e. trochaic words in an iambic line], are also important determinants of metrical complexity. Inversion or foot-reversal Kiparsky explains handsly by showing that "such a labeling mismatch never occurs together with a bracketing mismatch." Other aspects of the theory work out secondary stresses, syllabification and traditional elision, level stress, metrical idiolects, the iambic/trochaic dispute, extrametrical and missing syllables, the ordering of Metrical Rules, and stipulation of three Prosodic Rules.


The first formal statement of the third theory of generative metrics to be proposed so far. Kiparsky criticises Halle and Keyser for failing to exclude non-verse and failing to distinguish a sufficient number of degrees of stress. His view of Magnuson and Ryder is that "their metrical rules are adhoc and do not lead to any explanations," revealing "a failure to draw the right distinctions between phonology and metrics." His own theory, claiming not only descriptive but also explanatory and predictive adequacy, defines meter as "a system of correspondences between musical and linguistic rhythm" (Kiparsky speaks also of "the musical rhythm that underlies verse," but this seems adventitious), admits four degrees of metrical stress (denoted by the numbers 1-4, strongest to weakest) which correspond to the four degrees of stress in the language (though Kiparsky's actual examples betray this statement and reveal that his metrical levels are effectually binary), and takes account of word and phrase boundaries as well as patterning of stresses, on the argument that meter organizes not only phonological but also morphological and grammatical features as well. The system includes six components.
Acual Phonological Representation

The line itself.

Prosodic Rules

Specify how the patterns are to be mapped onto linguistic strings (by defining what counts as a "syllable," etc.), i.e. how metrical positions may match syllables.

Derived Metrical Patterns

These "correspond to the natural rhythm of speech."

(Metrical Rules)

These are two. MR1 states that only odd syllables in the iambic pentameter line are constrained. MR2 states that stresses in weak positions may occur only on monosyllables or after intonation breaks.

Metrical Tension Index

Gauges the difference between abstract and derived patterns and orders the constraints into hierarchies so as to rank stylistic variations in poets and genres.

Abstract Metrical Patterns

A small inventory.

In the revised version of this theory (E826), Kiparsky admits many of its original inadequacies and takes a new, more profitable tack. See also the criticisms by Chisholm (E824) and Barnes and Esau (E822-23).

See also: B117, E786, E795, E805, E809, L1464, L1510, L1542.