ZESZYTY NAUKOWE UNIWERSYTETU RZESZOWSKIEGO

SERIA FILOLOGICZNA

ZESZYT 14/2003 STUDIA ANGLICA RESOVIENSIA 2

Craig HAMILTON

THE FUTURE OF COGNITIVE POETICS[1]

In January 1999 in Amsterdam, the *Poetics and Linguistics Association* (*PALA*) hosted a one-day symposium to interrogate "cognitive stylistics." While not really defined in the statements published afterwards, cognitive stylistics seemed to stand for a way of studying stylistics based on cognitive linguistics. Also found in the published statements was far more scepticism than optimism towards all things cognitive. One drawback Peter Verdonk saw was that too much focus was placed on readers and not enough on writers when looking at literature from a cognitive point of view (*PALA 2*). Another limitation Peter Stockwell pointed out was that cognitive poetics had yet to produce the systematic *and rigorous methodology* lacking in critical theory today (*PALA 8*). On the one hand, the tendency to focus on readers rather than writers with a cognitive approach essentially raises the following question: *What is the object of study for such an approach to literature*? On the other hand, the issue about methodology raises another question*: What are the methods of cognitive poetics*? Answering these two questions, in the space I have here, shall be the focus of this paper. I shall conclude with general reflections on where cognitive theory is headed.

What object of study?

Let me begin with a simple question that rarely gets asked these days in English Departments: *What does it mean to be a human being?* If we turn to literature for an answer, we might say that engaging in symbolic activity of an artistic nature is central to what it means to be human. As far as I know, no anthropologist has yet discovered a society that does not engage in some kind of

[1] A version of this paper was presented at the 20th *PALA* conference at Goldsmiths College in London in June 2000.

art form. As such, symbolic art activity is as universal as grammar. However, to engage in art requires a mind and an imagination and this is where all the trouble starts. For example, the title of an essay by Sabine Gross is worth a thousand words: "Cognitive readings; or the disappearance of literature." In this review of Mark Turner's *Reading Minds: The Study of English in the Age of Cognitive Science*, Gross claimed that *Reading Minds* enabled us to see how wonderful *our* minds were as readers, but this finding was made at the *expense* of literature. Gross's argument was that when literary critics studied the mind and its literary nature, rather than literature itself, literature would vanish from our research. In other words, when a literary critic studies the mind rather than literature, she practices cognitive science without a license. The problem with this argument is that it buys into a division of knowledge between the humanities and the sciences that no longer holds. Such a division led to the awful scenario we saw in 1999 when *PMLA*, the most widely read journal for literary critics in America, published three articles on "literature and memory." Despite mountains of recent research into memory in cognitive science, the leading authority on memory cited by the three literary scholars in that issue was Freud.

All this would seem to suggest that the mind is off-limits to scholars in the English Department. Nothing could be further from the truth. Consider William Empson. As Frank Kermode put it in the *London Review of Books* recently, Empson *was always sure that the interest of a poem arose from its representation of what passed in the mind of the poet, and the piling up of information about what the poem means is in the end an investigation of the mind that produced it* (Kermode 2000:10). If criticism, *the piling up of information*, is actually *an investigation of the mind that produced [a poem]*, or of *what passed in the mind of the poet*, then studying the joint venture of mind and text makes sense. But what would it mean to study this joint venture? For starters, it would involve learning something about the way our minds in general work.

Consider Imagism. Ezra Pound insisted that Imagist poets use only natural objects as symbols. His infamous advice to Imagists was: *go in fear of abstractions*. While no critic has adequately explained why this should be so, it turns out that the most common objects in Imagism are what the psychologist Eleanor Rosch would call *basic level objects*. In Rosch's famous research on categorisation, superordinate (e.g., furniture), basic (e.g., chair), and subordinate (e.g., easy chair) levels exist in any given category (Mervis and Rosch (1981:92)). Fewer items exist at the superordinate level and more exist at the subordinate level. Such is the way we organise the world. Basic objects are very significant because they help *form a mental image isomorphic to the appearance of members of the class as a whole* (Rosch 1978:34).[2]

[2] Alan Paivio's well-known research on images and words corroborates this finding of Rosch's. According to Steven, some of the first words children learn tend to be the names of basic

Now given this research on categorisation in psychology, we can better understand the mind of Imagist poets via their use of basic natural objects. For instance, consider the objects used in H.D.'s "Oread" of 1915:

Whirl up, sea —
Whirl your pointed pines,
Splash your great pines
On our rocks,
Hurl your green over us,
Cover us with your pools of fir.

and the objects in the first three lines of D.H. Lawrence's "At the Window":

The pine trees bend to listen to the autumn wind as it mutters
Something which sets the black poplars ashake with hysterical laughter;
While slowly the house of day is closing its eastern shutters.

The natural objects we see here (e.g., pines, pine trees, and black poplars) are subordinate level ones rather than basic ones (e.g., trees). Why do Imagists like H.D. and Lawrence prefer these? Concepts from categorisation theory like *gradients of representativeness* (Mervis and Rosch (1981:95)) or *prototypes* (Gibbs 1994:296) may provide an answer. Gradients of representativeness refer to the phenomenon that *some exemplars of a category are more representative than others* (Mervis and Rosch (1981:96–99)). Exemplars are representative prototypes, highly salient members of a category.[3] Therefore, H.D.'s *pines* and Lawrence's *pine trees* may be more poetically effective than simply using *tree* because pine trees, in our culture at least, may be *prototypical* trees. It is not far fetched to think that we would draw a pine tree when told to draw a tree because its representativeness is exemplary of the *tree* category as a whole. Moreover, the chosen words are fine lexical labels for producing the desired mental image and for evoking the entire symbolic category they belong to. These notions could demonstrate why exemplary objects get used in Imagist poems: you get a lot of mileage out of basic level or exemplary objects because they are so evocative. Pound probably knew this when listing Imagism's principles but he did not have Eleanor Rosch around to tell him how the mind categorised objects. In other words, what we have now is empirical research like Rosch's to explain what Imagists only sensed intuitively. Simply put,

---

objects (Pinker 1994:155), which would help explain their vitality. Michael Tomasello, a psychologist, might say that this is due to the fact that in Western middle-class families, parents tend to point out and name basic objects all the time to their infants in order to teach the terms to their infants, something we do not do for verbs. (Lecture: Dr. Michael Tomasello, "Culture and Human Cognition," 12 November 1999, Université Paris IV–Sorbonne).

[3] The formulaic phrase Rosch and Mervis used to test for gradients of representativeness when measuring speed of processing is *An [exemplar] is a [category name]* (Rosch and Mervis (1981:96); brackets in original).

Imagists capitalised on a foundational cognitive building block for elaborate poetic reasons.

Having said that, in order to understand the Imagist mind we need to understand our own minds too. Hence, we cannot really study one without studying the other. I do not think Empson would disapprove. We are now able to see why Imagists used few adjectives to modify basic nouns. If modification limits the evocation of larger categories, of wider meanings, then the basic level object is perhaps the best choice for semantic priming in poetry. Likewise, if a commonly shared cognitive capacity like categorisation is made manifest in a poem, then it is next to impossible to study the mind of the reader without considering the mind of the poet as well. Indeed, were the two minds producing a poem at any given time in reading so fundamentally different, one from the other, poetry would not happen. Fortunately, we have a few thousand years of experience to tell us that poetry does happen.

What methods?

Biologists have *methods* to gather data, test a hypothesis, and report their findings in such a way so as to make those findings reproducible by any other lab in the world conducting the same experiment. When you fudge your methods, your results are not reproducible. If you do this, you can lose your job, as the infamous David Baltimore affair in the USA taught us in the 1980s. For us, however, things are different. Other literary critics rarely reproduce our results. Two of us can read Dickens through the lens of Foucault, get different results, and still keep our jobs. Indeed, many of our "methods" consist of applying concepts from philosophy, psychology, economics, linguistics, or history to the study and analysis of literature. As such, cognitive poetics is no different: it applies appropriate findings in cognitive linguistics to the study of literary texts. In this manner, Tsur's definition of cognitive poetics as a sort of applied cognitive science for literature (1992:1) is valid,[4] even if cognitive science is not always easy to define.

[4] Needless to say, the father of cognitive poetics, Reuven Tsur in Israel, has stated the following: *A cognitive approach becomes increasingly indispensable for accounting for certain central effects of poetry. But the cognitive approach involves a great danger too: reductionism. Cognitive Poetics must learn to benefit of the advantages of the cognitive approach without suffering of the deficiencies of reductionism. The most vicious danger inherent in reductionism is that it offers a true description of the phenomenon under discussion in the alternative language of a more "basic science", arousing the false impression of contributing to a better understanding of it. It is, however, a mere "unnecessary duplication of terms". This danger is not specific to literary studies. We meet it all around in the academy: some scientists earnestly believe that it is only a matter of time that neurological processes will completely account for psychological processes; or*

My discussion of objects in Imagism applied research from psychology to poetry as a method to better understand the Imagist mind. However, the tools of cognitive linguistics are extremely useful for analysing language, as readers here saw in Marek Kuzniak's precise analysis of "desire" recently (Kuzniak 2001). To test-drive another method from cognitive linguistics, I would like to apply to W.H. Auden's poetry Gilles Fauconnier and Mark Turner's theory of blending or *conceptual integration networks* (1998). Consider Auden's spatial metaphors for the human body. In many poems, Auden uses houses, cities, and landscapes as metaphors for the body. Some of these figures involve common syntactical expressions of the "NounPhrase-of-NounPhrase" type (Turner 1998:54). These syntactic patterns are often truncated "XYZ metaphors" (Turner 1991:197–201). An XYZ metaphor is comprised of three noun phrases separated by a prepositional phrase. Examples of such metaphors are: *Language is the mother of a poem* (Auden, adapted); *Speech is the mother of Thought* (a Karl Krause phrase Auden loved); and *July Fourth is the Thanksgiving of Great Britain*. In these statements, three metaphoric elements (X, Y, Z) are explicit. To use conceptual metaphor theory's terms, elements X and Z are in the target domain, and element Y is in the source domain. So, for instance, in *A poet is the father of his poem* (Auden, adapted), the source is *father* (Y) and the target is *poem* (Z). *Poet* (X), closely related to poem, is also part of the target domain. A crucial but hidden element (W), namely child, gives us the metaphor's full analogical meaning: A father is to a child as a poet is to his poem.

Similar to XYZ metaphors are "YZ compounds" (Turner 1998:54), where only the last two elements of the metaphor are explicitly mentioned. YZ compounds are made of two noun phrases separated by a prepositional phrase. A dozen examples of these compounds from Auden's spatial body metaphors, where elements Y and Z (two noun phrases) are linked by the preposition *of*, are listed in Figure 1.

Unlike fully developed XYZ metaphors, Auden's phrases are truncated YZ compounds. We put these nouns into a relationship across target and source domains when we *connect these spaces by cross-space mapping* (Turner 1998:54). Thus, Auden's compounds (e.g., *pools of my pores*) prompt a cognitive process that borders on *analogy* even though only two elements from the network are overtly named (Y and Z). The syntax "NounPhrase-of-NounPhrase" sets up a mapping relationship that becomes metaphoric when the semantic distance between the two domains hits the metaphoric threshold. Thus, Auden's

---

biochemical or electric processes will account for neurological processes which, in turn, will account for psychological processes and, eventually, for aesthetic experience (http://www.tau.ac.il /~tsurxx/Emily_Dickinson.html). While I cannot say that I agree with Tsur on this point (I am more optimistic about cognitive poetics), the fear of reducing literature to cognitive science has been raised recently by Dimock.

metaphors are principled, not arbitrary: there is enough distance, for example, between *pools* and *pores* to produce a metaphor even if the domains (as they must) share similar topographical features.

Figure 1. Data for YZ Compounds in Auden

NP (Y)	*PP*	*NP (Z)*	*Page in Collected Poems*
the channels	of	the ear	130
land [i.e., face]	of	flesh and bone	137
the provinces	of	his body	247
the deserts	of	the heart	249
the harbour	of	her hand	251
the shabby structure	of	indolent flesh	285
the kind gates	of	the body	627
the Frontier	of	my Person	688
the pools	of	my pores	838
the tropical forests	of	arm-pit and crotch	838
the deserts	of	my fore-arms	838
the cool woods	of	my scalp	838

Of course, Aristotle was the first to deal with the analogical nature of certain metaphors: *As old age (D) is to life (C), so is evening (B) to day (A). One will accordingly describe evening (B) as the 'old age of the day,' (D + A) … and old age (D) as the 'evening' or 'sunset of life' (B + C)* (qtd. in Fauconnier and Turner (1999:406)).[5] Charles, in a seldom-cited yet wonderful 1982 article titled "Cognitive Metaphor," refers to the same passage in Aristotle and argues that metaphor is *a cognitive process* (Hartman 1982:330; my italics). Hartman gathers data for analogical metaphor in poems by Burns, Williams, and Stevens, before noting that the hallmark of such metaphors is that the terms of the vehicle are explicit, but usually we must deduce at least one term of the tenor (Hartman 1982:332). While implicit terms make metaphors of this sort analogical for Hartman, the cognitive process of metaphor, "deducing" the missing analogical elements to process the metaphor, is something conceptual integration theory handles rather nicely.

To see how conceptual integration can account for analogical metaphors like Auden's, let us focus on just one example from Figure 1: the image of *the kind gates of the body* from "Prime" in the "Horae Canonicae," a sequence published in 1955. Auden's phrase, *gates of the body*, is a YZ metaphor that prompts us to

[5] Turner has also explained that *the XYZ figure has a corollary Z-Y compound noun form [e.g., 'land yacht']* (Turner 1998:54). In the case of a Z-Y compound like *land yacht*, the NP-NP nominal compound, where *land* actually becomes adjectival in modifying *yacht*, emphasises the Y-Z relationship. Analogically, large cars (X) are yachts (Y) of the land (Z), and such a Z-Y compound is a conceptual blend.

combine *gates* from Input 1 (i.e., the source) with *body* from Input 2 (i.e., the target) in the emergent structure of the blend. Figure 2 represents these elements.

Figure 2. The YZ Compound from "Prime" as a Blend

Generic Space	*Input 1*	*Input 2*	*Blend*
Part-whole structure	Gates (Y)	Senses (X)	Gates (Y) of
Container image schema	City (W)	Body (Z)	The Body (Z)

In a minimal conceptual integration network like this, we have a generic space, two inputs, and a blended space. What is generic to both inputs are the part-whole structure and container image schema that both bodies and cities have in common. That is, bodies and cities can be thought of as containers with part-whole relations. The importance of the generic space is that it indicates the constraints on the mapping. *The body cannot be understood in terms of just any old structure*. Rather, its "source" input space must include a structure that it is in some ways compatible with. Now notice that Auden's YZ figure leaves two elements (X and W) out of the final blend. The X and W elements are implicit but they need to be deduced to grasp the YZ compound. Without senses and cities, for example, we would not know what kind of relation to create between gates and bodies.[6] However, since the YZ compound is itself the blend, elements X and W are left out from the selective cognitive projection in the blend.

What is amazing about this example, and others like it, is that the mapping instructions that Auden provides us with are *minimal* although the semantic output is *maximal*. Rather than give us full four-part analogies, or even XYZ metaphors, Auden presents us with just YZ compounds. The beauty of these bits of figurative language is that we can build a very rich image and original understanding of the human body with these sufficient, albeit necessary, cues. These minimal cues are the "ground zero" for any understanding of the poem for they provoke a good deal of cognitive elaboration. That mental "work" is what cognitive linguistics has been describing for some time now, and models like those for conceptual integration enable us to think through the epistemological foundations of figurative language. These models are highly relevant to cognitive poetics for they locate precise elements we can agree or disagree upon when looking into a poem's metaphors. If this method helps us do at least that, then the method is worth considering.[7]

[6] Note also that the ZW compound (body-city) identifies the BODY AS CITY conceptual metaphor, demonstrating that metaphors can be inputs to blends (Grady *et al*. 1999:113).

[7] It is important to note that of blending theory's six *optimality principles* (Grady *et al*. 1999: 108), the one that is significant for our purposes is the fourth, the *topology principle*. The topology principle is defined as follows: *Elements in the blend should participate in the same sorts of relations as their counterparts in the inputs* (Grady *et al.* 1999:109). The implications of the topology principle

What future?

In order for future research into cognitive poetics like this to be fruitful, we might down play the fact that our bibliographies are loaded with cognitive science texts. There is a serious albeit misguided fear that we want simply to "reduce" literature to cognitive science (cf. Dimock (1999)). But if elaborating the cognitive principles that make acts of literature possible is mistakenly viewed as *reduction*, so be it. After all, to paraphrase Alan Richardson, most current critical theory reduces everything to some form of materialism without ever considering the three-pounds of material we all possess inside our skulls. For sceptics, I think that work like Masako Hiraga's doctoral dissertation on metaphor, poetry, and iconicity will be sufficient to quiet some detractors of cognitive poetics. Insightful and systematic cognitive criticism will convince still more critics. At the end of the day, however, some people will just never be happy no matter how hard we try. So stock in cognitive poetics is rising in North America but falling quickly in Europe. A year of seminars at the Center for Research on Literature and Cognition at the University of Paris 8 convince me of this. The few literary scholars in France with a stake in the cognitive approach are also the approach's biggest detractors. This makes the whole enterprise look rather insincere instead of pointing the way to building a better mousetrap. At this rate, although web sites by Francis Steen (www.cogweb.net) and Alan Richardson (http://www2.bc.edu/~richarad/lcb/home.html) suggest otherwise, cognitive theory may vanish before many literary critics can learn of its uses. At the very least, these resources point to what cognitive theory (i.e., cognitive poetics, cognitive stylistics, cognitive criticism, etc.) has become on the other side of the Atlantic. What happens on this side of the Atlantic, however, may be another story. Let us hope not because if the comments from Amsterdam are taken at face value, then we will soon see papers like "What was Cognitive Poetics?" in our professional journals.

---

are clear with the example from Auden we have been studying. The first topic of Auden's YZ figure is the body, not the gates, because we are supposed to understand *body* via *gates*, not *gates* via *body*. With the development in "Horae Canonicae" of city and Christian images, to label elements W (city) and X (senses) in this YZ blend appears reasonable. Moreover, the YZ figure of the body metaphor here is highly productive: it provokes the reader to activate a network of analogical relations to elements like the city (W), thereby implicitly introducing another topic into the poem. Gates can be associated with fortresses, walled cities, houses, yards, fields, and even airports. Open gates suggest vulnerability; closed gates defensive measures. Auden's lines, *the kind/Gates of the body fly open/To its world beyond*, imply that the body's openness is beneficial and the scenario here could be easily understood as positive and welcoming, which is what I take to be the second topic here in Auden's body metaphor. This YZ figure relates opening city gates to opening the body, signifying openness or release from the container that is the body. In this fashion, the mappings bind nicely because topology among the inputs elements is maintained.

References

Dimock, W.C. 1999. “Forum: Reply to Ellen Spolsky,” *PMLA* 114. 222–223.

Fauconnier, G. and **M. Turner**. 1999. “A mechanism for creativity.” *Poetics Today* 20. 397–418.

Fauconnier, G. and **M. Turner**. 1998. “Conceptual integration networks.” *Cognitive Science* 22. 133–187.

Gibbs, R. 1994. *The Poetics of Mind*. Cambridge: Cambridge University Press.

Grady, J., T. Oakley and **S. Coulson**. 1999. “Blending and metaphor.” *Metaphor in Cognitive Linguistics*. Eds. Raymond Gibbs and Gerard Steen. Amsterdam: John Benjamins. 101–124.

Gross, S. 1997. “Cognitive readings; or, the disappearance of literature in the mind.” Rev. of Mark Turner’s *Reading Minds: The Study of English in the Age of Cognitive Science* (Princeton UP, 1991). *Poetics Today* 18. 271–297.

Hartman, C. 1982. “Cognitive metaphor.” *New Literary History* 13. 327–39.

Hiraga, M.K. 2000. “The interplay of metaphor and iconicity: A cognitive approach.” Unpublished Ph.D. dissertation. Goldsmiths College, University of London.

Kermode, F. 22 June 2000. “The heart of standing is you cannot fly.” Rev. of John Haffenden’s *The Complete Poems of William Empson* (Allen Lane Press, 2000*). London Review of Books.* 10–11.

Kuzniak, M. 2001. “The semantics of *desire*: An axiological-cognitive account.” *Studia Anglica Resoviensia* 2. 55–63.

Mervis, C. and **E. Rosch**. 1981. “Categorization of natural objects.” *Annual Review of Psychology* 32. 89–115.

PALA. 8 January 1999. “Book of statements for the International Symposium on Cognitive Stylistics”. University of Amsterdam.

Pinker, S. 1994. *The Language Instinct*. New York: Morrow.

Richardson, A. 1999. “Cognitive science and the future of literary studies.” *Philosophy and Literature* 23. 157–73.

Rosch, E. 1978. “Principles of categorization.” *Cognition and Categorization.* Eds. Eleanor Rosch and Barbara Lloyd. Hillsdale, NJ: Erlbaum. 27–48.

Tsur, R. 1992. *Towards a Theory of Cognitive Poetics*. Amsterdam: North Holland.

Turner, M. 1991. *Reading Minds: The Study of English in the Age of Cognitive Science*. Princeton: Princeton University Press.

Turner, M. 1998. “Figure.” *Figurative Thought and Language*. Ed. Albert Katz. New York: Oxford University Press. 44–86.