A Conversation with Reuven Tsur: Appendices

Appendix 1: On differing vocal interpretations

In my 2006 book, *'Kubla Khan'—Poetic Structure, Hypnotic Quality and Cognitive Style: A Study in Mental, Vocal, and Critical Performance*, I have discussed related issues at great length, with reference to two excerpts from the last stanza of 'Kubla Khan'. Here I can merely provide a relentlessly-abbreviated version of that discussion. But before that, to avoid misunderstandings, let me remind ourselves that interpretive statements cannot be true or correct; they can be plausible at best. Where 'a is true' and 'b is true' are incompatible, 'a is plausible' and 'b is plausible' are not incompatible. This is true of our statements about vocal interpretations as well.

*

With reference to the first excerpt I discuss two different solutions to a more than fascinating problem which I have encountered in two performances, but I have never encountered it in any written interpretation. The gist of the first solution is reproduced here from a recent (2015) paper by Chen Gafni and myself.

The following example from my 2006 book shows how intonation and voice quality may contribute to interpretation. Consider the following lines from *Kubla Khan*:

> And all should cry, Beware! Beware!
> His flashing eyes, his floating hair!

A Conversation with Reuven Tsur on Intonation: Appendices
Thinking Verse V (2015), 214-227
ISSN: 2049-1166

These lines represent the voices of two speakers: there is the excited voice of 'all' who would 'hear me'; and the voice of 'I' who reports it. Most reciters conflate the two voices into one stream of excited exclamations. The onlookers cry excitedly; and the speaker in the actual situation imitates, as it were, their excited cry. By contrast, Roger Lloyd Pack makes a sophisticated use of intonation and voice quality, displaying the voices of the two speakers one atop the other, even though he himself, as a reciter, has only one voice. He performs this by having recourse to the boundary intonation known as 'fall-rise', demonstrated in Figure 1. According to Christine Bartels, 'statements bearing "declarative *fall*" [...] convey a sense of self-containedness, closedness, 'finality', whereas statements bearing a fall-rise [...] convey reservations, openendedness, or "continuity".'[1]

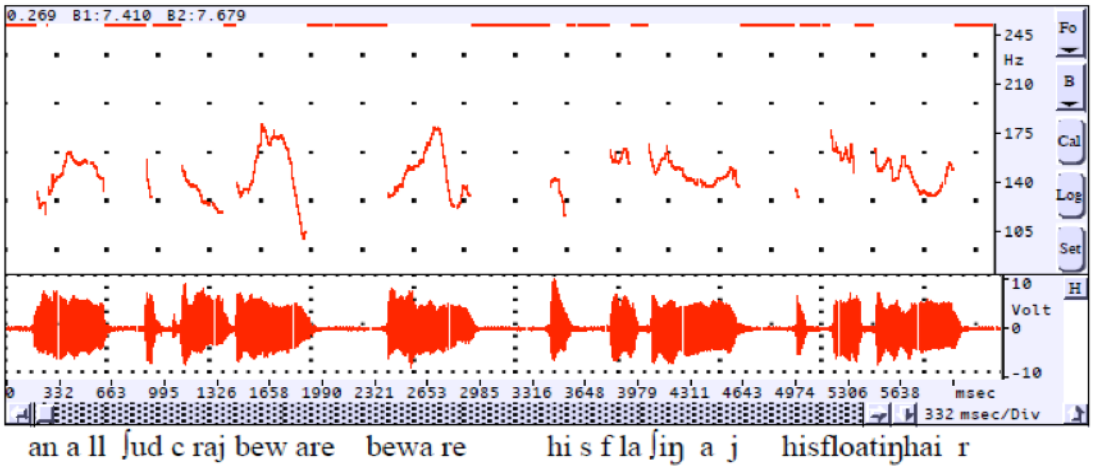


Figure 1 Wave plot and pitch extract of 'And all should cry, Beware! Beware! His flashing eyes, his floating hair!' read by Lloyd Pack. Notice the fall-rise intonation pattern at the end of the second token of 'Beware!' and of 'eye' and 'hair'. **Listen**

According to Bartels (p. 35): 'both the [Low] nuclear accent and the [High] boundary tone are marked options that appear to contribute to the utterance's special connotation', but the basic illocutionary force of this utterance is still that of an assertion, or exclamation. The falling intonation curves suggest here a

[1] Bartels, *The Intonation of English Statements and Questions: A Compositional Interpretation*, p. 59.

powerful unqualified attitude—warning or horror, or both. It is the attitude of the onlookers in the hypothetical situation reported. The rising boundary tone, by contrast, conveys the unassertive, inconclusive mood of the speaker in the actual situation. The rising boundary tone by itself cannot give more specific information than, e.g. 'an unassertive, inconclusive mood'; all the rest must be gathered from the context. Thus, for instance, the speaker in the actual situation may be less than certain that he would ever recover the lost melody, and so have doubts whether those unqualified cries would ever be heard. This is a plausible conjecture, not a fact.

In the present case one may notice an evasive change of voice quality between the first and second tokens of 'Beware!'. This change takes place precisely when the speaker shifts from the falling boundary tones at the end of 'and all should cry', and the first 'Beware' to the fall-rise at the end of the second 'Beware', and of each of the two noun phrases 'his flashing eye' and 'his floating hair'. Thus, the emerging voice quality tinges the emerging unassertive, inconclusive mood with a pensive or wistful tint. One-and-the-same intonation contour conveys, then, two very different attitudes, belonging to two different voices: the voice of the wonder-stricken or horrified hypothetical onlookers crying out at the sight of the ecstatic youth; and the wistful voice of the speaker, reporting in the actual situation those exclamations.

Jennings suggests the same two kinds of situations by very different vocal strategies, relying more on articulation than on intonation.

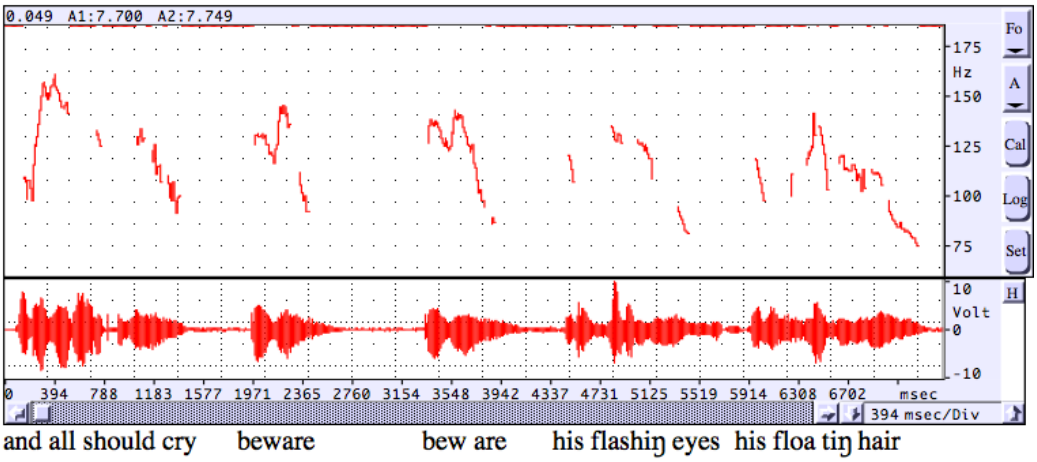


Figure 2 Wave plot and pitch extract of 'And all should cry, Beware! Beware! / His flashing eyes, his floating hair!', read by Jennings. **Listen**

Some performers in my corpus stay on a sustained high pitch to indicate here a terror-stricken emotional quality. Jennings finds a different vocal gesture to achieve a similar effect. As we see in Figure 2, each phrase ends in his reading with a long-falling intonation contour, and not a fall-rise. Rather, he exploits the alliteration in 'flashing' and 'floating'. He overarticulates these fricatives by three different means. They begin with a forceful, closer than usual closure of the lips, almost [p]; then they continue with a fricative stream that is longer and much louder than in Sheen's reading, for instance. Such a vocal gesture may suggest an attitude like trembling with fear. At the same time, the stressed vowel of 'flashing' is exceptionally brusque.

The best way to grasp Jennings' peculiar pronunciation of [f] in 'floating' is to compare it to his own pronunciation of 'floated' in 'floated midway'. The light touch of the lower lip in articulating [f] *may* serve as a gesture that imitates 'floating', when meaning supports this. Indeed, Jennings articulates it smoothly in 'floated'. In *'fl*oating' (and, to some extent in *'fl*ashing'), by contrast, Jennings performs the consonant [f] more roughly and more forcefully. This is perhaps supported by the meaning of *'fl*ashing' too. As shown in Figure 4, in 'floating' the [f] is much louder (both in absolute terms and relative to the vowel) and longer (203 vs 188 msec) than in 'floated'; what is more, its amplitude envelope is much more perturbed. **Listen** online to the two recorded words. In 'floated' the [f] is

floating, so to speak; in 'floating' it is pronounced with lips more tightly closed, almost a [p] or [pf]. When I tried to cut the [f] at the onset like a salami, I always heard a [pf] rather than [f].

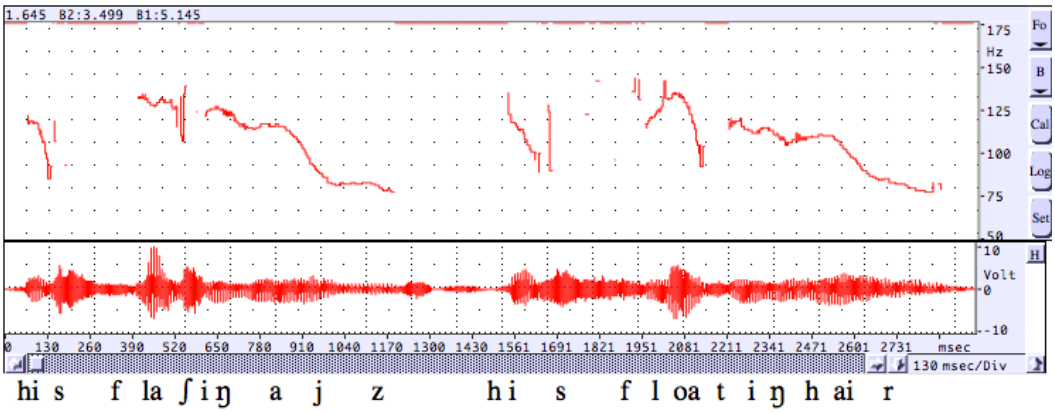


Figure 3 Wave plot and pitch extract of 'His flashing eyes, his floating hair!' read by Jennings. **Listen**

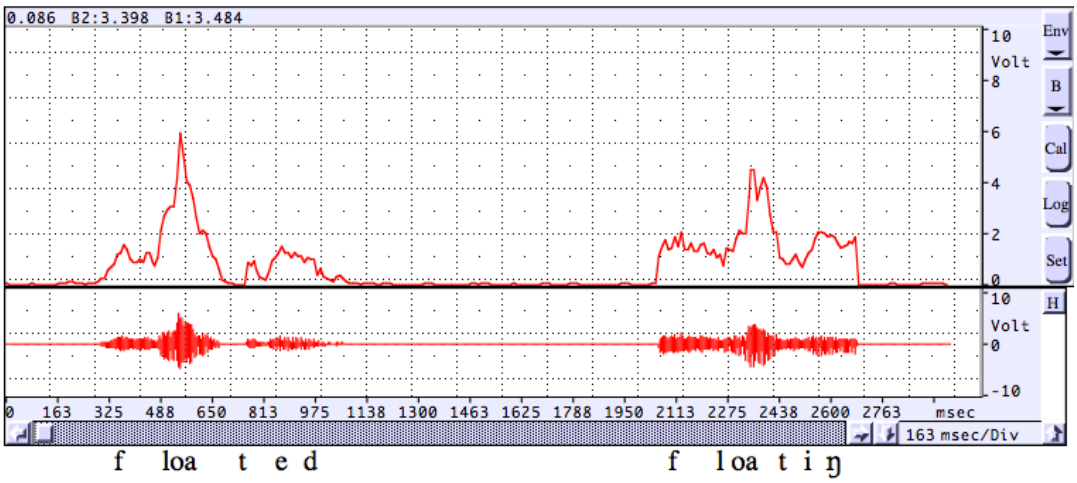


Figure 4 Wave plot and amplitude envelope of 'floated' excised from 'floated midway' and 'floating' excised from 'floating hair!' read by Jennings. Note the greater amplitude and longer duration of the [f] in 'floating'. **Listen**

In Lloyd Pack's reading of these same lines I pointed out that he conveyed two different speaking voices by resorting to the falling-rising boundary tone. Earlier in my book I pointed out a vocal gesture in Jennings' reading that consists of lingering on continuous speech sounds and suggests, at the same time, an emotional quality by some other vocal device. This was perceived as clinging to an

object or memory, yearning, for instance, for an inaccessible reality. Something like a combination of these two may be observed in the reading reflected in Figure 3. The vowels of *eyes* and *hair* are lengthened to a considerable extent. The falling intonation curves too are drawn out, with a rounded 'knee' at the beginning. These are, perhaps, the most outstanding instances of the 'rounding effect' I discussed in my book. It typically indicates a tender attitude. The combination of vocal gestures in this line may be construed as two different speaking voices: the terror-stricken 'all' who would cry in the imagined situation, and the person clinging on the pleasurable fantasy in the actual situation.

The other issue concerns the performance of the last line,

> And drunk the milk of Paradise.

Here I will reproduce from my book only the bottom line of a long, detailed discussion. In the book I analyse readings by four actors: Alex Jennings, Michael Sheen, Ralph Richardson, and Roger Lloyd Pack. When we compare the four readings of the last line of the poem, with special attention to the word *Paradise,* we find something quite surprising. Jennings and Sheen end their readings with a falling contour, while Richardson and Lloyd Pack end their performances on a sustained high pitch, or even with a rising pitch. This suggests unresolvedness, non-finality, open-endedness. There may be many aesthetic reasons for such a sabotage of closure. Here I wish to point out one. These two endings may reflect two different conceptions of the poem's nature. My analysis of the poem in Chapter 2 of my book implies that it has the significant structure of a hypnotic-ecstatic poem, the end of which constitutes the peak of an ecstatic experience. From this peak, 'all the preceding elements may be viewed comprehensively and their relations grasped as part of' an emotive crescendo, to use Barbara Herrnstein-Smith's description of closure. In Christine Bartels' words, 'statements bearing 'declarative *fall*' [...] convey a sense of self-containedness, closedness, 'finality', whereas statements bearing a fall-rise [...] convey reservations, open-endedness, or 'continuity" (p. 59). In this poem, closure is supposed to occur at the peak of an emotive crescendo. Coleridge himself, however, designates this

poem as 'A fragment', and in his introductory remarks tells us the story of how it became a fragment. Jennings seems to conceive of this poem as having a significant structure; Richardson—as of a fragment. Consequently, Jennings attempts to give 'ultimate unity and coherence to the reader's experience'; Richardson does not. The vocal gestures involved in these processes also have far-reaching consequences regarding the attitudes of the speaking voice. Perhaps the interaction of the lack of closure and the resulting unassertive attitude of the speaking voice is significant too. Notice an apparently paradoxical aspect of this state of affairs. One might expect that the peak experience at the end should be indicated by a sustained, or even rising, high pitch. But such an intonation pattern typically suggests unresolvedness, non-finality, open-endedness; it is the verse-final intonation fall that conveys a sense of self-containedness, closedness, finality, that is more appropriate to an ecstatic peak that creates in the reader the expectation of nothing.

Sheen **Jennings** **Richardson** **Lloyd Pack**

In an attempt to foreground the difference between a sustained high and a verse-final falling intonation contour, I have doctored, with the Praat speech processor, the contour on 'Paradise' in Lloyd Pack's reading. **Listen** to the line 'And drunk the milk of Paradise' as read by Lloyd Pack, and compare it to a **version** in which the final part of the pitch contour was manipulated. Note the indecisive tone of the genuine version suggesting open-endedness, and the more decisive, conclusive tone of the manipulated version, suggesting finality. Note also that the falling contour in the manipulated version does not suggest an ecstatic peak as in Jennings' reading. In Jennings', but not in Lloyd Pack's, reading there is a wealth of vocal cues that suggest high emotion (discussed in my book, but not here).

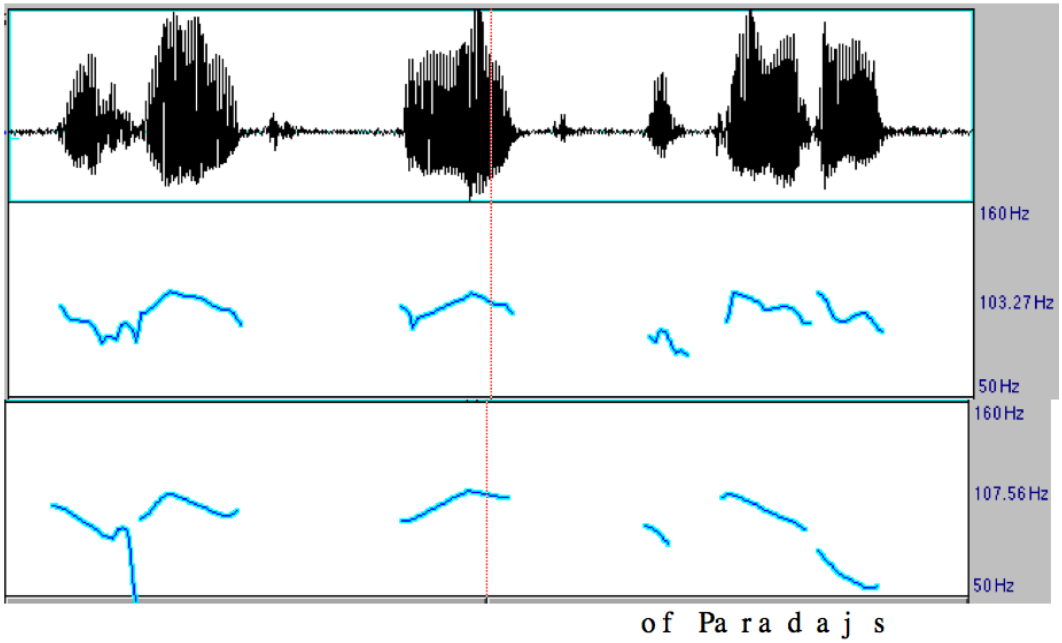


Figure 5 Wave plot with genuine and manipulated pitch extract of 'And drunk the milk of Paradise' read by Lloyd Pack. The middle window shows the genuine contour; the low window, the manipulated one. **Listen**

Appendix 2: On his relation to the 'Historical Poetics' of Marina Tarlinskaja

One of the trickiest questions in our domain is metrical expressiveness: the relationship between metric figures and meaning. In this respect, I will briefly consider three approaches to a stress valley beginning in the seventh position,[2] Halle and Keyser's *ad-hoc* approach, and Marina Tarlinskaja's and my own more systematic approaches. Surprisingly, in Tarlinskaja's work the crucial factor appears to be not necessarily the stress maximum in the weak position, but the displacement of stress to the preceding weak position. Faced with the metric 'violation' in Keats's

[2] In Tarlinskaja's work it is not necessarily in the seventh position.

7
How many bards gild the lapses of time

where the first syllable of ***lap****ses* constitutes a stress maximum in a weak position, they try to 'save' it by explaining it away as a kind of onomatopoeia, a 'metric pun'. According to the conception of performance outlined here, confirmed by a great number of readings, such configurations as the four syllables of *lapses of time* can be performed rhythmically, by grouping them together. This renders the line acceptable, and the *ad hoc* explanation of 'metric pun' becomes superfluous. Keats and Halle/Keyser use 'lapses' in different senses and the 'metric pun' construal of the mismatch is far-fetched. Keats means 'the passage of centuries', whereas Halle and Keyser—'unacceptable metres', and that the line enacts its statement. If it did, the line ought to have been perceived as witty, like Pope's 'And ten low words oft creep in one dull line'.

In my book I make a short excursus on the expressive potential of the stress valley initiated by the stress maximum in the seventh position: using L. B. Meyer's phrases, this infringement inspires the reader with 'awe, apprehension, and anxiety' that the utterance may escape back to chaos, 'arousing powerful desires for, and expectations of, clarification and improvement'. These desires and expectations are fulfilled, precisely, in the last position of the line, generating a strong feeling of closure. The line becomes well shaped and, paradoxically, at the same time, near-chaotic. Hence its strong emotional impact. The feeling of uncertainty, of 'anxiety', as it were, is particularly felt in the unstressed syllables of such polysyllabics as *crúcifie* or *bóttomless*, where they must lean back on that broken reed of a stress maximum in the seventh position, or one must wait until regularity is reasserted again, in the tenth position. Consider the following three lines.

7
Burnt after them to the bottomless pit
Milton: *Paradise Lost*, VI: 866

7
With them from bliss to the bottomless deep

Milton: *Paradise Regained* I: 361

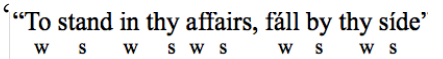
7
And whelm on them to the bottomless void
Shelley: *Prometheus Unbound*, III. i: 76

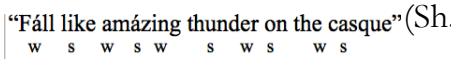
Far from being a poetic 'oversight', Milton repeats the deviant figure 'bottomless pit' in *P.R.* as 'bottomless deep', and then Shelley goes in his footsteps in 'bottomless void'. I shall try to account for this below. I suggest in my book that what we have is not exactly iconic; it is more accurately handled in terms of 'combinational potential'. The 'falling' analogue is not part of the metric pattern; it is merely a metaphor to suggest a peculiar psychological atmosphere of insecurity and anxiety, which are perceptual qualities of the metric shape under discussion. This metric shape is associated with a feeling of momentum and craving for stability that may combine with any content and lend impetus to such expressions as 'crucifie mee', or almost any other instance quoted here. When it combines with 'bottomless pit' and its near-synonyms, the feeling of insecurity and anxiety and the craving for stability may combine with the content of the line, reinforcing each other. In Halle and Keyser's handling of 'the lapses of time' the parallel between metric structure and contents critically depends on the words by which we describe the metric figure: if we describe it as 'metric lapse', the parallel exists; if we describe it as 'metric deviance', it does not exist. Moreover, it also depends on assigning to the word 'lapses' a meaning that is different from the one suggested by the context. My discussion of 'the bottomless pit', by contrast, concerns an *atmosphere* of anxiety generated by the loss of control caused by the extreme metric deviation, 'arousing powerful desires for, and expectations of, clarification and improvement'. This is a possible source of a sense of 'momentum' seeking 'focal stability'.

As promised, I shall contrast my approach also to Marina Tarlinskaja's approach to poetic rhythm, who brings the methods of the Russian school to the study of English poetry. Her work is descriptive and not normative as that of the generative linguists. Not as with Chatman, for instance, with whom I had only a dialogue in my thought, I am good friends with Marina, and we have had some

written correspondence and face to face discussion. We even attempted jointly to publish a controversy on matters that go far beyond metrics, confronting cognitive and historical poetics. But, alas, it didn't work out. In our earlier correspondence she was rather sceptical of my cognitive approach. Since in this discussion I am relying on personal correspondence too, I sent this section of my book to Marina and asked her to comment on it. In a communication of the 19 September 1997 she wrote: 'I am NOT against cognitive poetics, or your interest in recitation, or psychology of response. Simply, I am not a psychologist. How do I know what is going on in the 'black box'? Also, if anything would be allowable, any kind of line, there would be no noticeable tradition, no difference by the period, by the poet—and by different poetic traditions in different literatures. Therefore I stick to my approach—see what poets do, and try to generalise. I do try to explain WHY certain things are more acceptable than other things, and their semantic role'. As will be clear from what has been said here so far, not 'any kind of line' is allowable by the present approach either; and also how 'noticeable tradition, difference by the period' may be generated by the processes suggested here.

Her approach is based 'not so much on insight and intuition as on wide quantitative analyses of observable facts'. Her enormous erudition and keen analyses of her quantitative findings are always illuminating. I have no quarrel with all that. In fact, there appears to be some overlapping between her very large-scale quantitative work and my own, more modest quantitative work examined in light of intuitions and cognitive hypotheses. If I were to state my position with reference to hers, I would begin with her 1987 paper 'Rhythm and Meaning: 'Rhythmical Figures' in English Iambic Pentameter, Their Grammar, and Their Links with Semantics'; and would perhaps compare it to my 1985 paper 'Contrast, Ambiguity, Double-Edgedness' where, too, I point out relationships between metrical structures and meanings.

Consider the first two examples from a group of lines quoted by Tarlinskaja (p. 20), in the metric notation of the present study: ' 

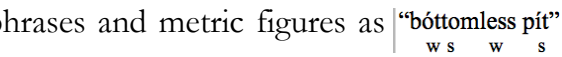
(Sh. *Son.* 151.12); 

(Sh. *R2* 1.3.81), and so forth. I

have marked in these lines the linguistic stresses and the underlying weak and strong positions in a stretch of four syllables. In the terminology of the present study these are 'stress valleys' beginning in the first or seventh (weak) position and ending in the fourth or tenth (strong) position, but no stress maximum is involved in either. If there were a stress maximum in the seventh position, there would be a similar dynamics, but with more pronounced effect.

While in my work the group of four constitutes the unit of analysis, Marina refers only to the first two syllables of these groups as a metric figure, labelling it as WS, that is, a stressed syllable in a weak position and an unstressed syllable in a strong position. It would appear that she was interested here in the deviating portion of the line. Rhythmical figures may stretch for her over as far as 5, and more syllables; but in these instances she focuses on the two deviating syllables only. By contrast, I was interested in the perceptual unit in which the deviance is accommodated. This is in perfect harmony with her statistical, as well as with my cognitive approach. Marina found by statistical means what are the meanings typically associated with this figure. One of them is, she says, 'motion downward'. All the examples she quotes in this group contain the word 'fall' or 'fell' in a weak position. But 'motion' and 'falling' is just one of the most frequent semantic areas coupled with this rhythmical figure; the verb is frequent, but not obligatory; other parts of speech may appear, but the context may still be 'motion', and the verb of motion may be absent, or placed outside the figure. Tarlinskaja offers the following explanation for this association of 'downward motion, falling' with this metrical figure: 'The semantic component "falling", so frequent in the figure WS-1, probably has something to do with the accentual-syllabic structure of the figure itself, which usually begins a verse line or a phrase within the line: it is a stressed syllable followed by two unstressed ones; possibly this arrangement does produce a physical impression of a heavy weight falling down.'[3] Now consider such

[3] Marina Tarlinskaja, 'Rhythm and Meaning: "Rhythmical Figures" in English Iambic Pentameter, Their Grammar, and Their Links with Semantics', *Style* 21 (1987), pp. 1-35, p. 29. WS-1 designates a sub-type of 'weak-strong' disyllabic figure, 'formed by two monosyllables (a loss of stress on S may be also caused by an unstressed syllable of a polysyllabic word)', as opposed to a weak-strong figure formed by a polysyllable (p. 4).

phrases and metric figures as 

and its near-synonyms in two lines by Milton and by Shelley (quoted above): 'Burnt after them to the bottomless pit' (Milton: *Paradise Lost*, VI: 866); 'With them from bliss to the bottomless deep' (*P.R.* I: 361); and 'And whelm on them to the bottomless void' (*Prometheus Unbound*, III. i: 76). The word 'fall' does not occur in these lines, but the violent downward motion *is* there. It is rather the adjective 'bottomless' that occupies the critical metrical positions.

The main difference between Tarlinskaja's and my own approach seems to be, in this respect, that Cognitive Poetics would try to clarify how this arrangement of a stressed syllable followed by two unstressed ones can produce a physical impression of 'a heavy weight falling down'; and if it failed, it would have tried some other explanation. The present conception assumes that no amount of 'observable facts' in the text may suggest an answer to that question. For this, one must assume the responses of a human perceiver. It is also obvious that the answer should be sought in the structure of signs that have no predetermined semantic meaning. Consequently, Leonard B. Meyer's discussion of emotion and meaning in music might prove illuminating for our purpose. Emotion or affect is aroused, Meyer says, when a tendency to respond is arrested or inhibited.[4] The pleasantness of an emotion seems to lie not so much in the fact of resolution itself as in the *belief* of resolution—the knowledge, whether true or false, that there will be a resolution (p. 19). That is why we can know whether an emotion is pleasant or unpleasant before it is actually over (that is, before apprehension is dispelled, or stability is achieved). 'The sensation of falling through space, unconditioned by any belief or knowledge as to the ultimate outcome, will, for instance, arouse highly unpleasant emotions. Yet a similar fall experienced as a parachute jump in an amusement park may, because of our belief in the presence of control and in the nature of the resolution, prove most pleasurable' (p. 20). Now a stress valley beginning with a stressed syllable in a weak position and ending in a strong position at precisely the most stable points of the pentameter line (in the tenth or

[4] Leonard B. Meyer, *Emotion and Meaning in Music* (Chicago: Chicago University Press, 1956), p. 14.

the fourth positions), may initiate an experiencing of such a 'pleasurable apprehension'. Loss of control is experienced during three syllables; but one also knows that control and stability will be regained at the fourth unit, where the stress pattern and the metric pattern have a coinciding downbeat, and the metre becomes again fresh and new. In the verse lines in which the first syllable of 'bottomless' occurs in the seventh position, anxiety is much stronger, there is a greater danger that the line will return to chaos, because it involves a stress maximum in a weak position; thus, everything said about the other examples is much more forcefully valid here.

Tarlinskaja quotes seventeen lines that contain such figures, with 'fall' or 'fell' in the critical weak position, by poets ranging from Shakespeare, through Pope, Swift, Byron, Shelley, Wordsworth, to Arnold. Thirteen of the resulting stress valleys end in the fourth position, four in the tenth. One of the latter does not belong to this discussion, because it occurs in an iambic hexameter line, beginning immediately after the caesura. In another group, with the verbs 'fly', 'run', 'rush' (that is, indicating vehement movement *away)* Tarlinskaja quotes eight lines, by Shakespeare and Shelley; in five of them the stress valley ends in the fourth position, in two in the tenth position, and only in one in the eighth position. Thus, out of twenty-four pentameter lines quoted in these two groups, only in one line (by Shelley) the stress valley ends in a position other than fourth or tenth.

The stress valley has no semantic meaning, only a perceptual dynamics. But this dynamics may generate a combinational potential, that is, a potential to combine with semantic elements that are relevant in one way or another to that dynamics. 'Downward movement, falling', for instance, has an element of loss of control; but in the present instances, this loss of control may be pleasurable, because the reader believes that the stress valley and the pairs of iambic feet will have a coinciding downbeat, where stability and control will be regained—even though the 'pit', the 'void', the 'deep' are 'bottomless'; that is, control can be regained in the stress valley only, not in the endless fall. Thus, by metric means, the endless fall is turned to an aesthetic end, and becomes pleasurable.

I believe, then, that Tarlinskaja and myself may benefit a lot from each other's methods. Her large-scale investigations are always of great importance. Her

findings are never casual or marginal. What is more, her findings can always be viewed in proportion to the whole corpus. Here I could learn a lot from her. But when she is looking for *explanations* for, e.g., the frequent combination of certain metric figures with certain meanings, she *must* take interest in what happens in that black box, the human brain; no amount of 'observable facts' can help her in this respect. Here, cognitive poetics could serve her well. A more thorough investigation would perhaps consider the other meanings that are frequently associated with this metric figure, and see whether or not its perceptual dynamics has something to contribute to them as well. And then, a similar investigation could be carried out regarding the other associations of meanings and metric figures. My above quotation from her suggests that she *does* acknowledge the need for explanations; but this could be made more systematic, more controlled, through the insights yielded by cognitive science.

Finally, Tarlinskaja's semantic interpretation can be consistently applied across a wide range and variety of verse lines, whereas Halle and Keyser's applies, if at all, to one single example. But neither of them suggests how a stress maximum in a weak position can be perceptually integrated in an iambic context. The approach on offer here, by contrast, shows how it can be perceptually accommodated in an iambic context and, by the same token, suggests how it can consistently generate a very general emotional atmosphere that can be individuated as specific emotions by the contents.

A more in-depth discussion of these issues can be found at:
http://cogprints.org/736/1/Postscript.html