Cognitive Poetics and Speaking the Unspeakable

Preliminary
In this paper I am going to present a conception of Cognitive Poetics which considerably differs from the Lakoff school's approach. While the Lakoff school is mainly concerned with meanings, the present approach is concerned with meanings, emotions, unspeakable experiences, and the sound structure of poetry including rhyme and rhythm—what in Chinese you call “Ya Yun” and “Ping Ze”!. At the outset I propose to trace briefly the place of Cognitive Poetics between critical impressionism and analytic criticism. There are, on the one hand, impressionist critics who indulge in the effects of literary texts, but have difficulties in relating them to their structures. On the other hand, there are analytic and structuralist critics who excel in the description of the structure of literary texts, but it is not always clear what the human significance is of these texts, or how their perceived effects can be accounted for. Cognitive Poetics, as I conceive of it, offers cognitive theories that systematically account for the relationship between the structure of literary texts and their perceived effects.

Language is essentially conceptual. Poetry is supposed to convey experiences that in part, at least, are non-conceptual. This paper will discuss some ways in which conceptual language is used in poetry to convey non-conceptual experiences. "The dictionary of a language is", says Bierwisch (1970: 172), "a system of concepts in which a phonological form and certain syntactic and morphological characteristics are assigned to each concept". Such words as "feeling", "emotion", "mysticism"—just like "table", "car", "hammer"—are tags that serve to label concepts; they do not convey the experiential quality of the things referred to. In everyday communication such tags are efficient means to direct attention to the things intended. But this may be insufficient in poetry. Some poetry, at least, is supposed to convey, not merely

1 In the discussion following my lecture someone objected that in Lensky’s poem I speak of sadness suggested by the fish going down; and it was precisely Lakoff who formulated the principle UP IS HAPPY, DOWN IS SAD (by the way, the world didn’t wait for Lakoff to discover this). I gave to this the following two answers. First, while Lakoff speaks of meanings, I am speaking of pervasive perceptual qualities, usually called “emotional” or “aesthetic qualities”. Second, and this supports my previous point, when I read out the first three lines of the stanza to students, they report a perceived quality of calm. Only when the fourth line is added, the quality perceived becomes sadness. While Lakoff cannot predict the “calm” quality perceived in these lines, the present theoretical framework can predict both qualities, and can also explain why the same images can be perceived in one condition as suggesting “sadness” and in another—“calm”. 
mention emotions, feelings, experiences. Such experiences remain unspeakable, as it were. Now poetry uses words to express feelings, emotions, experiences. In Wayne Booth’s terms, poetry is supposed not merely to tell about experiences, but also to show them. Thus, poetry is supposed to use conceptual language to convey non-conceptual experiences, not merely the concepts of those experiences. Consequently, such phrases as “emotional poetry”, or “mystic poetry” ought to be contradictions in terms. But we know they are not. The reason is that poetic form does something to the language that enables readers to detect some structural resemblance between the text and certain emotional experiences. This paper explores some techniques by which, in poetry, conceptual language is turned into experiential language.

Here we must make a further distinction. When you say “My sister is sad”, and “The music is sad”, you use the word “sad” in two different senses. In the first sentence you refer to some mental process of a person. In the second sentence you do not refer to a mental process of the sound sequence, nor to a mental process it arouses in you. One may be perfectly consistent when saying: “That sad piece of music made me happy”. You refer to a perceptual quality generated by the interaction of the particular melodic line, rhythm, harmony and timbre of the music. In other words, you report that you have detected some structural resemblance between the sound patterns and emotions. When you say “This poem is sad”, you use the adjective in the second sense. In this sense “sad” becomes an aesthetic quality of the music or the poem.

The Nature of Emotion

“Emotion is a tendency towards an object judged suitable, or away from an object judged unsuitable” (Arnold and Gasson, 1968: 203). The unique conscious quality attributed to emotions has certain structural correlates. Psychologists have, roughly, discerned the following elements in emotions:

1. Situation appraisal as harmful, beneficial, threatening, etc.;
2. Deviation from normal energy level: increase (gladness, anger), or decrease of energy (sadness, depression, calm);
3. Diffuse information in a highly activated state that is less organised and less differentiated than conceptual information;
4. Such information is active in “the back of one’s mind”, without pre-empting everything else. To play chess, for instance, you must know the possible moves and strategies of the game; but you must also want to win. This wish to win must be active in the back of your mind, but may not usurp the place of your thoughts on the moves and strategies.
Thought processes are experienced as relatively unemotional, though Antonio Damasio (1994) has recently demonstrated that they too crucially depend on emotional processes. Emotional and non-emotional processes do not constitute a rigid dichotomy, but a continuum. "There is no point on this continuum", says Elizabeth Duffy (1968: 138), "where a 'non-emotional' degree of disorganization of response changes suddenly to an 'emotional' degree of disorganization; and there is no point at which a 'non-emotional' conscious state changes suddenly to an 'emotional' one. These characteristics of experience and behavior show continuous variation rather than separation into hard and fast categories". There may also be some trade-off in this respect between the interlacing strings of mental processes.

Convergent and Divergent Poetry

It is easy to see how a verbal text can contain a situation appraisal. But how can a poem display a structural resemblance to emotions in respect of streams of diffuse, undifferentiated information? That will be the major business of the present paper. Psychologists distinguish between convergent and divergent thinking. Wellek and Warren conceive of a poem as of a "stratified system of norms". The devices at the various strata of a poem are mostly independent variables, and may act less or more in convergence. Accordingly, the poem may be perceived as more or less emotional.

Let us consider the following two lines:

(1) That the wind came out of the cloud, chilling
And killing my Annabel Lee.

One striking property of these lines is that although they speak of the death of a little girl, the lines hardly sound sad. They sound rather witty or, at least, playful. Another striking point is the prominent sound repetition in *Chilling and killing*, though somewhat mitigated by the intervening line-ending. The sound repetition *out-cloud* is less salient. The first explanation that one is inclined to offer is that the “punning” sound repetition makes the lines sound witty or playful. But does it? Let us consider the opening lines of *Paradise Lost*:

(2) Of Man’s first disobedience, and the fruit
Of that forbidden tree, whose mortal taste
Brought death into our world, and all our woe,
With loss of Eden, till one greater Man
Restore us and regain the blissful seat,
Sing, Heav’nly Muse …
This sounds anything but playful. But notice this: all the sounds of forbidden and of Eden are included in disobedience, in the same order. Fruit includes all the consonants of tree (repeated in the reverse order, in mortal) and two at least in first. The consonant-cluster st is repeated in first, taste, restore, seat. One could add the consonant cluster l - s in loss and blissful in lines 4 and 5. Here the vowels [o–i] are contrasted by the phonetic features BACK–FRONT and ROUNDED–UNROUNDED. At the same time this phonetic opposition reinforces the thematic opposition between the Fall and Redemption. Obviously, there is a greater number of sound repetitions in Milton, but they lend the passage some harmonious blend of musical rather than some witty or playful quality. How can we account for this perceptual difference?

One difference is that the groups of sounds of chilling and killing are more concentrated; they are nearer in time to one another. A second difference is that in Poe, the repeated sounds are stringed, so to speak, in one direction, whereas in Milton, the various sound clusters are ‘interwoven’, yielding a diffuse ‘texture’, as it were, of various strings. Another difference is that in Poe’s lines, the strong positions of the metric scheme coincide with the stressed syllables of the words. It is these converging patterns that are reinforced by the repeated sounds on the one hand, and by the parallel morphological and syntactic structures on the other. In the handouts, the W and S letters stand for metrical weak and strong positions.

(3) chilling
  s w
And killing my Ánnabel Lée
  w s w w s w w s

In Milton, lexical stress does not necessarily coincide with strong positions:

(4) Of Mán’s first disobedience, and the frúit
  w s w w s w s w w s

Here, first occurs in a weak position; dis- and and in strong ones. In terms of figure–ground relationship, the converging stress and versification patterns and concentrated sound clusters in Poe's poem yield well-articulated figures, whereas in Milton's poem the interlacing sound patterns and diverging linguistic and versification patterns are dumped in the ground, are "active in one's back of the mind", foregrounding the patent argument as more "plastic", perceptually fuller.

It is generally assumed by linguists that the decoding of speech involves both prediction of what is to be said and a short-term memory storage of what has been said, until such time as the meaning of the message has been cleared up (see, for instance, Frye, 1970: 48-50). Both parallel mechanisms are far more strained in
Milton than in Poe. In the latter’s poem, even though “Chilling and killing” is syntactically subordinated to “came out”, it is not “predicted” by the finite verb. The first part of excerpt (1), “the wind came out of the cloud”, requires no further syntactic elaboration. The rest of the quote runs to its end in a straightforward manner. The two transitive verbs chilling and killing require a direct object and that is precisely what follows them, in the usual order. Milton’s passage, by contrast, puts a great strain on the reader’s prediction and short-term memory store. One must split, so to speak, one’s attention. The poem begins with a preposition (off), predicting a verb. The fulfilment of this prediction is suspended until the beginning of line 6 (Sing). While the reader proceeds in following up “this great argument” towards its logical conclusion, he must, at the same time, suspend a part of his attention, in order to remember that at the beginning there was a loose end, demanding to be tied up. Compare the tone of Milton’s actual poem to the following transcription:

(5)  Heav’ly Muse! Sing  
Of Man’s first disobedience, and the fruit  
Of that forbidden tree, whose mortal taste  
Brought death into our world…

This sounds somehow more single-minded, more conclusive. The various parallel activities of our decoding apparatus more readily converge here. One may mitigate the almost intolerable conclusiveness of the transcribed passage, by interpolating the vocative between the verb and its indirect object, thus suspending, for a moment at least, the flow of the utterance: “Sing, Heav’nly Muse, / Of Man’s first disobedience, and the fruit…” The run-on phrases at the end of lines 1 and 2 of Paradise Lost generate further divergence between the prosodic and the syntactic units.

The quotation from “Annabel Lee” represents a conclusive tone, achieved by an emphatic convergence of parallel linguistic and versification patterns. Repeated sounds, in such a context, are perceived as witty or playful. The passage from Paradise Lost represents a suspensive tone, achieved by the divergence of parallel patterns, yielding a texture, an emotional background to the “great argument”. The strings of repeated sounds are woven into the background texture, lending the passage an elusive musical character. Such structures are sometimes reinforced on the semantic level of the poem. Thus, for instance, puns are usually considered as witty or playful. In his edition of Milton, Douglas Bush has pointed out two puns in the first two lines of Paradise Lost: “Fruit”: both ‘fruit’ and ‘result’; “Mortal”: both ‘human’ and ‘fatal’. Here, however, the divergent meanings are absorbed in the thick fabric of divergent strings.
Now, if we consider these two examples in the light of the foregoing theory of emotions, we readily recognize Milton’s divergent style as “emotional”; because our emotional responses, too, are divergent. The emotional quality of the passage may not be derived from its contents. The passage comprises fragmentary allusions to events of mainly theological interest, a synopsis of “this great argument… to justify the ways of God to men”. And conversely, the two lines quoted from “Annabel Lee” are, in their contents, of immediate emotional interest. We do not recognize the event as sad, or painful, as we should have thought it was, because it is put forward in a convergent style. And our convergent mental activities are, usually, nearer to the non-emotional end of the scale. Thus, in the present case, the convergent structure overrides the sad event; instead of reinforcing each other, the two patterns combine to yield a non-emotional (playful or witty) whole.

This principle can be stated in another way too. Convergent structures make stronger shapes (in the gestaltist sense) than divergent structures. Stronger shapes are typically associated with witty or rational qualities, poorer shapes with emotional qualities. Divergent structures are less predictable; and the diverging patterns tend to blur each other. Leonard B. Meyer, who applies gestalt theory to music, discusses strong and weak shapes and their respective perceived effects as follows: “Because good shape is intelligible in this sense, it creates a psychological atmosphere of certainty, security, and patent purpose, in which the listener feels a sense of control and power as well as a sense of specific tendency and definite direction” (Meyer, 1956: 160). That is why strong gestalts are typically associated with rational, witty qualities, poor gestalts with emotional qualities.

**Parallel Entities and Mood**

In the following example an emotional quality is achieved by different means. We are going to discuss the first stanza of a short Hebrew lyric poem in a literal English translation, by the great Hebrew poet Khayim Lensky (who wrote Hebrew poetry in Soviet Russia, and found his death in Stalin’s concentration camps). Versification is lost in a literal translation, but in the original the passage is essentially convergent.

(6) The day is setting over the lake,
    The fish have gone down to sleep in the depth,
    Birds have ceased from their chatter…
    How sad is the rustling of the reeds!

We may make two preliminary observations about this stanza. First, it is only in the fourth line that it names an emotion (“sad”); in the first three lines it describes facts of the landscape that have no explicit emotional contents. In other words, the
emotion appears to be there only by way of “telling”, not “showing”. Intuitively, however, this is not true, and we should attempt to account for this intuition in a systematic way. Second, the four descriptive sentences in the four lines relate to one another in two different ways: in one way, they refer to parts of the situation, complete one another to constitute the description of a coherent landscape; in another way, they parallel one another in an important sense. The latter relationship is reinforced by the rhyme pattern (lost in the literal translation).

The reader is inclined to extract from parallel entities their common ingredients. When the first three lines are read out to students, they abstract from these lines such abstractions as “going down”, “decrease of activity”. When asked whether this description has any emotional quality, they more often than not suggest the emotional quality “calm”. As I have suggested above, emotions are typically associated with some deviation from normal energy level, and that the lowering of energy is typically associated with sadness, depression, or calm. It is only the fourth line that supplies the “situation appraisal” (that is, explicitly settles the uncertainty concerning the character of the situation in which the emotion arises: it is the kind of situation to which the adjective “sad” is more appropriate than “calm”), and resolves the emotional quality of the landscape description in favour of “sadness”.

There is convincing experimental evidence that the superordinate categories of parallel entities is present, simultaneously though subliminally, in active memory. This can be demonstrated with the help of the Stroop test. The Stroop test has revealed an involuntary and subliminal cognitive mechanism of some interest for our present inquiry. In this test, colour names (e.g., “yellow”) are written in different-coloured ink (e.g., “blue”). If the subject is required to read the word, he has little interference from the ink colour, but if he is required to name the ink colour, he has great difficulty because of interference from the colour name (Posner, 1973: 26). The findings of this experiment suggested a further study, concerning the automatic activation of superordinates. In this study, subjects were presented with lists of three words which they were to remember. The three words came from the same category (e.g., “maple”, “oak”, “elm”). The subjects were then shown one of the words in the list (e.g., “oak”), the name of the category (e.g., “tree”), or a neutral word unrelated to the list. These visually presented words were written in coloured ink. The subjects were asked to name the colour of the ink as rapidly as possible. Based on the Stroop effect, it was expected that if the word shown to the subject was in activated memory, the subjects would have greater trouble inhibiting a tendency to vocalise the word name. Such a tendency would slow their response to naming the ink colour. The experimental data showed that words from the list (“maple”, “oak”, “elm”) and the category name (“tree”) produced greater interference with colour naming than control words. This study suggests that the category name is activated when a list word is presented, without any requirement to do so (Posner,
One might perhaps cautiously suggest that the same principle may be extended to ad hoc categories too: that when the first three lines of Lensky’s poem are read, the superordinate categories “going down”, “decrease of activity” are activated too. Such an assumption, however, requires further experimental testing.

The abstractions extracted from parallel entities have considerable adaptation value. As Posner suggested, such abstractions may contribute to a parsimonious hierarchical organisation of semantic memory. One might add that they also facilitate the preservation of lists of such parallel entities in active memory. One major assumption of cognitive poetics is that poetry exploits, for aesthetic purposes, cognitive processes that were initially evolved for non-aesthetic purposes. In the present instance, the abstractions that typically serve to alleviate the load on active memory receive exceptionally strong emphasis and are perceived as aspects of the emotional quality pervading the landscape described. As aspects of the emotional quality pervading the landscape, such abstractions conform with the description of emotions above: they constitute diffuse information in a highly activated state that is less differentiated than conceptual information, and are active in “the back of one’s mind”, without pre-empting everything else. This is how this stanza evokes some diffuse emotion or vague mood. But these are generated by the physical behaviour of animals and lifeless physical reality, not expressed as human emotions. The ensuing discussions will highlight further emotional aspects of this landscape description.

Abstract and Concrete Nouns in Poetry

In the next few sections I will elaborate on the nature of abstract and concrete nouns in poetry. I will explore the ways they may be exploited for generating some structural resemblance between poetic texts and emotional processes.

Handbooks of style and composition have frequently insisted that a concrete style is more to be commended than an abstract one. Accordingly, “Men jostled one another in the street”, says Wimsatt (1954: 133), is supposed to be less vigorous than “Butcher elbowed banker in Threadneedle Street”. Wimsatt claims, by contrast, that anything may be abstract or concrete as compared with something else. Concreteness, as a source of vigour, says he, is nothing but tension between the concrete thing and some actual or potential abstractness. In the following few sections I will explore some fine-grained aspects of the relationship between the abstract and the concrete in poetry. I will argue that in certain circumstances poetic form may turn abstractions into lowly-differentiated, diffuse, thick perceptions loaded with emotions. I claim that the concrete is so vigorous because it is the most efficient means for the cognitive coding of a great number of abstractions, and that poetry offers certain devices that loosen the bonds between them. Let me explain
this by a quotation on concreteness and abstraction from another handbook of style and composition, by Cleanth Brooks and Robert Penn Warren

_Peach, pear, quince, apple, apricot are concretes._ The word _peach_ implies certain qualities: a certain shape, a certain colour, a certain kind of sweetness. But _peach_ implies these qualities as "grown together" as we should actually find them embodied in a peach. (The Latin word from which _concrete_ comes means literally "grown together"). We can, of course, _abstract_ (this word literally means "to take away") these qualities from the actual peach and refer to them in isolation: _sweetness, fuzziness, softness_. Isolating these qualities in such fashion, we get a set of _abstract_ words. _Sweetness_ is a quality common to peaches, of course, and to many other things; the quality is thought of as an idea in its own right. Words that refer to ideas, qualities, and characteristics _as such_ are usually abstract. Words that name classes of objects and classes of actions are usually general. Words that refer to particular objects and particular actions are usually both concrete and specific. These are, on the whole, our most vivid words (Brooks and Warren, 1958: 298).

One important thing is suggested by this passage, namely, that concrete nouns are bundles of abstractions grown together. In what follows I will draw attention to techniques by which figurative language _abstracts_ (that is "takes away, isolates") the various qualities from concrete nouns or objects, and utilizes them for poetic purposes.

This conception of concrete nouns as bundles of abstractions grown together may explain the importance attributed to concrete nouns in poetry. "When we use a noun metaphorically," says Christine Brooke-Rose (1958), "we make abstraction of certain attributes which it possesses, leaving out others which would not fit; for instance, in 'the roses of her cheeks', we think only of fragrance, pinkness and softness, not of thorns, leaves, yellowness or dark red. The metaphoric term, though a noun, becomes the bearer of one or more attributes". That is what I call efficient coding.

From this elementary example we may derive several principles for our purpose. First, the concrete noun is more parsimonious: it encodes several features that can be mapped onto "cheeks". Second, it makes all the difference whether we use the metaphor "the roses of her cheeks" in which the abstractions are grown together, or enumerate them one by one, e.g., "the fragrance, pinkness and softness of her cheeks". In the metaphor, the various unmentioned abstractions vie for attention, but none of them can usurp the place of the others; they rather blur each other, generating a stream of diffuse information that thus bears some structural
resemblance to emotions. Third, even in this trite and conventional image, this complex structure may serve as the basis of creativity, by moving from one sub-set of features to another, activating dormant, unnoticed features. In this way, novel metaphors can be generated and understood. For witty purposes, for instance, a poet could write: "There are roses in her cheeks—they are yellow and have thorns".

**Abstraction Plus Deixis**
Another device to make conceptual language express non-conceptual experiences is a peculiar combination of deixis with abstract nouns. Abstract nouns are "double-edged": in certain conditions they are the vehicle of highly-differentiated rational thinking; in some other conditions they arouse some lowly-differentiated, diffuse, non-conceptual perceptions. The latter, I will argue, is closely related to space perception. Deixis is the pointing or specifying function of some words (as definite articles and demonstrative pronouns), tense and a variety of other grammatical and lexical features whose denotation changes from one discourse to another. When one says I, or here, or now, the denotation of these words depends on who the speaker is, and where or when he is speaking. In literature, deixis does not point to such extra-linguistic reference, but instructs the reader to construct from the verbal material an imaginary situation in which such denotations are pertinent.

Consider two excerpts from William Wordsworth, the first one from his famous “Observations Prefixed to ‘Lyrical Ballads’” (1800), the second one from his “Solitary Reaper”. In both examples he uses the word overflow in a figurative sense, in relation to an abstract noun.

7. For all good poetry is the spontaneous overflow of powerful feelings [...].

8. Behold her, single in the field,
   Yon solitary highland lass!
   Reaping and singing by herself,
   Stop here or gently pass!
   Alone she cuts and binds the grain,
   And sings a melancholy strain;
   O listen! for the vale profound
   Is overflowing with the sound.

   (Wordsworth, “The Solitary Reaper”)

In spite of the occurrence of the word feeling in excerpt 7, the word feeling is felt to be conceptual, it suggest the idea, not the experience of feeling. Thus, it is
relatively less appropriate to describe the perceived effect of this excerpt than that of excerpt 8, where feeling is not mentioned but is experienced. Excerpt 7 is usually accepted as conceptual expository prose, notwithstanding the figurative use of *overflow*. In the last two lines of excerpt 8, by contrast, many readers report a feeling of being immersed in, or wrapped by, some thick undifferentiated texture that has little to do with auditory percepts. Indeed, excerpt 7 is placed in a timeless and spaceless context, whereas in excerpt 8, by contrast, the presence of a perceiving consciousness in midst of a concrete landscape is indicated by the verbs “Behold”, and “O listen”. These verbs refer to the mental processes of perception, and are in the imperative mode. Imperative verbs have a strong deictic ingredient, because one can give a command only to someone present (or imagined as present) here and now. How can we account for the association of this verbal structure with the perception of a thick undifferentiated texture?

In the nineteen seventies I came across cognitive psychologist Robert Orenstein’s study of consciousness (1975), in which he put forward the conception (which became the “received view”) that while logical and rational consciousness is typically related to the left hemisphere of the brain, meditative consciousness is related to the right hemisphere. The left hemisphere processes information sequentially, and its output is experienced as compact and logical; the right hemisphere processes information simultaneously and its output is experienced as diffuse, integrating input from many senses. Orientation, emotions, and mystic experiences are all typically right-hemisphere activities. Regarding the poetic structure discussed in the present section, I claimed, the emphatic deixis evokes a coherent scene arousing imagined orientation which, in turn, transfers a significant part of language processing from the left to the right hemisphere, rendering the related percepts more diffuse. Orientation involves not only a perception of the surrounding space, but also a sense of one’s own body’s position.

I was trying to stay for as long as possible within literary theory, linguistics, philosophy and cognitive science. But sometimes really compelling evidence turned up from the emerging brain science. During the past fifty years or so linguists have propounded a semantic-feature conception of meaning. Cognitive psychologists and brain scientists too speak of cognitive “features”. The brain scientist Marcel Kinsbourne refutes the naive belief that the right hemisphere’s output is featureless: “A holistic approach, leaving features and their relations unspecified, is as alien to right-hemisphere function as it is inimical to rationality in general” (Kinsbourne, 1982: 417). Consequently, I claim that the right hemisphere’s output is “ineffable” not because no semantic features are involved, but because those features are diffuse and simultaneous. It is not the information that is unparaphrasable, but its integration and diffuseness. Diffuseness and integration are not semantic information added, but the structure of information as it appears in consciousness.
Whereas semantic information can be paraphrased, the impression that arises from its structure can only be described. I discussed above divergence as a technique for rendering the poetic message more diffuse. Imagined orientation that transfers a part of language processing from the left to the right hemisphere is just another.

In 2001–2002 I extended the above conception to seventeenth century poetry of meditation as well. This poetry is said to have evolved from Jesuit meditation. The first stage of this meditation was “composition of place”. The seventeenth century Jesuits as well as twentieth century scholars claimed that the entire success of the meditation depended on a proper execution of the composition of place; but they never explained why. In a paper published in Pragmatics and Cognition, Motti Benari and I (2002) argued that the composition of place requires the meditator to imagine himself in a specific situation of an episode from the life of Jesus or one of the saints and induce the meditative process through activating the right hemisphere by the orientation mechanism. In romantic nature poetry too the insights into supersensuous reality are intimately associated with detailed nature descriptions, a “composition of place”, as it were. The orientation mechanism involved imposes diffuseness on the percepts conveyed by language. Now such diffuseness can be more easily imposed on thing-free and gestalt-free qualities, including abstractions, than on objects that have stable characteristic visual shapes.

There is no evidence in Orenstein’s discussion for our conjecture concerning this effect of the orientation mechanism on meditation and poetic language. But after the article had already been accepted for publication by Pragmatics and Cognition we encountered brain research that may support this conception. Andrew Newberg and his colleagues (2001) conducted a SPECT camera brain-imaging study of Tibetan meditators and Franciscan nuns at prayer. To our pleasant surprise, these researchers found that what they call the “orientation association area” (OAA) is “extremely important in the brain’s sense of mystical and religious experiences, which often involve altered perceptions of space and time, self and ego” (29). But the emerging picture is much more complicated than what we had imagined. Nevertheless, these findings would massively support our speculations above based on the structure of literary texts, introspection, and earlier brain research. Their study attempted to obtain experimental evidence for their claim. They point out that there are two orientation areas, situated at the posterior section of the parietal lobe, one in each hemisphere of the brain:

The left orientation area is responsible for creating the mental sensation of a limited, physically defined body, while the right orientation area is associated with generating the sense of spatial coordinates that provides the matrix in which the body can be oriented. In simpler terms, the left orientation area creates the brain’s spatial sense of self, while the right side
creates the physical space in which that self can exist (Newberg et al., 2001: 28).

These researchers found a sharp reduction in the activity levels of the left orientation association area. A SPECT image of the brain’s activity during meditation indicates that the activity of “the left orientation area […] is markedly decreased compared to the right side” (ibid., 4). They assume that both orientation areas were working as hard as ever, but in the left area the incoming flow of sensory information had somehow been blocked (6).

We consider these findings extremely valuable for interpreting the meditative experience. Mystics and meditators of many religions as well as romantic poets aspire to achieve a mental state which they describe as the suspension of the boundaries between self and not self, or the dissolution of the self in infinite space. In this case, the boundaries of the self must be de-emphasized, and the perception of the surrounding space overemphasized. The process must begin, therefore, with activities having opposing effects in the two orientation areas: in the right area “the sense of spatial coordinates that provides the matrix in which the body can be oriented” must be reinforced; in the left area “the mental sensation of a limited, physically defined body” must be reduced. What is more, the diffuse information-processing mode originating in the right hemisphere may help to blur, as an initial step, the mental sensation of a well-defined physical boundary of the body—whatever the later stages of the cognitive and neurological processes. In imaginative processes, objects that have stable characteristic visual shapes enhance the feeling of their separateness and our separateness from them; abstractions as well as gestalt-free and thing-free qualities enhance a feeling of the suspended boundaries.

The abstract of the concrete
The afore-said effect is frequently reinforced by a related kind of grammatical construction, the abstract of the concrete construction, the effect of which can be explained in light of Strawson’s distinction between singular terms and general terms in predicative position. Consider the following three phrases:

9  a. high hills
    b. the hills are high
    c. the height of the hills

The normal, “unmarked”, syntactic structure of such constructions, says Strawson (1967), would be that concrete, “spatio-temporally continuous particulars” as “hills” occur in the referring position. By “spatio-temporally continuous
particulars” Strawson means objects that are continuous in space, and if you go away and come back after ten minutes, an hour, a week, or a year they still have the same shape. Such more abstract or more general qualities as “height” should occur as attributes or predicates, e.g., “high hills”, or “the hills are high”. In such phrases as "the height of the hills", the adjectives are turned into abstract nouns, and the abstract nouns are manipulated into the referring position instead the spatio-temporally continuous particulars. As Strawson (1967: 82n) put it, “The variation in form from 'pretty' to 'prettiness' (or, in the present instance, from "high" to "height") supplies the substantive which is grammatically typical for referential position”. Apart from this, there is little semantic difference between them: both abstract nouns and adjectives serve to denote properties that may be grown together in concrete nouns. I have called such transformations *thematised predicates* or *topicalised attributes*. "We may think of this", says Halliday (1970: 159) "as governed by a 'good reason' principle: many linguistic systems are based on this principle, wherein one option (the 'unmarked' option) will always be selected unless there are good reasons for selecting otherwise". Here the "good reason" for selecting the "marked" option is to turn the attribute into the *theme*, what Halliday calls the "psychological subject" of the utterance.

Thus, not the concrete objects, but their attributes that have no stable characteristic visual shapes are manipulated into the psychological centre of the message. In this fashion, the psychological centre is directed away from the solid physical objects to some thing-free and gestalt-free quality. Such syntactic constructions (i.e., the *ABSTRACT of the CONCRETE*) may serve as a convenient tool for the separation between sense-data (or perceptual qualities) and physical objects. In everyday life and language we do not usually distinguish one from the other. When we perceive (or speak of) the one, we are inclined automatically to identify it with the other. But the two are far from identical, from the logical point of view. One of the tasks of the "abstract of the concrete" genitive phrases ("the height of the hills") may be to de-automatise the relationship between the attributes (or perceptual qualities) and the physical object.

This analysis might account for the fact that such verbal structures are quite common in seventeenth-century instructions for Jesuit meditation and meditative poetry, as well as in Romantic, Symbolist, and post-Symbolist poetry: they draw attention to the surrounding space, but focus on thing-free and gestalt-free entities (such as abstractions) rather than on stable characteristic visual shapes. Consider, for instance, the following phrase from a passage by the Jesuit writer, Dawson: "to have noted well the distance from one place to another, the height of the hills, and the situation of the townes and villages", or Ignatius’ “the length, breadth and depth of Hell”. Here the psychological focus is shifted from spatio-temporally continuous objects to certain abstract relations: distance ... height ... situation, or length, breadth...
and *depth*, manipulated into the referring position. According to our interpretation, such abstractions and gestalt-free qualities are perceived differently by the two orientation association areas. In the left area they enhance a feeling of the blurring of boundaries; in the right area they are perceived as unstable, fluid information, comparable to the fast-integrated output of right-hemisphere orientation processes, that cannot settle as solid objects.

Let us consider at some length a similar construction in a poetic context, in line 5 of Wordsworth’s Sonnet “Composed upon the Beach Near Calais”:

10. The gentleness of heaven broods o’er the Sea.

Here too we have the result of the same kinds of transformations as in Dawson’s "the height of the hills”, and Ignatius’ “the length, breadth and depth of Hell”, that is, nominalization and thematicization, which enable us to compare Wordsworth’s line to a different phrase structure:

11. The gentle heaven broods o’er the Sea.

The difference between the two formulations is, again, the difference between a sentence in which a *spatio-temporally continuous particular* is in the referring position, and one in which an *abstract property of a spatio-temporally continuous particular* is in the referring position. Now I wish to point out three significant aspects of this line. First, the spatio-temporally continuous particular in Wordsworth’s phrase, *heaven*, is a thing-free and gestalt-free entity. Second, in Wordsworth’s phrase both the spatio-temporally continuous particular and its abstract property (that is, both *heaven* and *gentleness*) are *simultaneously present*. Third, in Wordsworth’s phrase the spatio-temporally continuous particular exceeds the capacity of imagination to comprehend or encompass its whole representation in a single intuition. As a result, *gentleness* is perceived as a diffuse but intense quality infusing the whole perceptual field. This diffuseness is reinforced by “o’er the Sea” which, again, designates a limitless, gestalt-free particular.

To explore the intense effect of *gentleness* in this line, let us corrupt for a moment the predicate:

12. The gentleness of heaven *rests* o’er the Sea.

In this corrupt line, I suggest, the affect under discussion is much weakened. What is the source of this difference? Some people would say that whereas *rests* is plain nonconfigurative language, *broods* personifies *gentleness*. Suppose that we accept this account, we will have called the phenomenon by a name, but explained nothing.
“The gentleness of heaven” will be positioned “o’er the Sea” in the same way, with both predicates. A much more illuminating way would be to distinguish, semantically, between three kinds of predicate: **predicate of state**, **predicate of process**, and **predicate of action**. Such sentences as John is tall. This coat is dry. Peter is weak. This house smells., contain **predicates of state**. Such sentences as John became tall. The grass grew. The coat dried. Churchill died., contain **predicates of process**. Such sentences as She laughed. The children became aggressive. The animals scattered., contain **predicates of action**. A **predicate of state** indicates that an associated noun is in a certain state. A **predicate of process** indicates a **change of state**. A **predicate of action** indicates a process that is self-arising, subject to voluntary control, and may be purposeful (cf. Fowler, 1974: 80-82). **Predicates of action** are predicated only of **voluntary agents**, felt to have some intrinsic, independent “force”.

It will be noticed that the three kinds of predicates are arranged above in an order of mounting amount and kind of energy. It will also be noticed that when a “higher” kind of predicate is applied instead of a lower one (that is, a predicate of process instead of a predicate of state, or a predicate of action instead of a predicate of process or state), the “extra” energy conveyed by the predicate is perceived as an amplification of the **vividness** of the description. This is what Aristotle called "energeia", vividness. If we return now to Wordsworth’s line and to its corrupted version, we may notice that rests and broods suggest the **same state**. The difference between them is that whereas the former designates a physical state, the latter designates a mental action, infusing the diffuse thing-free quality gentleness with a high level of energy, increasing its impact upon perception.

Semantically, "brood" suggests both a physical and a mental action. The former indicates spreading the wings over the young (as a bird); the latter suggests pondering, sitting quietly and thoughtfully. The former meaning suggests a visual image of the heaven spread over the sea; the latter evokes no visual image—it intensifies the all-pervasive presence of the quality "gentleness”.

Let us go one step further. I have mentioned that in Wordsworth’s line both members of the genitive phrase, gentleness and heaven are simultaneously present. In order to better understand the effect of this simultaneous presence, let us consider the following two lines from Keats **(Isabella: XLIX)**:

13. O for the gentleness of old Romance,

The simple plaining of a minstrel’s song!

**Isabella: XLIX**

and compare them to Wordsworth’s line which we have already discussed at length, and to the following lines by T. S. Eliot:
I sometimes hear  
Behind a public bar in Lower Thames Street  
The pleasant whining of a mandolin.  

*The Waste Land*

Let us compare the line “The pleasant whining of a mandolin” to “The simple plaining of a minstrel’s song”. *Plaining* means here “complaining”; *whining* means "a high-pitched complaining cry". For the sake of comparison, then, *whining* and *plaining* are sufficiently similar from the semantic point of view, and both are “thematized predicates”. Moreover, both are used to characterize music in their respective lines. Nevertheless, there is an enormous difference between them. One major difference is this: in Keats’s line, as in Wordsworth’s, both the entity designated by the prepositional phrase and its abstract property are simultaneously present, at the same time and place; whereas in the passage from Eliot, the spatio-temporally continuous particular (the “mandolin”) and its thing-free property (“The pleasant whining”) are not necessarily perceived at the same time and place. You can perceive “The pleasant whining” without seeing the “mandolin”. But in Keats's verses you cannot perceive “The simple plaining” (or “the gentleness”) without perceiving the “minstrel’s song” (or the “old Romance”), just as you cannot perceive “the gentleness” without perceiving “heaven” in Wordsworth’s line. In other words, when Eliot says “I sometimes hear […] the pleasant whining”, *pleasant whining* may be regarded as a particular in its own right, and not just an aspect of another entity. When Keats says “The simple plaining of a minstrel’s song”, *simple plaining* must be regarded as an attribute, or property, or aspect of a minstrel’s song, in which it is “grown together” with other properties or attributes, and from which it must be *abstracted*; consequently, its transmutation into the referring position serves, *inter alia*, to destroy the *thing* and to create sets of loosely connected qualities; that is, to de-automatize the relationship between the perceptual quality and the thing “of” which a perceptual quality it is. The same is true of *gentleness* in the poems by Keats and Wordsworth. Yet here, too, there is an (other) enormous difference. “A minstrel’s song” has no spatial expansion in the sense e.g. “heaven” has; and as I have suggested, the spatial expansion of “heaven” exceeds one’s capacity to encompass it in one act of perception.

We may make, then, the following interim summary of the foregoing discussion. Genitive phrases of “the ABSTRACT of the CONCRETE” form, which are the result of a *nominalized* and *thematized predicate*, that is, of a *topicalized attribute*, tend to de-automatize the relationship between sense data or perceptual qualities and the things “of” which the sense data or perceptual qualities they are. Sometimes the transformational process is reinforced by some figurative and syntactic process as well. In such cases, the result may be the “destruction” of the physical object in
which the various abstract qualities are “grown together”, and a set of diffuse, loosely related abstract qualities is generated. There is a series of conditions that tend to amplify this process: first, when the second notion of the genitive phrase, the spatio-temporally continuous particular in the concrete position is itself a thing-free and gestalt-free entity; second, when the attribute topicated in the phrase cannot be perceived apart from the particular of which it is an attribute; third, when the particular notion in the second Noun Phrase has unlimited spatial expansion, so that the topicated attribute itself is perceived as diffused over considerable space, amplifying the impression of some lowly-differentiated, diffuse, dense percept. The more advanced the expression in this series, the more evasive and intense the impression appears to be, inducing a feeling, that “the surface of one’s body becomes peculiarly important, somehow accentuated”.

Returning now to Lensky’s description of the evening lake, this stanza induces the reader to construct a coherent landscape, activating the space perception mechanisms. In the first line the subject is an abstract noun (“day”), of which a predicate of process is predicated in a setting of wide space. In line 4 there is an abstract of the concrete genitive phrase (“rustling of the reeds”). In lines 2 and 3, by contrast, the psychological subjects are concrete nouns, “fish” and “birds”. The predicates of action are conspicuously appropriate to these living things. From these parallel concrete entities certain ad-hoc categories may be abstracted which, as suggested by the Stroop effect, may become active in the back of one’s mind. The space perception mechanism activated by the landscape description is hypothesised to thicken and intensify these abstractions into some dense, obscure mood.

Let us consider now a sixteenth-century example, Thomas Nashe’s “Litany in Time of Plague”:

15. Brightness falls from the air
   Thomas Nashe

Both brightness and the air are thing-free and gestalt-free entities. Brightness is, typically, a quality of other qualities. Thus, we may speak of, e.g., bright colours. In Nashe’s line it is a topicalized attribute, derived from, e.g., the bright air. It should be noted that had we substituted for brightness a noun that typically does occur in referring position, such as “Light falls from the air”, the effect would have been incomparably weaker (again, brightness could well occur in a phrase like bright air, or a sentence like The air is bright). In the world of referents, brightness cannot be perceived without the particular or the property “of” which it is an attribute or property, the air, or the light, or the colour. The affect of this isolated topicalized attribute is further amplified by three factors. First, both the air and brightness have
unlimited spatial expansion, and the present tense suggests here an immediate situation; second, instead of the genitive link of, we have here a verb, that emphasizes the separateness of the attribute in the referring position, which thus gains relative independence from the entity of which an attribute it is. Third, brightness designates a state, but a predicate of process, falls, is applied to it; the substitution of a predicate of process for a predicate of state amplifies the effectiveness of the former two factors.

Or, consider an excerpt from Wordsworth's "Westminster Bridge" sonnet:

16. This City now doth, like a garment, wear
    The beauty of the morning;

    Wordsworth

Again, both beauty and morning are abstract nouns, and both are simulatenously present. The morning fills the entire perceived space; and its attribute, beauty, is permutated into the referring position. Moreover, the co-presence of beauty and morning, suggests a state; but is expressed by a predicate of action, wear, turning the pure abstraction into a thick texture.

Or let us consider a piece of French Symbolist poetry, from Paul Verlaine's sonnet "Langueur":

17. En composant des acrostiches indolents
    D'un style d'or où la langueur du soleil danse.

    Paul Verlaine

    Composing indolent acrostics
    Of a golden style in which the languor of the sun is dancing.

Languor (that is, fatigue, weakness, weariness) is perceived here as a property of the sunbeams. The locution loosens the relationship between the property and the entity of which a property it is. Llanguor is both the grammatical and the psychological subject of the clause. Is dancing is a predicate of action applied to a languid state, amplifying the felt presence of the languor. Thus, the intense presence of an enfeebled atmosphere is perceived in these lines.

**Synaesthesia**

Such altered states of consciousness as mystic experiences and drug experiences frequently involve synaesthetic perceptions. Consequently, one of the most effective means to convey such lowly-differentiated, non-conceptual experiences is literary synaesthesia. But in certain circumstances it may convey witty effects as well. The term synaesthesia suggests the joining of sensations derived from different sensory
domains. One must distinguish between the joining of sense *impressions* derived from the various sensory domains, and the joining of *terms* derived from the *vocabularies* of the various sensory domains, such as “soft colours” or “warm sounds”. The former concerns synaesthesia as a neuro-psychological phenomenon, consisting in anomalous sensory perception: a stimulus in one sensory modality triggers an automatic, instantaneous, consistent response in another modality (e.g. sound evokes colour). The latter is *Verbal Synaesthesia*. Literary *Synaesthesia* is the exploitation of verbal synaesthesia for specific literary effects, of which I will discuss *emotional* and *witty effects*.

I will briefly explore two stylistic considerations, one based on Ullmann’s Panchronistic Tendencies, another on the gestalt qualities of abstract and concrete nouns as discussed above.

Ullmann's work is based on a hierarchic conception of the senses, from lower to higher, as follows: touch $\mathbb{E}$ taste $\mathbb{E}$ smell $\mathbb{E}$ sound $\mathbb{E}$ sight. He found that in Romantic poetry “transfers tend to mount from the lower to the higher reaches of the sensorium, from the less differentiated sensations to the more differentiated ones” (Ullmann, 1957: 280), as in “soft colours” or “warm sounds” rather than the other way around, e.g., "loud heat" or "red softness". Out of some 2000 transfers, only a little more than one sixth go downward (ibid, 282). “It is in strict conformity with the first tendency that the touch, the lowest level of the sensorium, should be the main purveyor of transfers” (ibid, 282). The predominant destination, however, turned out to be surprising. It was not the sense of sight, but the sense of sound, the second highest in the hierarchy. Ullmann interprets this as follows: “Visual terminology is incomparably richer than its auditory counterpart, and has also far more similes and images at its command. Of the two sensory domains at the top end of the scale, sound stands more in need of external support than light, form or colour” (ibid, 283). This explanation is not very convincing. Poverty of terminology is not the only (or even the main) reason for using metaphors in poetry. On the contrary rather, the richer the sensory domain, the more it “borrows”, the poorer the domain, the more it “lends”. As for the relative scarcity of the visual domain in Ullmann’s findings, I argue in harmony with our foregoing discussion that stable visual shapes hinder intersense transfer. When such shapes are avoided, the visual sense does become the predominant destination in synaesthesia. Ning Yu pointed out similar tendencies in Chinese literature.

According to Ullmann’s own data, it is precisely touch, the lowest level of sensorium (with the poorest vocabulary) that is the main purveyor of transfers. For this, the reason seems to be that speaking of the more differentiated sensory domain in terms of a less differentiated one is a powerful means of dedifferentiation. One of my major assumptions in Cognitive Poetics is that poetry in general, and figurative language in particular, consist of a permanent pursuit after finding ways to
overcome the tyranny of highly differentiated linguistic categories. Talking about sounds and colours in terms of the tactile or thermal vocabularies may convey just such an impression of their undifferentiated, pre-categorial sensory aspects. In downward transfers, by contrast, the discordant qualities are usually felt to be less reconciled than in upward transfers. This generalization is very frequently born out by the perceived quality of individual transfers. When we use such phrases as “soft colours” or “warm voice”, the adjectives refer to certain undifferentiated perceptual aspects that elude conceptual language. If upward transfers are intuitively more natural than downward transfers, then such upward transfers as “soft colours” or “warm sounds” would be appropriate to suggest some “genuine” experience in a poem, but we should not be surprised that mannerist poets like John Donne or Oscar Wilde have occasionally recourse to such downward transfers as “a loud perfume” or “mauve Hungarian music” and “the scarlet music of Dvorák”, for witty effects.

What is the explanation for the relative paucity of synaesthetic metaphors involving the visual domain? Intersense transfer is more apt to generate discordant qualities than ordinary metaphor. To evoke an emotional rather than witty response requires a smooth fusion of sensations. Boundaries of well-defined shapes tend to resist such fusion, whereas thing-free qualities are particularly suitable to it. It is this fact that may account for the relative scarcity of synaesthetic metaphors involving the sense of seeing as compared with the more lowly-differentiated sense of hearing, in Romantic poetry. Notice this: only the visual sense presents us with stable shapes that do not change while we go away and come back.

Now consider the following three excerpts from Keats and Donne.

18. And taste the music of that vision pale.
   (Keats, Isabella: XLIX)

19. The same bright face I tasted in my sleep
   (Keats, Endymion, I: 895)

20. A loud perfume, which at my entrance cryed,
    Ev’n at thy father’s nose.
    Donne, Elegy IV (The Perfume)

Excerpt 18 displays semantic interaction between terms derived from three sensory domains. It contains a double intersense transfer, both in the expected direction: both are upward transfers, that is, the line speaks of vision in terms of music; and of music, in turn, in terms of taste. A closer scrutiny of the interaction of semantic features in these transfers may account for the impassioned, uncanny atmosphere perceived by many readers in this line. The word vision denotes an
abstraction that has no stable visual shape. In distinction from *sight*, it suggests not only the thing seen, but also an impassioned state of mind with supernatural connotations. The paleness of the vision may be associated with the paleness of the dead, or of Isabella, or of the moonlit sight, but none of them is explicitly mentioned, nor can they usurp each other’s place. So, we only have a vague, indistinct, diffuse quality of paleness. The interaction of the two terms of the genitive phrase deletes the feature [+AUDITORY] in *music* which, in turn, implicitly turns gestalt-free *vision* into a perceptual object that is a pleasant fusion of something, full of energy and expanding toward the perceiving self. In the sensory domain of taste no shapes are possible at all. The interaction of *taste* with *music* deletes the feature [+GUSTATORY], foregrounding such meaning components as “directly perceiving reality, or undergoing experience, or perceiving some fine texture or elusive quality”. The upward transfer from the less differentiated sense *taste* enhances the indistinctness of the fused sensations. The powerful fusion of the discordant senses heightens the discharge of emotions, deleting the contradictory sensuous ingredients, leaving the reader with the feel of a supersensual, uncanny atmosphere. Excerpt 18 does not refer to three different referents in the gustatory, auditory and visual domains, but to one referent in the visual domain. “Taste” transfers certain transfer features to “music” which, in turn, transfers certain transfer features to “vision”. The same holds true, mutatis mutandis in relation to excerpts 19–20.

Excerpt 19 too applies the verb “taste” to an object derived from a higher sense (“The same bright face I tasted in my sleep”). Yet it makes a very different impression. Ullmann finds that it is a strange phrase (1957: 287), but cannot account for this strangeness. I have suggested above that intersense transfer is more capable of splitting the focus than ordinary metaphor. Inducing an emotional rather than witty response requires fusion into a soft focus. Stable characteristic visual shapes tend to resist such fusion, whereas thing-free qualities facilitate it. In these two examples, “The same bright face I tasted” and “And taste the music of that vision pale” there is an “upward” transfer, from tasting to seeing, and as such, both ought to be perceived as “smooth” and “natural”. The stable characteristic visual shape of *face*, however, appears to resist *tasting*. Suppose Keats wrote “The same brightness I tasted in my dream”—this would sound at once less strange.

Consider now excerpt 20: “A loud perfume, which at my entrance cryed, / Ev’n at thy father’s nose”. It contains a downward transfer from sound to scent. Indeed, W.B. Stanford (1942) says it suggests not an experience, but the concoction of an experience.

So, synaesthesia is a “double-edged” phenomenon. In certain circumstances it may generate a lowly-differentiated emotional, experiential effect; in some other circumstances—a highly-differentiated witty effect.
To conclude. Words denote concepts. There is no escape from that. Nevertheless, some poetry can convey what is usually deemed as nonconceptual experiences. In certain circumstances, poetic form does something to language that allows the reader to detect some structural resemblance between verbal structures and nonconceptual experiences. We have considered here a few verbal devices by which poetry achieves such effects.

References


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Reuven Tsur (forthcoming) "Deixis in Literature—What Isn’t Cognitive Poetics?" *Pragmatics and Cognition* Available online: http://www.tau.ac.il/~tsurxx/DeixisInLiterature.html