"Rhythm" is easily the most troublesome, most abused, most semantically dissolute term in versification, perhaps in all of criticism. In its kernel sense of "periodicity, periodic repetition" it is of course the crux of any theory of verse structure. Yet one cannot help thinking it one of those words we would be better off expunging from the unabridged dictionary for one edition, just to see how well we could get along without it. Throughout the history of English versification the terms "rhythm" and "meter" have been used virtually interchangeably, and indeed the establishment, refinement, and enforcement of so crucial a distinction must be considered one of the two or three major advances in the development of the theory. Yet the issues of whether "rhythm" is a phenomenon objectively verifiable or subjectively intuitable and whether "meter" is an abstract pattern of mental expectation or actually "heard in the lines" are issues that still remain clouded, as was evidenced in the important 1959-62 exchanges in PMLA.

At least for the organizational purposes of this book I take "rhythm" to be not the paradigm, the mental "set," the form, but rather the linguistic features themselves which are the constitutive elements of English verse. Of these there are many more orders in poetry than simply meter, which is an organization of stresses and non-stresses, even though such orders may be less coherent, more vestigial in the preponderance of cases. The patterning of stresses in English verse is now reasonably well understood, but the distribution of other intonational features--pitch, duration, pauses--has so far been either sighted or misconceived in scholarly investigations. Section Four of this chapter therefore collects studies of linguistic features other than stress in verse under the (uncomfortable) rubric of Poetic Rhythm. Section Three is the correlate category of Prose Rhythm, a subject which is technically peripheral to versification but which traditionally has been a natural subject of interest for metrists, insofar as they have believed
that the linguistic structures of speech, so highly ordered in poetry, are discernible in a medial state of organization in prose. In fine: meter orders the rhythms of prose. Section Two collects some psychological studies of motor response which were very influential in versification theory earlier in this century. Section One selects some of the more important and more recent linguistic studies of those elements which are organized in verse, not merely to provide references for background reading, but because--more crucially--the structure of verse is not finally separable from the nature of the elements comprising that structure. No student of English metrics will fully understand the dimensions of the problem until he understands the current as well as the past conceptions of such key terms as "accent," or until he realizes exactly how much and how little consensus has been reached by linguists on how to demarcate discrete entities out of the flux. No metric without its phonetic: the serious metrist will have to inform himself about matters linguistic, among many.

LINGUISTIC RHYTHM

Linguistics is of course an entire domain unto itself, yet since poetic structures are superimposed upon linguistic elements, some awareness of the current understanding of these elements is essential. The literature, however, is voluminous, so I cite below a representative selection of the most important and most recent studies of stress, pitch, and timing. A number of other grammars and early linguistic treatises more relevant to metrical theory will be found in the Stress Metrics—Traditional section of Chapter Six.

GENERAL


   "A theory of rhythm includes a theory of grouping and a theory of timing. . . .
   .grouping and timing cannot be identified in any single phonetic feature. . . .
   .the pattern of prominence must be taken as a whole."


   Work in experimental phonetics which follows the author's 1902 work on metrics (E424). He follows D. C. Miller and Helmholtz here.


A system is devised to visually display the suprasegmental features of pitch, apparent amplitude, and time in print by mixing elevation, darkness, and horizontal length of letters in various typefaces. The prosodic cues are thus most conspicuously marked.


D31 Trager, George L., and Henry Lee Smith, Jr. An Outline of English Structure. Studies in Linguistics Occasional Papers, no. 3. Norman, Oklahoma: Battenburg Press, 1951; rpt New York: Johnson Reprint Corp., 1970. 91 pp. Hereafter referred to as Trager-Smith. The widely endorsed structural-linguistic description of the phonology and morphology of the English language (though soon after challenged by transformational-generative grammar, of course). The core of the Trager-Smith system is the identification of four discrete levels of stress (i.e. primary, secondary, tertiary, weak), pitch (highest, high, normal, low), and juncture (internal, and word-, phrase-, and clause-terminal). The four-level description of stress was immediately seized by prosodists and applied to metrics with its two-level (bivalent, on-off, yes-no) ictic system, since it was apparent that the two medial degrees of stress could be "promoted" or "demoted" depending on context to either fully stressed or weak. See the subsection on Structural Metrics beginning at E709.


STRESS

D34 Abercrombie, David. "Some Functions of Silent Stress." Edinburgh Studies in English and Scots. Ed. A. J. Aitken et al. London: Longmans, 1971. pp. 147–56. An important argument for its bearing on metrical theory. Accepting Pike's view of English as "stress-timed" (originally suggested by Sir Joshua Steele) and Ladefoged's definition of stress as "a gesture of the respiratory muscles," Abercrombie argues that this gesture "has nothing to do with loudness"--i.e., the pause is completely phonological and not extra-linguistic. Some of its functions are: syntactic, emphatic, terminal, tentative, and rhetorical. In verse, these silent stresses or metrical pauses (1) insure a regular number of beats in the line, and (2) serve as line-end markers.


D43 Blackie, John Stuart. "On the Place and Power of Accent in Language." In his Horae Hellenicae. London: Macmillan, 1874. pp. 320–94. An indefatigable excursus on the nature of accent in languages, from Classical Greek to nineteenth-century English, with a correlate effort at defining and distinguishing the role of quantity vs. that of accent. Blackie denies that Greek accent was in any respect different from English stress and sketches the history of the "confusion" through Erasmus, Vossius, Gally and Foster, Horsley, Munro, and others.


D56  Ellis, Alexander J. "On the Physical Constituents of Accent and Emphasis." Translations of the Philological Society, 1873–74, pp. 113–64. An important nineteenth-century study of stress in English, German, French, Italian, Latin, and Greek, which also influenced Mayor (E591). See sections 17–22 on English: Ellis distinguishes as primary features length, pitch (frequency), force (amplitude, loudness), form (timbre), and glide. A cent is the result of specific variances in pitch and force; emphasis adds to these the expressive uses of form and length. A capsule definition: English accent may be defined as fixed force and free pitch. Interestingly, Ellis gives a very detailed synopsis of the system of Sir Joshua Steele (E394).


-- 114 --


D83 Liberman, Mark, and Alan Prince. "On Stress and Linguistic Rhythm." Linguistic Inquiry 8 (1977): 249–336. As if philology (here, phonetics) had failed historically to rescue (i.e. explicate) meter, now metrics will come to the aid of its substantive, phonology. In a major
theoretical statement, the authors propose a theory wherein the stressing of English
syllables is determined, on the deep level, by "the alignment of linguistic material
with a 'metrical grid,'" a process which is "reminiscent of the traditional picture of
verse scansion, so that the theory as a whole deserves the name 'metrical.'" Thus, in
the Liberman-Prince procedure, one simply marks relative prominence at the
constituent level, then allows the standard Compound and Nuc lear Stress R ules to
apply to the derivation of both word-stress and phrase-stress.

But there are cases in which stressing shifts unexpectedly in order to preserve
alternation of stressed and unstressed syllables (i.e. to avoid contiguous clashing
stresses); this phenomenon the theory accounts for via an optional Rhythm R ule,
whereby the metrical grid realigns itself systematically, a process the authors term
"scansion." Intriguing . . . that the structure of verse could explicate the structure of
the language. See Nanni (D98), Kiparsky (E826), and Chen (L1542).

D90 Macdonald, R. Ross. "A Brief Note on Stress on Prepositions in English." G eorgetown University Working Papers on Language and Linguistics 6 (1975): 75–78. Also in the same journal:


D110 -----. "The Order of Words in Certain Rhythm-Groups." MLN 28 (1913): 237–39. Cites examples contradicting Jespersen's claim that in cases where phrases are formed by monosyllable + and + disyllable, the monosyllable comes first, partly because that order has a smoother rhythm. The proportion of the two types is in fact roughly 50–50.

D111 But John Whyte, in "The Order of Monosyllables and Disyllables in Alliteration" (MLN 30 [1915]: 175–76) finds that 84% of the alliterative formulae in Willert (C126) place the monosyllable first.


D121  Vanderslice, Ralph. The Prosodic Component: Lacuna in Transformational Theory. Santa Monica, California: R and Corporation, 1968; 57 pp. Complaining that the Chomsky-Halle generative phonology (D1) both ignores intonation and oversimplifies stress, Vanderslice offers an alternative, simplified model with four binary features: Accent, Emphasis, Cadence, and Endglide. He claims that his system will more adequately explain "accent deletion" and "stress shift" than either Trager-Smith or Chomsky-Halle.


PITCH


TIMING, ISOCRONY, PAUSE, LENGTH


D165 Oliva, Joseph, and Judith Duchan. "Three Levels of Temporal Structuring in Spoken
Defines three levels: rhythmic (stress and length of syllables), metric (phrasal units equal in time from major juncture to major juncture), and beat-and-tempo (timing adjustments within the phrase).


Experimental studies of the nature of rhythmic patterning in simple sounds (clicks or beats, which could be varied in intensity, duration, timing, and grouping), human motor responses, human speech sounds, as well as other sensory stimuli, music, and dance, have generally drawn a fundamental distinction between objective rhythms (what is actually spoken or produced) and subjective rhythms (what the mind "hears" or constructs out of what it is given, based on expectation, projection, and an astonishing internal mechanism for the simplification and hierarchical ordering of complex recurrent stimuli). There have been many studies, and those which have examined sets of linguistic and prelinguistic sounds have frequently employed the terminology of versification, calling the groupings of features trochaic, anapestic, etc. Very often these studies have also applied their findings about clicks, taps, and nonsense syllables directly to verse, drawing conclusions about the nature of poetic meter or rhythm. In most of these studies the subjective aspect of rhythm is understandably given primary attention; hence the title above.

Not an experimental study but a theoretical argument that draws skeptical conclusions about the interference of motor responses and habituation with accurate time discrimination.

Difficult to assay; no conclusion is provided and the language is very dense. The
author is interested in the hierarchical ordering of complex impressions (both objective and subjective (into simpler groupings (when the rate is fast, for example, a "dipodic" grouping principle usually appears). The three aspects of rhythm are Recurrence, Accentuation, and Rate. The results are applied to poetic meter on pp. 410–11; MacDougall suggests that a meter is not at all a simple repetition of identical elements: "both intensively and temporally [the rhythmic group] is moulded by its function in the whole sequence, the earlier iambic of a heroic measure being unlike the later, the dactyl which precedes a measure of finality different from that which introduces the series."


D194 Schick, H. F. "The Effect of Practice Upon the Bi-Manual Production of Rhythmic Patterns at Various Tempos." Diss., Ohio State University, 1930.

D195 Squire, C. R. "A Genetic Study of Rhythm." American Journal of Psychology 12 (1901): 492–589. A study of rhythmic grouping in speech. Children were given lines of a repeated syllable and asked to read them aloud in varying configurations of stressing, pitches, and time-groupings. For involuntary rhythmical grouping, "primary rhythm" (equal pausing after every syllable) came most naturally, followed by time-grouping, wherein time preceded stress and pitch as the most important principle of grouping. Rather extensive conclusions (pp. 533–60) are drawn from all this, the most relevant of which is that the trochee seems to be the most natural grouping-form. The children found amphibrachs and anapests nearly impossible.
    Inter alia, Stetson agrees with Squire that "judgments of temporal equality or inequality play no part in the rhythm experience."

    Important bibliography. Given a unit of two tones, keeping intensity and frequency of the tones constant but varying the durations of both tones and silences, six configurations are possible. Which will be perceived as "iambic" and which "trochaic"? The hypothesis that longer tones will be perceived as accented and shorter as unaccented was confirmed, as was a second hypothesis that "in the absence of any objective cue for rhythmic perception ... a trochaic rhythm [will be] induced." Twenty-one varieties of triadic units are possible, of which seven were tested here; results agreed with those for duple units. The methodologies of Stetson and Woodrow are criticized. Conclusion: variance in temporal structure alone "is a sufficient objective condition for the perception of order and accent and, hence, rhythm." Review of the literature at the end.

    Further inquiry into the degree of distortion in interval required to render a series of sounds unrhythmical. Variance of 7% in intervalic durations was accepted by auditors as rhythmical, but a 13% variation destroyed the rhythmicity. Lengthening of interval was invariably perceived but shortening was not. Subjects were able to discriminate between five degrees of deviation, which are termed rhythm limens. But they were able to apprehend deviations of time before they perceived deviations of rhythm; the former seem to be a series of discrete points, the latter a curve or field. The tempo of a rhythmic series has important effects on auditors, the most preferred rate being 120 clicks per minutes, or from .5 to .6 seconds per interval. Still, when intervals were irregular, the series was heard as trochaic rather than iambic. Also studied were auditors' abilities to estimate a mid-tempo halfway between two given tempos.

    Experimental work showing that a trochaic rhythm can be changed to an iambic one "by increasing the interval immediately following the louder sound or by decreasing the interval immediately preceding it." When the intervals between sounds are equal but every other sound is raised in intensity, hearers perceive the sequence as trochaic "a regularly recurring difference in intensity exerts a tendency towards rhythmical groups with the more intense sound at the beginning." This sort of work is important for any theory about the perception of poetic rhythm or meter.

PROSE RHYTHM

Over the course of the past century a number of metrists who studied English verse also turned their attention to stress-patterning and other forms of rhythmic organization in prose as well, partly because they recognized that verse is made up of the syntactic structures of prose and partly because they were interested in the tradition of consciously rhythmical prose which stretched back from Joyce, De Quincey, and Sir Thomas Browne through the medieval Latin cursus to the highly stylized cadences of classical Latin prose. Efforts to show the presence of the cursus-patterns in the modern languages, however, have been thwarted by the fact that many of these patterns are identical to the stress-patterns of the naturally occurring phrases - a fact which
has considerable significance in itself. The whole area is of peripheral interest to versification, so I cite sources without discussion.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Author</th>
<th>Pages</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>D203</td>
<td>Prosaakzent und metrisches Schema in englischen Kompositionen</td>
<td>Brantner, Gunther</td>
<td>43</td>
<td>Diss., Graz, 1939.</td>
</tr>
<tr>
<td>D214</td>
<td>&quot;Poetry in Prose.&quot;</td>
<td>De La Mare, Walter</td>
<td>239–</td>
<td>Proceedings of the British Academy 21 (1935):</td>
</tr>
</tbody>
</table>
321. Also published as an offprint.


On Patterson (D248).


Scansions.


Close analysis of syntax.

There is a memorial essay on this scholar which may be of interest: see *Englische Studien* 70 (1936): 381–88.


The author's position, in brief, is that the cursus forms are found throughout English prose from Anglo-Saxon to the present day, but that these are not the result of any conscious effort but merely natural patterns of phrase-stressing, inherent in the structure of the language.


Extends Clark (D206).


See chapter 2.

For the author to conclude that "against all this Hopkins's poetry established a
dogged resistance. Both ethically and rhythmically, his vocation was to redeem the
time" is an impertinence: in fact, his subject is the social effects and speech-rhythms
of nineteenth-century political pamphlets.


D240 Mac Donald, Sister Mary L. "Poetic Speech in the Sermons of John Donne." DAI 30
(1969): 2538A (Catholic University of America). Those "poetic" passages in the sermons that detach themselves from the other, more logically connected elements of thematic development may be identified by their more overt concern with the sound-stratum itself than with meaning: besides the patterning of qualitative aspects, the sounds also marshall themselves into more regular patterns of stresses, here termed general cadence and group cadence, which may be either coincident or counterpointed.

D241 Moloney, Michael F. "Metre and Cursus in Sir Thomas Browne's Prose." JEGP 58

D242 Monroe, Harriet. "Dr. Patterson on Rhythm." Poetry 12 (1918): 30–36; rpt in her Poets
& Their Art (E374) in slightly revised form as "Dr. Patterson's Researches." A perambulating review of Patterson (D248). Her view of his "true scientific spirit": "Long life to these researches!" Her prosodic view: "The rhythmic difference, scientifically speaking, between verse and prose is rather... in the grouping of bars, which is cadence, than in syncopation or coincidence within the bar itself."


-- 127 --


D247 Deleted.

D248 Patterson, William Morrison. The Rhythm of Prose. An experimental investigation of individual differences in the sense of rhythm. New York: Columbia University Press, 1916. Based on his dissertation at Columbia in 1916. Finger-tapping experiments which conclude that verse is distinguished by the coincidence of steady taps with normally accented syllables, whereas prose is syncopated. Critique of Sievers and Schipper, pp. 84-85. See also Monroe (D242).

D249 "Prose Rhythm." TLS, 13 September 1957, p. 547. A retrospective on the merits of Saintsbury (D254), fifty years after.


D256 Savage, Olive M. Rhythm in Prose Illustrated from Authors of the Nineteenth Century. London: University College, 1917. 54 pp. A pamphlet; follows Saintsbury (D254).


See the Introduction to this chapter. It is a question whether the phrase "poetic rhythm" has any real semantic content at all by now; it has been applied to virtually every species of repetition in poetry, from the iteration of imagery to the patterning of phonemes. Meter (in English), the organization of stresses, is a species of rhythm, but it is so much the core phenomenon of verse-structure that it merits a separate chapter (Six, below) in this book. Therefore the present section is reserved for studies of linguistic features other than stress, and for such other studies as insist on the term "rhythm" without thereby clearly meaning "meter." Heretofore such studies have been the residuum of more pertinent scholarship on meter, but it appears that they will occupy a more central position in the focus of inquiry in the decades to come.


D267  Agenda: Special Issue on Rhythm 10, 4–11, 1 (1972–73): 3–67. See also the articles by Hill (D232) and Srawley (N126). The entire issue consists of an editorial, a questionnaire, twenty-two replies by modern poets, "Traditions Answer Back"--a group of quotations from famous poets as answers to the questions--a list of problems remaining to be solved ("Problems of Prosodists and Rhythm Rulers"), and the two articles cited above. The editorial is tendentious and irrelevant. The questionnaire contains twenty questions on General Points, Vers Libre, Syllabics, and Metrical Verse (sample: "Do you counterpoint your metre against the normal speech rhythm or do you attempt a coincidence?"). Replies: W. H. Auden, Anne Beresford, Keith Bosley, Basil Bunting, Peter Dale, Donald Davie, Peter Dent, Roy Fuller, Thom Gunn, Michael Hamburger, John Heath-Stubbs, Adrian Henri, Peter Levi, George Macbeth, John Montague, John Patchett, O mar Pound, Kathleen Raine, Tom Scott, Jon Stallworthy, Charles Tomlinson, and David Wright. For this reviewer's time, the best responses are by Davie, Tomlinson, and Wright. The quotations following are familiar; the list of problems unsolved is a list of real problems.

D268  Agenda: Supplement: On Rhythm from America 11, 2–3 (1973): 37–66. Questionnaire replies from Cameron, Davie, Eberhart, Hall, Hine, Lowell, Middleton, Oppen, Snodgrass, Stafford, and Zukofsky. Middleton's is the most erudite, and also mystical; Zukofsky bites off one-word answers; Donald Davie is irritated and irritable; Donald Hall makes the prize observation: "I think almost all of these questions are irrelevant to anybody's practice. Believe me, if you get neat and clean answers from anybody, disbelieve everything that is said."

D269  Bedetti, Gabriella. "On Understanding Poetic Rhythm." DAI 38 (1978): 4146A (Iowa). Understanding poetic rhythm differs from understanding other natural rhythms in that a process of "double perception" is required: the information gleaned about the rhythm must be integrated with thematic information as well. The theories of Shklovsky and Jakobson on the nature of poetic language are examined then applied to twenty poems by two American and two French poets.

In contrast to prose, poetry is spoken: (1) at a slower rate; (2) in shorter tone-units; (3) with more pauses; (4) in units relatively equal in length; (5) at a lower average pitch; (6) in a narrower pitch range; (7) in simple falling melodies; and (8) with simple falling nuclei. The conjunction of all these features, then, represents a de facto formula for intonation which identifies a text as "poetic." This fact suggests that the stress-group or metrical foot is not the basic rhythmic unit of verse but rather the "tone-group." Such groups "differ less in pitch, melody, and tone-type, and this makes them more nearly equal events than those in non-poetry. The sequence of units in poetry, therefore, is closer to being a regular recurrence of equal events. . . ." [italics added].


D.273 Dougherty, Adelyn. A Study of Rhythmic Structure in the Verse of William Butler Yeats. The Hague: Mouton, 1973. 135 pp. Based on her dissertation of the same title, D.A. 27 (1967): 3057A (Catholic University of America). That no full-scale study of the versification of the greatest poet of this century has yet been undertaken is a humiliation to our profession. Dougherty has given us a pilot study for such a work here: adopting the metrical system of La Drière (E570) she analyzes about 3000 lines of Yeats (25% of his canon) in an attempt to discover and define with some precision the features of his so-called Early, Middle, and Late styles of poetry. Her book consists of sixty pages of prose followed by scansions and charts. Conclusions: (1) "the poems in general are properly described as metrical, and the smallest constitutive unit of the metrical structure as an iamb"; (2) the most significant feature of Yeats's prosody is "the distinct character of the verse-line" as a unit; (3) Yeats's late style is most distinctive in its preference for highly nominal lines; and (4) a thorough study of his syntax is needed. Note that Dougherty uses the troublesome term "rhythm" quite deliberately, on the grounds that "it is the way in which a poet arranges his rhythms (in which meter may or may not inhere) that constitutes his rhythmic style, constitutes, therefore, what may be called in short his prosody. In a total analysis it is the 'coincidence' . . . rather than the separateness of the domains of meter and rhythm that must concern the student of rhythmic structure in Yeats's verse."

D.274 Draper, John W. The Tempo-Patterns of Shakespeare's Plays. Heidelberg: Carl Winter, 1957. 161 pp. Rev: by Muir in M.L.R. 53 (1958): 562–63; in Anglia 76 (1958): 306–7; in Études Anglaises 11 (1958): 161–62; in Shakespeare Jahrbuch 94 (1958): 280–81; and see also the stinging criticism of method by Le Page (D.316). Draper's book is the culmination of long study on the timing of the oral delivery of the lines in Shakespeare's plays, faster, slower, or even, as we can glean such knowledge from the evidence of spellings, metrical elisions, awkward clusters of consonants, and the like. We know that Shakespeare worked to vary the speech-tempo and registers and idioms of his various characters since, in part, the Galenic theory of the Humors widely accepted in the Renaissance entailed that various types of personalities would show distinctive celerity or lethargy in speech as well as in action. The book is densely written, with many statistics, tables, and charts covering all the major plays and most of the canon.

One is aware, though, that evidence of elision or spelling is equivocal at best; it is nearly impossible to say for certain that at any given line Shakespeare was working for characterization rather than for regular (or irregular) meter (to uphold the latter is no denigration), or that the compositors have not taken liberties. Draper's command of the textual scholarship of Hinman, Greg, and the others also seems insufficient. But that timing-variation as a means to characterization was practiced (and valued) by Shakespeare, no one can deny.
One also sees in Draper's work the best example of the debilitating, counterproductive expansion of modern scholarship: his useful book synthesizes the work of a score of now useless periodical publications, which I list below merely for the sake of completeness. This whole method of publication is vicious, swelling our libraries with redundant if not trivial (or worse, in some cases) information.


D281 ------. "Patterns of Tempo in Measure for Measure." West Virginia University Bulletin 9 (1953): 11–19.


D293 Farley, Odessa. "A Study of the Accentual Structure of Caesural Phrases in The Lady of the Lake." Thesis, University of Iowa, ca. 1920. Miss Farley was a student of John Hubert Scott's (D331); consequently, her thesis tabulates symmetra, metra, and non-rhythma.

Rev: by Beaver in Language 49 (1973): 188–90; in JAAC 30 (1972): 399–400. Faure's long Introduction takes account of nearly every conspicuous metrical work of this century up to about 1960. His own theory though is not in the mainstream: he accepts stress as the principal feature of meter but believes that stress is primarily established not by intensity but by pitch; stress is rendered prominent "par les ruptures ou des inflexions MÉLODIQUES" and English verse-rhythm "est solidaire d'un puissant RYTHME DE TIMBRE." His pitch-accent theory marks five constant tones and seven "melodic" (rising, falling, or complex) tones in the melodic contour of the line, the tonal unit being the syllable not the single phoneme. The book is almost exactly divided between theory and application.


Argues that this vague term cannot be defined unless we distinguish "essential Rhythm" from "those patterns that are created by repetition out of Rhythm." "The fundamental conditions of Rhythm are time, force, and space. . . . the movements of speech are in their nature rhythmical." Her view of rhythm in verse is that "the isochonous interval between stress and stress . . . forms the basis of English prosody." Thereafter published as


See also the Interviews here (pp. 150–63) and Frost's letters (pp. 211–18 here as well as in Perkins [A25]) on meter (there are only two, "strict iambic and loose iambic") and "the sound of sense"--the intonation patterns of sentences.

"But if one is to be a poet he must learn to get cadences by skillfully breaking the sounds of sense with all their irregularity of accent across the regular beat of the metre. . . . There are only two or three metres that are worth anything. We depend for variety on the infinite play of accents in the sound of sense."

D299 Funkhouser, Linda B. "Acoustical Rhythm in Performances of Three Twentieth Century American Poems." DAI 39 (1978): 1517A (St. Louis). Analyzes acoustic rate, pausing, and energy level in readings of Cummings's "Buffalo Bill's," Jarrell's "Death of the Ball Turret Gunner," and Frost's "Dust of Snow" by the poets, ten professors of literature, and ten random readers. The author has published the three parts of her dissertation as:

D300 -----. "Acoustic Rhythm in Randall Jarrell's The Death of the Ball Turret Gunner." Poetics n.s. 8 (1979): 381–403.


D302 -----. "Acoustic Rhythm in Frost's 'Dust of Snow.'" Language and Style (forthcoming).


The material of his Technique of Verse (B81) is reworked here, but the emphasis turns from meter to rhythm, Gordon devising a system of bars and slashes to denote
degrees of syntactic breaks between phrases, clauses, etc., both in prose and in verse. These syntactic patterns when set against the meter are striking; more work is needed here.

D 304 Gray, James A. "The Form and Function of Rhythm in the Versification of Paradise Lost." DA 28 (1967): 1785A (Washington at Seattle). Gray is interested not in the fact of the iambic meter of Milton's epic but in the rhythmic groups demarcated by the syntax; these syntactic-rhythmic groups are organized by stress, pitch, pause, and inflection, features which can be described by linguistic notation. Further, these rhythms correlate to distinct narrative styles in the poem: falling rhythms are associated with Satan and the postlapsarian humans; rising rhythms are associated with the prelapsarian pair; and stable rhythms are associated with the angelic orders, particularly such figures as Abdiel who are tempted but remain unshaken.


D 308 Hammond, Marion. "A Note Concerning Rhythm Tests in Poetry and in Music." Journal of Applied Psychology 15 (1931): 90-91. The psychological tests applied here are found to be unreliable, but they showed a low correlation between the subjects' sense of rhythm in music and that in poetry.

D 309 Harding, D. W. "The Rhythmical Intention in Wyatt's Poetry." Scrutiny 14 (1946): 90-102. The mistake of Foxwell and all the other critics of Wyatt's prosody has been to assume that he intended to write regular meter. MS evidence shows that Wyatt deliberately roughened some lines. Therefore we should assume he did not intend to write in regular meters but rather in "rhythm units" the natural clitic groupings of syllables around a stress. Syntactically these groupings may be characterized as either "pausing rhythms" or "flowing rhythms." Wyatt stands on the edge of a great transition in English verse from the former to the latter; his work shows both. But Harding goes further to suggest the two types of rhythm as two fundamental modes of perception available in verse. Describing these, he thinks, will be more effectual than scanning meters.

D 310 -----. Words Into Rhythm: English Speech Rhythm in Verse and Prose. New York: Cambridge University Press, 1976. 166 pp. Rev: in Style 12 (1978): 390-91; in PTL 4 (1979): 196-201. In his Clark Lectures for 1971-72, Harding pursues the sensible thesis that rhythm in prose and poetry is based on--built up out of--the rhythm of speech. His method is non-technical, and in fact Harding is not especially interested in the kind of analyses of speech possible in acoustic phonetics or phonology. Rather, his method is simple and direct: he looks, repeatedly and steadily, at examples, asking how they work, how they are deployed, rhythmically, how they may be adapted to meter. Sometimes the natural rhythm (stress pattern) and the meter match so well that the meter seems nature not art; sometimes the meter will effect subtle alterations in a rhythm for semantic purposes; other times we can see how the meter will resolve
for us a choice between two possible rhythms for a phrase, or, if several rhythms are congruent with the meter, how the sense will distinguish the right one. Now, in the account given by traditional prosody, when the speech rhythm varied within a strictly metered verse-line, one of two things happened: if the variation seemed acceptable or inoffensive it was called a permissible variation or substitution; if unacceptable, however, the line was judged unmetrical. This was accounted for by the primitive and questionable procedure of stipulating permissible combinations of "feet," which is a mere mechanical description and by no means an explanation. A better answer would be that metrical lines establish a "metrical set," such that in aberrant lines, one part of the line establishes a clear "set" which the rest of the line does not then bear out. For Harding, when the rhythm and the meter clash, it is the rhythm which takes priority—as the reality—and "the notion that our reading should ever be some kind of 'compromise' between metre and natural speech is indefensible." Such suggestions are provocative, and warrant the full elaboration they could not receive in this context.

D311 Harris, M. A. "A Study of the Nature of Rhythm." *PMLA* 11 (1896): xxi–xxv (Proceedings). Discusses the grounding of poetic meter in the rhythms of mental processes and in the rhythms of the body and breath: "we hold rhythm to be an inseparable adjunct of poetry, and meter a separable adjunct."

D312 Herbert, T. Walter. "Tunes of Poetry: Experiments in Recognition." *Emory University Quarterly* 16 (1960): 164–73. This genteeel, at times nearly fanciful, but unjustly forgotten essay contains a germinal idea that if pursued could bear fruit for a decade of scholarship: Herbert suggests, quite simply, that when the words--the meaning-bearing phonemes--are removed from a poem, a completely meaningful and quickly recognizable pattern--"tune"--remains, the intonational contour of pitches, durations, and intensities. This contour varies considerably in its minutiae from one reader to the next, but some simple experiments will show that the general shape of the contour is astonishingly uniform. And if it is so for many of us, likely it was nearly so for Shakespeare himself. Not since Eduard Sievers has anyone suggested serious and comprehensive analysis of the pitch-patterns in poetry. Cf. Berry (C35), Newton (L518–21), and Turner (D339).

D313 Kim, Myung W. "Dance and Rhythm: Their Meaning in Yeats and Noh." *Modern Drama* 15 (1972): 195–208. Begin at p. 203: after his exposure to the Noh drama Yeats changed his conception of "rhythm" to include musical aspects alongside the verbal ones.


D316 Le Page, R. B. "The Dramatic Delivery of Shakespeare's Verse." *English Studies* 32 (1951): 63–68. A full-scale criticism of the theory of John W. Draper (D274) that the stage-tempo of a passage or scene can often be determined from metrical evidence in the text. Specific objections: (1) the printed texts we have vary and are unreliable; (2) any computation of relative speech-rates can in no way be translated into an absolute span of minutes and seconds on stage—it is foolish to assume that each "normal" line
took the same amount of time to be spoken; (3) rather than believing that hypermetrical lines were spoken more rapidly, we should consider that their unusual length is expressive—they were meant to take longer to say; (4) Draper rarely presents his full numerical data and makes an error in statistical method.

On types of enjambment, which Levý sees as the most remarkable result of Eliot’s aversion to the coincidence of rhythmic and syntactic periods. There are three types: regressive, continuous, and discontinuous. Also discussed: effects of absence of punctuation, and melody (rhyme). The syntactic period is the principle feature in Eliot’s metric.


Explication of Frost’s poetics of tone, drawing heavily on the poet’s own statements. The “sound of sense” is of course simply intonational contour. That is what separates the “Oh” of surprise from the “Oh” of scorn.

Hortatory remarks in favor of general education in rhythm.

Pakosz identifies certain critical misdirections which have hindered study of the role of intonation (pitch, juncture, timing, tone) in English meter. For us "meter" has usually meant "stress," but pitch has been shown to be the single most important cue in the perception of stress, and clearly the very nature of the verse line alters syntactic and intonational contours from what they would otherwise be in prose. Therefore meter includes intonation as well as stress. Good review of the literature, but not a substantial original contribution, and articulated as if through a mouthful of sand.

A survey of experiments and theories of accent in the psychology of rhythm, distinguished by a notably elegant style, an immense breadth of reading, and a sharp ear for interesting biographical detail. The author himself suggests only the addition of metrical half-stress and rhetorical super-stress to the tools of scansion, through he doesn’t credit scansion for much. His principal interests are isochronism and expectation.

"Can literary rhythm be correlated with biolinguistic rhythm?" Kymograph measurements.

Intriguing speculations on poetic contexts where "a tone of voice is intimately related to the rhythm," tone being taken both as pitch-inflection and as speaker’s
attitude. Prince knows—and says—that poetry leaves the matter of pitch indeterminate, whereas music does not, and his insistence falls only on the point that tone—voice—is crucial to poetry nonetheless. One other lure: "Would it be possible to define in poetry an element which corresponds to drawing in the visual arts? Would it be rhythm, syntax, composition—or simply 'meaning' in a very wide sense?"


D329 Rosenwald, John R. "A Theory of Prosody and Rhythm." DAI 30 (1969): 3435A (Duke). An argument that rhythm is the repetition of any element into recognizable patterns, and that restriction of the concept to its metrical sense prevents prosodists from adequately describing non-metrical poems. Then follow chapters on "purely visual and purely auditory" rhythms, combination rhythms, "rhythms imposed by the performer or audience", and line-length. Thesis: "The prosody of meter, however adequate in the past, must be modified so that it can deal with the poetry of the present and the future as well. By returning meter to its rhythmic origins and suggesting the rhythmic basis of all poetry, a prosody of rhythm can accomplish its goal."


D331 Scott, John Hubert. Rhythmic Verse. University of Iowa Humanistic Studies, vol. 3, no. 2. Iowa City: The University, 1925; rpt Norwood, Pa.: Norwood Editions, 1975; rpt Folcroft, Pa.: Folcroft Library Editions, 1970. 216 pp. See also his Rhythmic Prose, no. 1 in the same series (D258). Underneath what I see as a wholesale confusion of both concepts and terms in this book (not to speak of the curious "gestural" scansion), there is a surprising bedrock of orthodox thinking. The single most unorthodox claim, and the central premise of the whole book, is that meter is subordinate to rhythm. The rhythmic phrase not the metrical foot is the ground unit of verse. Scott admits the existence of metering in feet (he is a Stresser; see his fine anatomy of the question-begging of temporalist theories on pp. 49–51, where he reminds us that "a perfectly arranged disposition of counted masses in a sequent order" (Ruskin) is a reality whereas timing is only a necessary fiction, so that "any attention to timing results almost inevitably in a warping of poetry"), but he argues that when all the metrical variations are admitted, what is left of regularity? The rhythmic "undercurrent" is more crucial than the metrical "current" (p. 63). So for Scott verse is to be measured by the rhythmic phrase not the foot, and it is precisely when the rhythmic phrases become ordered (regularized) that rhythmic prose rises into rhythmic verse. The units of rhythm he analyzes as either rhythm or quadrals, the rhythmons taking two forms, the symmetron and the metron. Symmetra are "isolable sentential phrases" having a scansion of "stressed and unstressed syllables to the right and left of a medial point";
metra, in contrast, are units "whose stress patterns show a duplication of some syllabic combination." Quadrals are sentences of four phrases having similar scansions.

The reader can see that such idiosyncrasies make this a difficult book to penetrate and absorb, and though it reveals an extensive knowledge of previous scholarship, there is little here that one can take away as both new and valuable. Probably chapter 3 is the most important. See also Farley (D293).

A quarrel with F. W. Bateson's opinion that the reader of a poem must perceive in advance the meaning of a line so that he can know how to assign the line its proper rhythm--i.e., so he can read it aright. Sims notes that both processes occur nearly simultaneously, and to say that proper reading requires prior familiarity with the intonational patterns of the language is to say nothing new at all. Fowler, emphasizing the frequent deviance of poetic syntax, suggests that expectation is much less reliable in poetry than in prose, agreeing with Bateson on the logical precedence of meaning but agreeing with Sims that the process of apprehension is rarely sequential, mechanical, or fragmented. The issue, properly in the domain of psycholinguistics, is a crucial one in poetic theory.

A theory that certain poems are "actually and literally hypnotic," because their metered stresses fall at the regular half-second intervals which psychiatrists use to induce hypnosis. Includes a chapter on Free Verse.


Demonstration (based on the system of David Abercrombie [E102-3]) that syntax is equally if not more determinative of rhythm than such conventions as rhyme or alliteration. Final versions of verse lines are compared to hypothetical alternatives, patterns of stress and quantity are examined, and types of rhythmical modification (between one line and the next) are identified. But it is chaos to call syntactic periods "feet," and the slightest familiarity with traditional prosodic terms would have reduced this essay by more than half.

A subject widely important yet widely ignored, but results here are slender: caesurae and line-ends seem to also mark ends of pitch-contours, and the even ictuses in dipodic verse have raised pitch. We need a thorough study of the conditions under which pitch (or juncture) can partially or solely signal ictus in English verse. Cf. Crystal (E20).

Identifies three: Phonic Rhythm (by Accent [R unning Rhythm and Sprung
Rhythm; by Quantity; and by Combination of both); Thought Rhythm (varieties of Parallelism); and Emotional Rhythm (Tone-color, Syllable-count, and "Visionary Rhythm"). A summary outline; inexplicable statements and examples.

The author asserts that in rhythm one may find tunes and tones (as in music), though in poetry the tuneless rhythm is the most highly developed. Still, one can sometimes hear "tune-rhythms" in verse; I take these to be stress patterns, since all his examples are stress-verse and nursery rhymes and since he distinguishes "tune" from "melody." Rhythm is said to be based on meter as flesh on skeleton. Cf. Herbert (D312).


The author urges on us his view that verse-structure depends on verse-recitation and that acoustic phenomena depend on indispensable psychic factors. Laboratory experiments disclose one other matter of interest, "the presence in the [verse] line of at least two rises in pitch, spaced at a certain distance," suggesting that it is "the melody rather than the sound intensity" which is crucial to the perception of rhythm.

Without being very helpfully precise, yet while rounding out the context, the author identifies Frost's "sentence-sounds" with a dramatic principle and with "the fundamental emotional energy of human nature."

See also: B218, D179, E606, E1518.