

## Editorial Preface

This issue presents new and highly original texts from the current global workshop of poetics – a natural meeting place for semiotic studies of meaning and cognitive studies of mind. Literature is a privileged ‘window’ into the mind, if we follow the baroque imagery of architecture as an articulation of mind, body, and world. Conversely, a certain knowledge on the workings of the mind, its semio-cognitive processes, including its linguistic aspects, is a prerequisite of literary reading and interpretation. The way in which things make sense to our mind, in so far as we can know it, sheds light on literature – and poetry may be a primordial way to use language.

Cognitive poetics is a young discipline, but it has a large and rich set of ancestors, including Gestalt psychology, neuroscience, modern linguistics from semiology, formalism and structuralism to cognitive semantics, and modern philosophy of embodiment from phenomenology and theories of mind to contemporary semiotics. The exploration of the human world of meaning and mind is manifold; poetry itself may be the semio-cognitive exploration that every human intimately engages in every day. As the non-literary physician Sigmund Freud remarked, after having sketched out his meta-psychology, “if you wish to know more, go to literature”.

In this bouquet of contributions, we discuss the theory (L. Brandt), the evolution (C. Collins), the methodology (R. Tsur), and the aesthetic and phenomenological perspectives of cognitive approaches to literature, especially poetry (H. Ross, M. Freeman, F. Kjørup, J. Hobbs & P. Aa. Brandt). We are proud to offer articles by pioneers of the field, and happy to bring fresh insights and controversial ideas to the reader’s table. Two articles are specimens from forthcoming books (T. Deacon, R. Tsur), specially readied for this issue. Reuven Tsur’s article is a critical discussion of Eve Sweetser’s analysis of Rostand’s verse drama *Cyrano de Bergerac*. Terrence Deacon’s contribution has a more general topic and is a continuation of his article on theory of information presented in our first issue (Fall 2007). The editors are deeply thankful to the contributors from near and far who have made this volume possible.

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## Literary Studies in the Age of Cognitive Science

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This paper gives an overview of the enterprise of cognitive poetics as an area of research in the intersection between cognitive science and literary studies, and examines the role of semiotics within this framework, as it pertains to the playful occupation with expressive signs characteristic of literary art, a representational practice employed in all human cultures. As a form of aesthetic pretense literary communication engages the reader in a mental sharing that, unlike everyday pragmatic communication, does not require joint attention in the sense of attending with mutual awareness to the same object at the same time. The act of literary enunciation is not framed by the participants as deictically rooted in space and time, as is practically oriented, “situated” communication, and represented contents are not intended as direct propositional depictions of observable states of affairs. In these respects literary language use presents an interesting case for semiotics, and indeed for cognitive science which by virtue of having human cognition as its subject, encompasses the realm of imagination and expressive ingenuity. Conversely, from the viewpoint of literary studies, cognitive science can be seen to provide certain epistemological and methodological advantages which grant literary scholars a way of thinking about their objects of study as simultaneously embodying a manifestation of unique choices and particular circumstances of production as well as being indicative of universal processes of meaning construction and interpretation. The paper aims at laying out a foundation for discussing the philosophical underpinnings of the enterprise, and raises some philosophical questions concerning literary meaning as an object of research. These issues in turn make certain methodological considerations relevant which are subsequently discussed, with a view to clarifying potential scientific objectives and illuminating existing

incongruities within cognitive poetics and literary studies as such. The paper does not aspire toward any dogmatic solutions to these matters; rather it seeks to call attention to existing problem areas and to stress the significance of upholding a basic rational attitude – here contrasted with *meaning skepticism* as a philosophical position, with Rorty’s pragmatism as a prime example – as a minimum requisite motivating the various intellectual pursuits that qualify literary studies as a humanistic science. Finally, I propose the view that just as literary studies may advance by integrating insights from cognitive science, so too can cognitive science benefit from becoming progressively more attuned to aspects of the human intellect manifesting our *cultural* nature, not least aesthetic experiences of literary expressivity.

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## 1. Cognitive Poetics

### 1.1 Literary language use

It remains a disputable issue to what extent intersubjectivity and semiotic interaction is unique to humans and to what extent these competencies are shared with other species. There are diverging accounts of what specific semiotic competencies separate humans from other species, and how these competencies are to be defined in theoretical terms. It is safe to say, however, that humans are the only *literary* species.

The emergence of *literary expressivity* as a cultural practice attests to the significance of the externalization of linguistic signs into *written* symbols and to the fundamental predisposition for causal participation in each other’s inner “theaters”, to use a well-known metaphor (cf. Bernard Baars’ “theater of consciousness”, Baars 1997), by symbol use alone. Literary expressivity is a form of externalized communication which relies on the semiotic resources inherent in everyday *enunciation* and its extensions beyond the everyday, practical realm by virtue of *playful pretense* (see also Collins 1991). Humans have evolved a semiotic culture which proliferates communication not just for purposes of coordination and negotiation, i.e. socially and materially practical purposes, but for the sake of momentary enjoyment – jesting banter, story-telling, nonsense-making and other non-pragmatic communication scripts, or “language games”, not governed by a principal concern for factual states of affairs. Interpersonal

Christopher Collins

## **Palaeopoetics: Prefatory notes toward a cognitive history of poetry**

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As a verbal artifact, a poem draws upon a number of nonverbal structures in the brain. Even before the emergence of language, certain behaviors had to have been in place, e.g. an increased capacity to bind perceptual data and process them as single events (episodes) and the ability to reproduce perceived actions (mimesis). These two evolutionary phases, according to Merlin Donald, preceded language, but to allow for the emergence of that specific activity we know as poetry, two other behaviors must also have evolved – play and tool-making. Play supplied episodes with frames and as-if intentionality, while tool-making skills enhanced mimesis by crafting artifacts that were saved and reused. Palaeopoetics, which I would define as the study of cognitive skills pre-adaptive to verbal poesis, is a project that examines play, episodic awareness, mimesis, and tool-making as forming the common foundation upon which all the myriad varieties of oral and written poetry have been built.

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How did poetry begin? From a cognitive-evolutionary point of view this is not an unanswerable question. If we agree that poetry is a complex operation that the brain performs, agree that the complexity of the brain consists of the structures and functions, albeit modified, of its own evolutionary past, then we should agree that poetry, too, should be able to reveal something of its own beginnings in its structures and functions. But then, of course, the follow-up question becomes “what is poetry?”. A convenient first answer would be: “Poetry” is what most people around the world and down through the ages have assumed it to be, namely, the practice of making self-contained, formally patterned verbal compositions. In the course of this essay I will propose some

Haj Ross

## Structural Prosody

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This article examines in great detail an eighteen-line poem by William Carlos Williams: “To Waken an Old Lady”. It argues that the poem can be *sectioned* – seen as consisting of two nine-line halves, the first half being characterized by a desperate bustling activity, and the second half by a serenity, by the attainment of peace. It is also proposed that the poem be seen as divided into thirds, and in fact even into six three-line units, which six mention birds, snow, and wind in the first half, and again, these same three in the same order, in the second half. One of the arguments for this *cosectioning* is the number of words in each three-line unit: nine words in each bird-unit; seven in each snow unit, and ten in each wind-unit. This device of *numerical rhyme*, coupled with another poetic *gesture* – that of moving an element from the first place in a unit to a last place in a corresponding one (or the reverse of this movement) – this pattern of marking *boundary* in a poem by *firsting* and *lasting* – coupled with a masterful ascent to a climax of transcendent harmony, which the wake-up call of the poem, the reperception of later life, offers to the old lady in the title, explains the use of the term *prosody* for the beauty of the poem’s impact, a beauty which confirms the mastery of the poet.

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The short paper that follows is, as will be obvious to the many others whose work has been permanently shaped by the immensity of his genius, a sort of thank-you note to my teacher and friend, Roman Jakobson. I have not forgotten, nor will I ever, how as a student at MIT I went to the first meeting of the course he gave which always had the same title: “Crucial problems in linguistics”. My head was far away from what I thought I had known of his work – on shifters, morphology, the history of Slavic, distinctive features, acquisition, aphasia – the whole stunning catalog we know him for.

Frank Kjørup

## **Grammetrics and Cognitive Semantics: Metaphorical and force dynamic aspects of verse-syntax counterpoint**

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The phenomenon of verse-syntax heteromorphy, frequently described in terms of *enjambement* or *run-on lines*, is investigated in its structural and functional aspects. Investigating the basis for the tradition of conceiving the phenomenon as a kind of counterpoint, this structural analogy, being found to hold an intuitive attraction, is analysed with a view to its functional implications: what does it imply for the contrapuntal phenomenon in terms of perception/performance to be conceived in terms of different scenarios of force-dynamic emphasis on its structurally constitutive terms? The four basic scenarios of *run-on*, *enjambement*, *versificational pseudosyntax* and *garden path versification* are thus analysed. Next, the investigation turns to focus on the theoretical implications of different conceptions of syntactic movement as observed to relate to different conceptions of verse-linear space. An emergent pattern of conceptual mind-body continuity is discussed with a constant view, on the one hand, to the phenomenal specifics of verse-syntax counterpoint and, on the other, the deeper phenomenological significance to be drawn from analysing this structure. The phenomenon is finally found as being meaningful, articulating basic experience, in a broader existential perspective.

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### **Verse-syntax heteromorphy as poetic counterpoint**

A central discipline of poetics, grammetrics (Wesling 1993, 1996) studies the interaction of the linguistic semiotic of grammar and the aesthetic semiotic of metre. While the latter is taken in its broadest sense to include not only auditory

Margaret H. Freeman

## **Reading Readers Reading a Poem: From conceptual to cognitive integration**

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My attempt in this paper is to further the discussion of the role of conceptual blending in cognitive poetics by looking more closely at the cognitive processes by which readers interpret a literary text. I start by describing the results of an informal experiment to determine what mapping strategies people actually use to solve an analogical problem. I discovered that people tend to map on the basis of similarity and relation; they do not spontaneously apply the more abstract reasoning processes based on form that may be unique to human beings, what Holyoak and Thagard (1995) call *system mapping*. I then analyze critical readings of a poem by Emily Dickinson from the perspective of conceptual blending. My analysis shows that different interpretations arise as a result of readers selecting different topologies and projections to make sense of the text according to their own knowledge, experience, intentions, and motivations. Missing from their interpretations is any attention paid to formal qualities – such as order and shape, or prosodic and linguistic features – that reveal the poem’s tone or feeling, elements that would need to figure in a full system mapping approach. I then sketch out an approach toward reading Dickinson’s poem based on a theory of literature that takes into account form as symbolic of human feeling (Langer 1953). I conclude by suggesting that my approach offers a way that shows how system mapping based on a theory of art can provide a cognitive poetics reading that combines interpretive (conceptual) and experiential (emotional) responses.

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Per Aage Brandt & John Hobbs

## Elements in Poetic Space: A cognitive reading

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In this article we compare in two well-known poems the representation and function of space as experienced and imagined by human minds. According to Larsen (1996) and Brandt (1995), human representations manifest distinct but connected versions of an imaginary space, which unfolds canonically into three phenomenologically basic forms: the bio-imaginary, the socio-imaginary, and the phantasmic imaginary. The poems lead us to study this unfolding in a stepwise process directly related to their emotional meaning. We show that the general existential and metaphysical meaning of events and states in the textual content is linked to the evaluative morphologies of these spaces and versions of subjective embodiment. The guiding principle is that experienceable spaces are articulated by the natural elements into contrasts between proximal and distal sections, and that the bodily experience of 'near' and 'far' is further connected to thymic oppositions of euphoric and dysphoric values assigned to figurative contents. The spatial contrast between polar element oppositions of water (proximal) and air (distal), or implications thereof, appears to be particularly important in poetry.

The inquiry into the semantics of the *imaginary* as such, or the 'imaginative mind' (Roth 2007), is a new enterprise in cognitive poetics, whereas it has many resonances in modern literary criticism.

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### Introduction

Our purpose is to demonstrate how cognitive and traditional poetic interpretations can be complementary, using as examples two familiar nature poems.

Reuven Tsur

## Comparing Approaches to Versification Style in *Cyrano de Bergerac*

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Aiming to highlight the difference between the author's approach to "Cognitive Poetics" and that informing analyses based on cognitive linguistics, this paper offers an analysis of versification style in Rostand's *Cyrano de Bergerac* in the contrastive light of reflecting upon Eve Sweetser's investigation of rhyme and metre in the same play. Proceeding from a gestalt-oriented perspective, the analysis focuses, first, on the perceptual implications of intrusions upon the verse line (such as caesura and syntactic boundaries), noting in particular their crucial significance for the perception of line integrity, as seen in the context of Rostand's tense, a-classical, style of alexandrine composition. Secondly, the semantic structure of rhyme words is analyzed, with an emphasis on such perceptual effects as "vigorous" and "tame". Revitalizing a central tenet of New Critical theory, the paper concludes by arguing for a theoretical framework of Cognitive Poetics doing away with the traditional, still widely observed form-content dichotomy.<sup>1</sup>

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### Preliminary

Since the first publication of my book *Toward a Theory of Cognitive Poetics* (1992), many scholars adopted the term "Cognitive Poetics", and it is now widely used – in quite different senses. For instance, there is a difference to be observed between, on the one hand, the understanding informing certain approaches based on cognitive linguistics and, on the other hand, my own understanding of Cognitive Poetics.

1 Editorial note. Abstract provided by the editors of the present special issue. With the exception of editorial adjustments to the prefatory paragraphs, the paper printed below is to appear as part of an updated, second edition of *Toward a Theory of Cognitive Poetics* (Tsur 2008).

Terrence W. Deacon

## **Shannon – Boltzmann – Darwin: Redefining information (Part II)**

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A scientifically adequate theory of semiotic processes must ultimately be founded on a theory of information that can unify the physical, biological, cognitive, and computational uses of the concept. Unfortunately, no such unification exists, and more importantly, the causal status of informational content remains ambiguous as a result. Lacking this grounding, semiotic theories have tended to be predominantly phenomenological taxonomies rather than dynamical explanations of the representational processes of natural systems. This paper argues that the problem of information that prevents the development of a scientific semiotic theory is the necessity of analyzing it as a negative relationship: defined with respect to absence. This is cryptically implicit in concepts of design and function in biology, acknowledged in psychological and philosophical accounts of intentionality and content, and is explicitly formulated in the mathematical theory of communication (aka “information theory”). Beginning from the base established by Claude Shannon, which otherwise ignores issues of content, reference, and evaluation, this two part essay explores its relationship to two other higher-order theories that are also explicitly based on an analysis of absence: Boltzmann’s theory of thermodynamic entropy (in Part I) and Darwin’s theory of natural selection (in Part II). This comparison demonstrates that these theories are both formally homologous and hierarchically interdependent. Their synthesis into a general theory of entropy and information provides the necessary grounding for theories of function and semiosis.

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