A CORRESPONDENCE RULE IN FROST'S POETRY AND ITS SIGNIFICANCE FOR METRICAL THEORY

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ROBERT FROST IS KNOWN for his respect of meter. Certainly, however, his poetry is not sing-songy. Given that the abstract metrical patterns he employs are no more immediately apparent to the ear than those of many other poets, the question arises as to why he has the reputation of being a strict metricist. One possibility is that Frost's poetry is recognizable as belonging to a poetic tradition familiar to his readers' ears. In following up on this idea, I will show that metrical theories developed to account for poets of the English tradition can reasonably be applied to Frost.

There are repeated instances in Frost's poetry of what at first look like violations of conventions in the metrical theories I consider here. Within one theory, however, most of these apparent violations disappear when we realize that Frost makes use of a correspondence rule that, while not commonly employed today, has a long history, going back to Chaucer. The evidence from Frost allows one to argue that any adequate theory of metrics for the particular poetic tradition of the poets mentioned in this article must somehow incorporate the effects of the stress maximum principle.

DEMONSTRATION OF THE VIOLATIONS

There are numerous competing modern theories of metrics for the poetic tradition of interest in this paper. Here I consider four of the more fecund ones. I give only a brief and partial sketch of each theory, just enough to allow the demonstration of an unmetrical line in the Frost corpus. I refer the reader to the original articles for details.

In the demonstration of the problems, I take as a given no correspondence

rules other than synalepha, which is common to traditional as well as more modern theories.[1] As I will show later in the paper, the problems presented below become nonproblems when we admit the existence of another correspondence rule and modify one of the theories considered here to incorporate the basic insight of an earlier theory. No correspondence rule mentioned in this paper is to be taken as a phonological rule or even necessarily as an analogue of a phonological rule. That is, a correspondence rule relates syllables in a spoken line of verse to abstract positions in a metrical pattern. If a correspondence rule assigns multiple syllables to a single metrical position, for example, there is no suggestion that those multiple syllables need be pronounced as a single syllable. For a discussion of this matter, see Halle and Keyser (1971: chap. 3).

The examples used in this paper come from the recordings of Frost reading his own poems listed in the bibliography, with just one exception (as noted in the text below). I follow faithfully Frost's pronunciations of the words when determining how many syllables there are in a given line of poetry. For example, while a sequence of words like *it was,* as in example 3 below, can be contracted in poetry to the monosyllable *'twas,* Frost pronounces two syllables here and my syllable count matches his. Also, individual words that in traditional metrical analysis are open to either a monosyllabic or disyllabic value, such as *ever* in 10 below, are given the value that Frost's pronunciation assigns them. Likewise, the stress marks above a line of poetry represent the high stresses as Frost reads them. Of course many different pronunciations of the verse considered here are possible and plausible. The point is that Frost's realization of the poetic lines must be generated by our metrical theory if it is to be adequate (given that these realizations exist, as witnessed by the recordings); thus the correspondence rule given below was employed by Frost in generating his pronunciation. Other pronunciations of these lines may not call for this particular correspondence rule. I return to this point in the final section.

HALLE AND KEYSER (H&K)

H&K (1966), when examing Chaucer's poetry, propose the Stress Maximum Principle (SMP) according to which a stress maximum cannot correspond to a weak (W) position in a line of poetry.[2] A stress maximum is a strong stress flanked by unstressed (or very low stressed?) syllables. This principle will rule as unmetrical the following Frost line, among many others:

```
1)  You may see their trunks arching in the woods
    1   2   3   4    5   6   7   8   9  10
    W   S   W   S    W   S   W   S   W  S

    ("Birches," line 17)
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KIPARSKY (K1)

K1, when examining Shakespeare's verse, proposes the Monosyllable Principle (MP) according to which a 1 stress (high stress) cannot fall on a 4 position (that is, a W position) unless it is in a monosyllabic word. By this principle, 1 above is judged metrical. But the following Frost line (among many others) is judged unmetrical:

```
2)  As large around as the chopping block;
    1  2    3  4   5   6   7  8    9

    ("Two Tramps in Mud Time," line 10
     iambic tetrameter:  4 1 4 1 4 1 4 1 a 1a K1
                         W S W S W S W S a 1a H&K)
```

There are nine syllables in this line and only eight positions in the metrical pattern, thus there cannot be a one-to-one correspondence between syllables and positions in the metrical pattern. The final syllable receives a 1 stress (in Frost's reading of the line), and since extrametrical positions can be filled only by unstressed or low stressed syllables, we know that the final syllable in this line must correspond to the last 1 (the last S position) of the metrical pattern. We have two possibilities then: the extra syllable is somewhere in medial position and synalepha is applying, or the extra syllable is line initial. The only environment we have for synalepha is in syllables 3 and 4, but applying synalepha here will only throw a 1 stress (that of syllable 4) onto a 4 (or W) position (the second 4 position). It is not clear, however, whether the result of synalepha here should be taken as a violation of either the SMP or the MP since the 1 stress of syllable 4 (here also a stress maximum) does not fill the 4 (or W) position. We can see this below, where a curved bridge under two syllables indicates synalepha:

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as large around as
4   1     4     1
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See Napoli 1975 for a discussion of this question.

Other lines from Frost, however, are violations of the MP regardless of the application of synalepha:

```
3)  Because it was grassy and wanted wear;
    1 2     3   4     5  6 7     8  9   10

    ("The Road Not Taken," line 8
     iambic tetrameter: 4 1 4 1 4 1 4 1)
```

1 stress falls on polysyllabic words in syllables 2 and 5, yet there is no environment for synalepha here that could allow both of these 1 stresses to be assigned to even positions in a single analysis of the line.

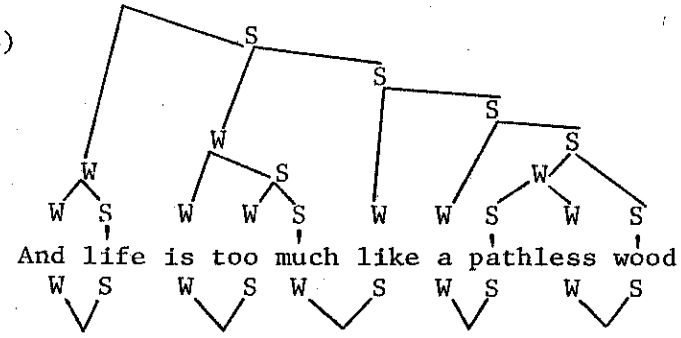
KIPARSKY (K2)

K2 (1977), when examining the verse of Milton, Pope, Shakespeare, and others, proposes that lines of poetry are broken into feet in the metrical pattern and into trees in the phonological representation.[3] The degree of congruity between these two determines the degree of complexity of the line. For example, if a left branch W in the metrical pattern is filled by a right branch stressed syllable, there is low congruity (and high complexity) and some poets may not use such lines:

phonological line: \s
metrical pattern: w\

Again, Frost would appear to allow great complexity.

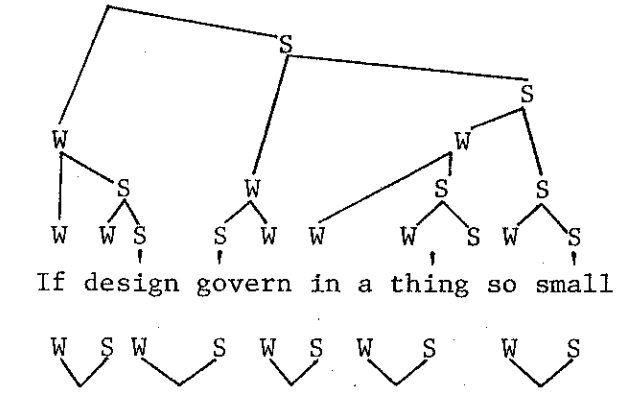
4)



("Birches," line 44)

The important syllable here is that of *much*. Of course, 4 could not be a problem for the MP. However, Frost allows lines of great complexity that also violate the MP: witness the third syllable in 5:

5)



("Design," line 14)

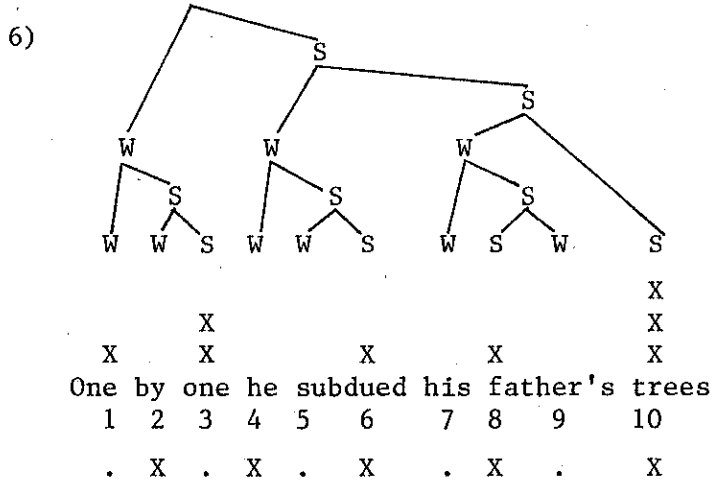
Of course, 5 could not be a problem for the SMP.

HAYES (H)

H (1983), when examining the English metrical tradition, proposes metrical grids to be set up in the following way: mark every content monosyllable, and add marks so that the strongest syllable of every strong metrical constituent has more marks than the strongest syllable of its weak sister. He then proposes that metrical violations are found when a metrical valley is filled by a phonological peak (perhaps in a specified environment and perhaps only if the peak is rising, or, alternatively, falling). Since peaks are defined relative to at least one neighbor, there is some similarity here with the SMP.

Again, Frost's lines seem to defy the metrical theory at hand. He freely allows phonological peaks, both rising and falling and in a variety of environments, to fill metrical valleys. In 6 we see that phonological peaks can fall on valleys at both the beginning and the end of a phonological phrase:

6)



("Birches," line 28)

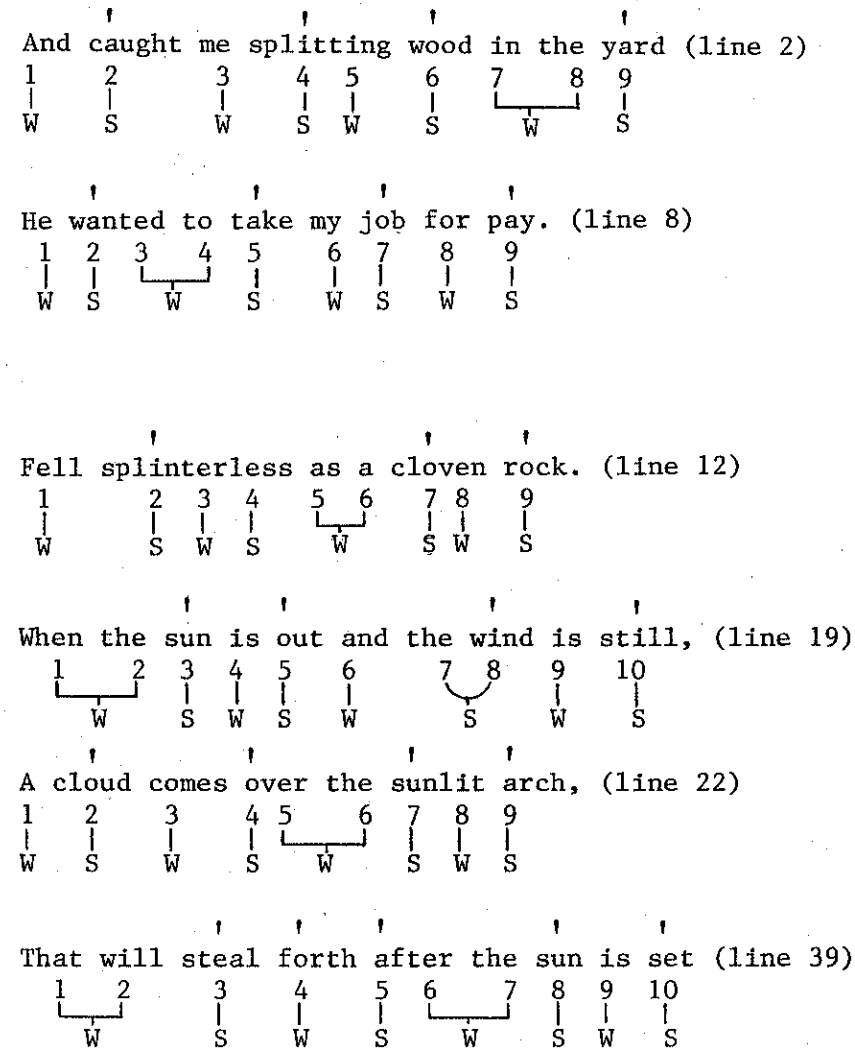
The important syllables here are the first and the third.

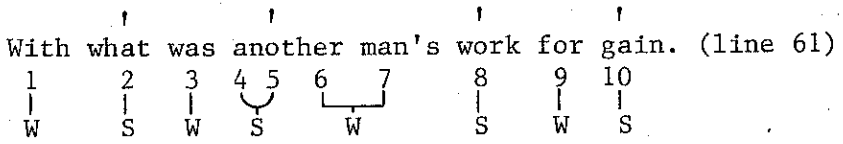
DEMONSTRATION OF A CORRESPONDENCE RULE

Frost has many lines in his poetry that have more syllables than there are metrical positions. Often there are no suitable possibilities for synalepha in these lines. Thus, Frost must have some other correspondence rule that allows two syllables to be assigned to one metrical position. I propose that he employs the same correspondence rule that H & K posed for Chaucer (as their Condition 2). That is, the Monosyllable Correspondence Rule (MCR):

> An unstressed or weakly stressed monosyllabic word may constitute a single metrical position with a preceding stressed or unstressed syllable.

Examples are numerous. Here I will take just a few from "Two Tramps in Mud Time," a poem in iambic tetrameter. Please keep in mind the fact that the number of syllables I assign to a line and the stress peaks are strictly according to how Frost pronounces them in his recordings. With these syllable counts and with these particular stress peaks, the number of theoretically possible analyses for these lines is much fewer than if we admitted the possibility of monosyllabic scansions for words like *over*. In these examples, a squared bridge under two syllables indicates the application of the MCR.[4]



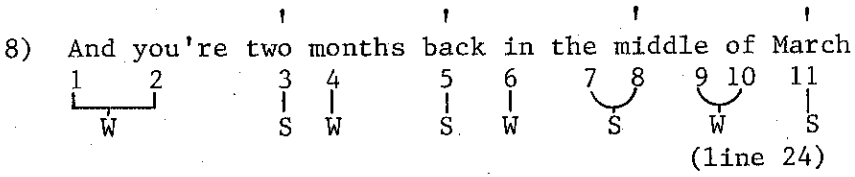


In these examples the two syllables assigned to one position are both unstressed or weakly stressed.[5] I have found no examples in Frost's poetry where the MCR applies when the syllable preceding the relevant monosyllablic word is stressed. However, I leave the MCR as is for the sake of generality, since this is the correspondence rule employed by Chaucer.

At this point we may notice that in all of the applications of the MCR thus far, the syllables assigned to a single metrical position are all short in the sense of Kiparsky (forthcoming). Kiparsky defines as short any syllable ending in a vowel or syllabic sonorant. Furthermore, any syllable ending in a single word-final consonant after an unstressed vowel may be treated as a short syllable. He proposes the mechanism of resolution in G. M. Hopkins's sprung rhythm, as follows:

> A sequence of short syllables may count as one syllable if all are unstressed. Two (rarely three) short syllables may count as one also if the first is stressed.

If Frost also employed resolution, we would not need the MCR. The crucial question, then, is whether a long syllable can be assigned to the same metrical position as another flanking syllable. Resolution would not allow such an assignment; the MCR would. And, in fact, we find such assignments. Example 8 is also from "Two Tramps in Mud Time." *And,* here, is a long syllable.



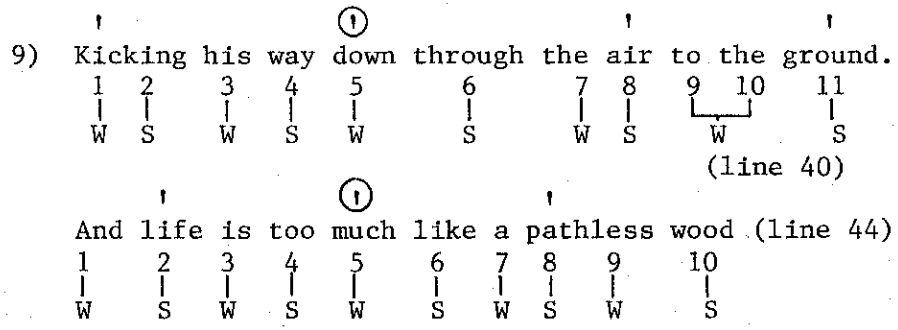
I conclude that it is the MCR and not the resolution that Frost employs.

Implications for a Theory of Metrics

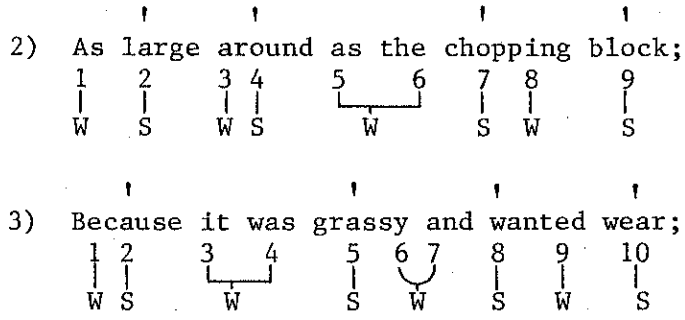
Given the MCR, we can now look back to the four theories outlined at the start of this paper and reanalyze some of the examples.

With regard to the SMP, Frost's poems abound with counterexamples, even once we have recognized the use of the MCR. Thus 1 remains a problem for this principle, as do the examples in 9 below from "Birches," a poem in iambic pentameter, and many others. In 9 I mark the stress pattern Frost uses in his

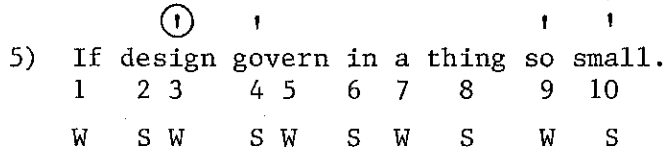
recording. Thus both *way* in line 40 and *too* in line 44 are very weakly stressed or unstressed in Frost's recording, making *down* and *much* stress maxima.



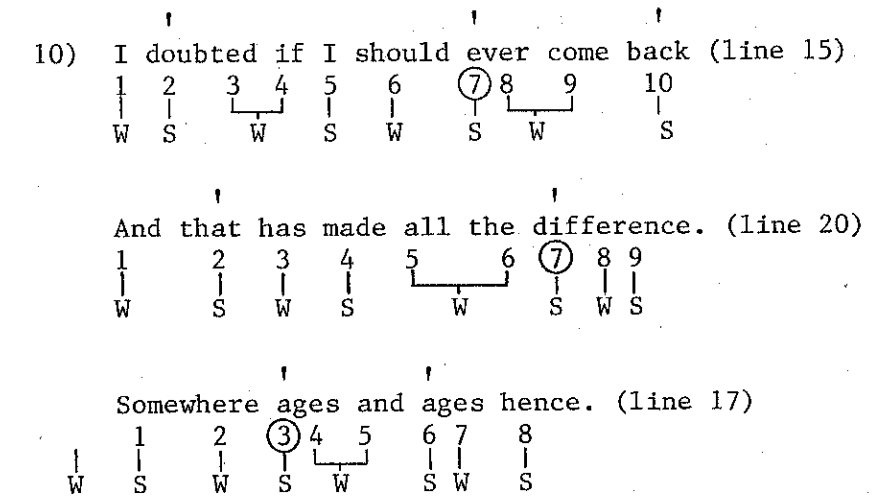
With regard to K2's stress trees, both 4 and 5 and many other examples like them remain problems. With regard to metrical grids, 6 and other similar examples remain problems. However, with regard to the MP, we can see that the MCR removes both 2 and 3 as problems:



Only 5, in which there is a match between number of syllables and number of metrical positions in the line, remains a problem.



Still, 5 is the only problem I have found for the MP in Frost's poems. That is, many examples that look like potential problems are not, given the MCR. Consider the examples in 10 from "The Road Not Taken," a poem in iambic tetrameter. I have circled the number of the syllable that would have been a problem without the MCR.



The last example of 10 is a headless line. In light of 10, we might try to reanalyze 5 as headless. The problem here is that if the second syllable of *design* does not violate the MP, then the first syllable of *govern* will. Only if one of those syllables received weak stress could we come up with a metrical analysis of the line within K1's theory. Unfortunately, this is the single example I have cited for which I do not have a recording by Frost himself. Thus, in the absence of such crucial information, I read the line with 1 stress on the first syllable of *govern* and 2 stress on the second syllable of *design*. With these stresses, no analysis of 5 that I can think of will get around the problem.

There are various possible conclusions one could reach at this point. One is that 5 is a random exception, not a counterexample, and that the MP plus the MCR is adequate for describing Frost's metrics. This is a simple but wrong possibility, since 5 is not random; examples like 5 appear in Shakespeare, as Youmans (1983) shows. Nearly all the violations of the MP that Youmans has found in Shakespeare fit into the same pattern we see in 5, in which the misaligned disyllabic word is immediately followed by a correctly aligned polysyllabic word, where the word stress of the second word is higher than that of the first.

If instead we consider 5, a counterexample that reveals a problem in the K1 theory, we may be able to use 5 to come to a modification of the K1 theory that will improve its adequacy for Frost. Notice that the SMP and the metrical grid theories both (though in different ways) incorporate the standard of comparing the stress level of any given syllable to the adjacent syllable or syllables. We could take the basic insight of these two theories and add them to the MP in such a way that a W position could be filled by a stressed syllable only if that syllable constituted a monosyllabic word (the MP) or was adjacent to another syllable bearing high stress (so that the stressed syllable in W position is not a stress maximum). Then 5 would not be a problem.

The question now arises as to why a word like *divine* in 5 holding SW positions is more likely to be followed by a polysyllabic word that begins with a stressed syllable than by a stressed monosyllable. That is, the second syllable of *divine* would not be an SMP in either case, yet the first case occurs much more frequently (as in Shakespeare) than the second. Gilbert Youmans (personal communication) suggests that for metrical purposes, a stressed syllable in a polysyllabic word outweighs an adjacent stressed syllable in a monosyllabic word even if the latter occurs to the right of the former. Thus, a word like *divine* in SW position is not likely to be followed by a word like *rule* in an example like 5 since the final stress on *divine* could not be compensated for by the stress on *rule* and the sequence would then be in violation of the SMP. But *divine* in 5 can be followed by *govern* since both are polysyllabic words and the misaligned stress of *divine* is therefore compensated for.

The final proposal, then, is the K1 theory enriched by the SMP.

This result is pleasing with regard to Frost in particular, since anyone hearing Frost's poems read aloud by the poet himself is struck by the evenly spaced modulation of stresses, something that suggests that the relation of each syllable's stress to that of the flanking syllables is relevant.

This result is also pleasing in that Hayes (forthcoming) has proposed that in Longfellow's *Song of Hiawatha* there is a rule, the Bounding Rule, which allows peaks on Ws only if there is also an adjacent peak within the same linguistic (here, phonological) constituent. We can see that the Bounding Rule also allows peaks on Ws as long as the peaks are not stress maxima.

Thus, Hayes's analysis of Longfellow's work and mine of Frost's work propose similar modifications to the theories adopted. I contend that any adequate metrical theory for the verse tradition embodied by these poets must incorporate the SMP in some form.

Implications for Methodology

Many of the problem examples in this paper are problem examples only because I have counted syllables and marked high stresses according to the way Frost himself reads his poetry. On paper, these same lines are open to variations in syllable counts and different assignments of stress. And, as Chatman (1956) has shown, Frost's stresses often do not match what others would do. The correspondence rule Frost employs, the MCR, emerges only when we study the poet's reading of his poetry. At this point the thorny question of whether the poet's reading of a given poem should be given more value than any other person's reading of that same poem may arise. I will not delve into this question since I believe it is essentially irrelevant to my point. Instead, setting all value judgments aside, I propose that whenever recordings of a poet reading original poetry are available, that the metrical analyst check analyses against these recordings when trying to discern the correspondence rules the poet's metrical theory might have included. To suggest, for example, that a word like *ever* in the first example of 10 above, must be analyzed as monosyllabic in order for the line to be metrical is to impose an abstraction on the actual surface form of the poem as Frost reads it: Frost pronounces this and similar words as disyllabic. Surely abstraction belongs at the underlying level of metrical pattern, not at surface realization. We need to allow the surface form that the poet produces if we are ever to draw the proper correspondence rules between surface form and underlying metrical form that the poet employs in a given performance of a poem. None of this is to say that other pronunciations of a poem with, accordingly, other correspondence rules lead to less valid metrical analyses, but only to metrical analyses that may not accurately reflect the full range of metrical mechanisms available in the metrical theory the poet uses.

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NOTES

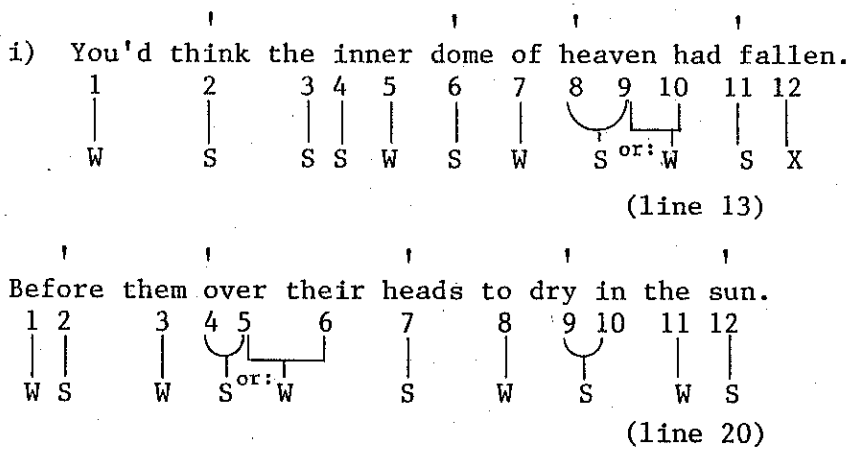
Thanks go to Michele Burtoff for pointing out problem examples for me, to Bill Fleischmann for arguing with me over the analysis of several lines, and to Marina Nespor for discussions about phonological phrase structure. Special thanks go also to Richard Cureton, Bruce Hayes, and Gilbert Youmans for criticisms of the entire paper.

1. Synalepha is the rule that allows two syllables to correspond to a single metrical position when the vowels of those syllables are separated by only certain material. For many poets that intervening material consists of at most one sonorant consonant. The use of synalepha in no way implies any sort of elision or slurring of syllables.

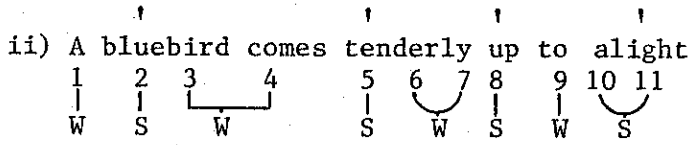
2. H&K note that if a major syntactic break immediately precedes or follows a highly stressed syllable, that syllable may fill a W position freely. Given more recent work in metrical theory, I would expect that this stipulation would be phrased today in terms of major phonological breaks.

3. Both K2 and H (discussed below in the text) build theories upon assumed agreement in phonological tree structure. Actually, the assumed agreement may not exist. Below I follow Nespor and Vogel (1982) regarding phonological phrase structure, although I use the symbols w and s at every node, just as K2 and H do. I have chosen my examples in such a way that controversial issues about tree structure do not crucially affect the relevance of these examples to the point I make in the text.

4. It may be possible to analyze line 22 as having synalepha between syllables 4 and 5 and thus as not employing the MCR. Certainly, there are poets who allow synalepha across a [v] (such as Shelley). I have not been able to find any lines where it was necessary to claim synalepha across a [v] for Frost, however. Instead, there are multiple lines where either synalepha is employed across a [v] or the MCR is employed. Let me give two more examples from "Birches".



Still, it may be that Frost does allow synalepha across [v], since he seems to be liberal about synalepha in general. For example, in ii we could propose synalepha across the two segments [rl).



("Two Tramps in Mud Time," line 25, iambic tetrameter)

Notice that in applying the MCR to syllables 3 and 4, I have treated *comes* as not being a highly stressed syllable. In the recording Frost puts stronger stress on the first syllable of *tenderly* than on *comes*, although *comes* certainly receives some nonnegligible amount of stress. One might conclude from ii that the MCR should apply to stressed monosyllables as well as unstressed and weakly stressed ones. If the MCR applied to stressed monosyllables, then instead of synalepha in syllables 6-7, we could have the MCR applying in syllables 7-8, thus seeing Frost as more conservative with respect to synalepha after all. Since this is the only example I have found relevant to this point, I merely raise the issue and leave it open without modifying the MCR accordingly.

5. In line 61 Frost gives considerably weaker stress to *man's* than to *work*.

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