

In Gitte Kristiansen, Michel Achard, René Dirven, and Francisco Ruiz de Mendoza, eds. *Applications of Cognitive Linguistics: Foundations and Fields of Application*, 403-428. Berlin: Mouton de Gruyter, 2007.

The Fall of the Wall Between Literary Studies and Linguistics: Cognitive Poetics

Margaret H. Freeman

Abstract

This paper explores how cognitive poetics may serve as a bridge between literary studies and linguistics. Because cognitive poetics studies the cognitive processes that constrain literary response and poetic structure, it provides a theoretical cognitive basis for literary intuition. At the same time, by exploring the iconic functions that create literature as the semblance of felt life, cognitive poetics contributes to our understanding of the embodied mind. The effect of what I call “poetic iconicity” is to create sensations, feelings, and images in language that enable the mind to encounter them as phenomenally real. The paper draws upon Susanne K. Langer’s (1953, 1967) theory of art, Charles Sanders Peirce’s (1955[1940]) theory of the sign, Ellen Spolsky’s (1993) theory of literature bridging the gap caused by the mind’s modularity, Elaine Scarry’s (1999) theory of images in the mind, and the cognitive-semiotic notions of blending, deixis, negative polarity, and schema theory to show how Robert Frost manipulates the fictive and factive planes in his poem, “Mending Wall,” to create a poetic iconicity of feeling that leads literary critics to their various interpretations of the poem. It concludes by arguing that both literary studies and cognitive linguistics are complementary ways of showing how a literary text extends natural language use in order to bridge the gap between mind and world.

Keywords: Cognitive poetics; iconicity; blending; schema; deixis; negative polarity; Robert Frost

1. Introduction: Brief Sketch of Literary and Linguistic Relations

Over thirty years ago, George Steiner (1970) explored the history of “the language revolution” in literary studies from its development at the turn of the twentieth century. In his chapter on linguistics and poetics, he comments on “the arrogant absurdity” of those who deem themselves qualified in the art of literary study and yet who are totally ignorant of what linguistics contributes to the knowledge of language (p.150). One could just as well say that linguistics as practiced in the twentieth century was just as arrogantly oblivious of the literary text (but see Jakobson 1987 for a notable exception). When the editors of this volume invited me to contribute this chapter on the “fall of the wall between literary studies and linguistics” as they put it, I had no doubt that they had in mind, in Steiner’s phrase, the “mutually suspicious” attitudes of both literary critics and linguists to each others’ work that still exist in academic departments today (Henkel 1996). Whether “the cognitive revolution” that has replaced “the language revolution” at the turn of the twenty-first century can succeed where its predecessor has so obviously failed remains to be seen. In this short essay, I will attempt to outline what I see in cognitive poetics that might suggest a means for better understanding between linguistics and literary studies.

Twentieth century linguists, especially Noam Chomsky and his followers, scorned what they called “mere performance” in their aim to produce a theoretical account of linguistic competence. Cognitive linguists, to the contrary, as the other chapters in this volume show, adopt an encyclopedic view of language and attempt a scientific account of natural language in use. As a result, they have shown increasing awareness of how literary texts might provide a productive source of data for investigation. They have not yet, however, generally recognized the contribution that the accumulated knowledge of literary studies might make to their own research agenda. Likewise, literary critics have been dismissive of linguistic approaches to literature, cognitive or otherwise, either because such approaches fail to account for what the critics consider significant or because the “scientific” apparatus simply recasts in technical jargon what they have said, and said more clearly.

More intense collaboration between linguistics and literary studies could be mutually beneficial. Literary studies have developed over centuries an expertise in reading and analyzing texts which, in the process, has led to the recognition and better understanding of such phenomena as point of view, perspective, narrative, tone, foregrounding, implied author, and so on. It has also developed expertise in relating imaginary worlds to the real contextual worlds of author and reader. Cognitive linguistics, for its part, has developed theories of such phenomena as deixis, figure-ground, fictive motion, mental space mappings, and so on, that parallel literary discoveries. It is no surprise, therefore, that many literary critics find cognitive linguistic applications to literary texts merely “jargonizing” what they already know, and cognitive linguists find literary readings ad hoc and impressionistic. The paralleling of terminology between the two fields is, however, deceptive. Whereas literary critics focus on illuminating the language of the text, cognitive linguists focus on illuminating the language of the embodied mind. This is where cognitive poetics comes in.

2. Cognitive Poetics

In linking the processes of language in literary text construction and interpretation to the processes of language in the workings of the human mind, cognitive poetics provides a bridge between the two fields.

2.1 Brief History

Cognitive Poetics developed over the past twenty years or so from several different strands. Reuven Tsur (1983) was the first to use the term to describe his theoretical and methodological approach to poetry, drawing from studies in psychology, neuro-anatomy, and literary criticism. Another strand developed almost a decade later in Tabakowska’s (1993) work in applying Langacker’s (1987, 1991) studies in cognitive grammar to poetic translation. Meanwhile, Lakoff and Johnson’s (1980) work in conceptual metaphor theory led to Lakoff and Turner’s (1989) *More than Cool Reason: A Field Guide to Poetic Metaphor*, from which another strand more closely linked to metaphor theory developed. This strand broadened into further studies as a result of Fauconnier and Turner’s (1994, 2002) work in conceptual integration theory, or “blending,” as it is more commonly known. Yet another strand emerged from a more general interest in the relation of cognition as reflected in the multidisciplinary approaches of cognitive science to literary studies (Crane and Richardson 1999). Meanwhile, work in cognitive narratology (Emmott 1997; Fludernik 1993), text-world theory (Werth 1999; Gavins 2005), and cognitive stylistics (Semino and Culpepper 2002) expanded the role of cognitive poetics to include other theoretical perspectives and all literary texts.

2.2 What Is Cognitive Poetics?

As a result of these different strands, cognitive poetics embraces a broad array of theoretical and methodological approaches. Tsur (1992) defines cognitive poetics as an exploration of how cognitive processes shape and constrain literary response and poetic structure. As Elena Semino (personal correspondence) notes:

Cognitive poetics therefore combines the detailed analysis of linguistic choices and patterns in texts with a systematic consideration of the mental processes and representations that are involved in the process of interpretation. Within cognitive poetics, literary reading is assumed to involve the same mental processes and representations that are involved in comprehension generally. However, special attention is paid to linguistic creativity and its interpretation, since creativity is a central part of the literary experience (even though it is not an exclusively literary phenomenon).

More broadly, Ellen Spolsky (personal correspondence) defines cognitive poetics as “an anti-idealist, anti-platonist enterprise” that entails the following assumptions: 1) the embodiment of the mind-brain constrains what humans can do; 2) human works, including works of art, are attempts to push the boundaries of what can be controlled, known, understood; 3) any study of cognitive issues in a specific work of art must be historically grounded. Thus, cognitive poetics includes not just interpretation from the reader’s perspective, but creativity and cultural-historical knowledge of the writer too.

At its best, cognitive poetics is Janus-faced: looking both toward the text and toward the mind. In so doing, it offers the possibilities of developing both a true theory of literature and contributing to a theory of mind. In my own work, I take the position that the study of literature, as part of the broader study of all the arts, contains two elements crucial to the study of mind: the role of feeling and the role of mimesis. As Susanne K. Langer (1953, 1967), the American philosopher, has extensively argued, art is the “semblance of felt life.” Studies of mimesis, or iconicity as it has come to be known, and studies of feeling, or the sensory-emotive element in all reasoning, are relative newcomers to the field of linguistics. It is in these areas that literary studies have most to offer cognitive linguistics. Many cognitive researchers have spoken to the question of what cognitive approaches to literature might offer linguistics and literary studies (see, for example, Crane 2001, A. Richardson 2000, Schaubert and Spolsky 1986, Spolsky 1993, Turner 1991). I therefore decided to take a literary text appropriate to the theme of this essay—Robert Frost’s “Mending Wall”—and set myself the challenge of attempting to identify at least some of the ways in which cognitive poetics says “something new” in literary studies about the text as well as saying “something different” in linguistics. Frost’s poem is an appropriate choice, not only because of its subject matter, but because it is one of the most anthologized and analyzed poems in modern literature. Although the choice of one poem necessarily restricts areas of interest to cognitive poetics that might be studied, I hope that such a cognitive poetics application will realize the spirit of this series in applied linguistics and give some sense of the work in cognitive poetics to date.ⁱ

3. A Case Study in Cognitive Poetics: Robert Frost’s “Mending Wall”

“Mending Wall” might seem an odd choice for a case study on a chapter devoted to the fall of a wall. However, as I hope to show in the ensuing analysis, Frost’s poem reveals, as he said himself, that man is both “a wall builder and a wall toppler. He makes boundaries and he breaks boundaries. That’s man” (quoted in Cook 1974: 82-83). This human characteristic reflects man as part of nature. Frost notes elsewhere: “Nature within her inmost self divides / To trouble men with having to take sides.”ⁱⁱ Although Frost’s poem ostensibly appears to be about two men taking opposing sides, a close analysis reveals a somewhat different purpose, as several critics have noticed: the value of opening up the imagination. In this way, the gaps in the physical wall become identified with gaps in nature, gaps in the human mind (Spolsky 1993). In seeing the emergent meaning of the poem as a blend between the physical story of the two neighbors as they go about mending their boundary wall and the imaginative story of the work of the human mind, one can also see the poem iconically invoking images of boundary walls from the reader’s own experience which is then mapped onto the narrative, thus making the language of the poem become phenomenally real, to create, in Langer’s words, the semblance of felt life. How this works is what I hope to show in the rest of this essay.

3.1 Poetry as Iconicity

Poetic iconicity is one way of explaining why poetry cannot be successfully paraphrased. As Frost would invariably remark in response to a question as to what he meant by a poem, “What do you want me to do, say it again in different and less good words?” (quoted in Raab 1996). “It” is not simply “meaning”, it is the poem itself. According to Charles Sanders Peirce (1955[1940]), every word is a symbol that may or

may not have an icon or index function. A poem that is true to the experience of felt life is mimetically representing that experience by evoking a mental image of it. Mimesis, literary or so-called “exophoric” iconicity, is the principle of form miming meaning, language miming the world. But poems are also mostly self-referential, displaying instances of “endophoric” iconicity, with form miming form (Nöth 2001).

The effect of poetic iconicity is to create sensations, feelings, and images in language that enable the mind to encounter them as phenomenally real. In this way, poetic iconicity bridges the “gap” between mind and world. This gap takes on different forms and arises from different causes depending on the perspective taken. In neurological theory, the gap occurs because the mind is modular, receiving and processing multiple sense impressions in discrete areas of the brain (Aleksander 2005; Modell 2003; Velmans 2002). In cognitive theory, the gap is caused, as Spolsky (1993: 2) explains, by the “inevitable asymmetry and incompleteness of mental representation” through the idealization that occurs as the result of the mind’s modularity (Lakoff and Johnson 1999). In philosophical theory, the gap is described in terms of the lack of connection between mind and world. In linguistic theory, the gap arises from underdetermination; that is, the phono-morphemic syntactic system of language does not of itself generate meaning. One should not consider this gap to be a flaw in human nature. Rather, it is the means by which we are able to think at all, to reason, to hypothesize, to consider counterfactual possibilities, to respond emotionally and ethically to situations we find ourselves in, and so on. It accounts for our ability to anticipate, accept, and encourage change. Fundamentally, it enables creativity. When Spolsky (1993: 2) says that the “mind itself can hurt you into poetry,” she is suggesting that “innovation in literary systems can be understood as evidence of the mind’s responses to incompatible representations” created by the gap (ibid. p.7).ⁱⁱⁱ Poetic iconicity, as I define the term, is the means by which poetry both exploits and bridges this gap.

Because of its subject matter and the fact that it is a poem, Frost’s “Mending Wall” becomes a prototypical exemplum of the poetic iconicity I am talking about (see Appendix for complete text). Across the relatively long history of human culture, tension exists between conservancy of conventionalized strategies that preserve the relationships of intermodular activity and the multiple flexibility of change needed for the mind to adapt to the challenges of new stimuli in producing unconventional relationships. This tension is reflected in Frost’s poem.^{iv} It is the poet-speaker who distinguishes between the “gaps” caused by human agency in the work of the hunters and the “gaps” made by “something” no one can see or hear. It is the farmer-neighbor who holds on to the traditional attitudes of his cultural forebears. Frost’s poem suggests that imaginative creativity occurs when writers probe beyond the outward appearance of things to explore their significance and “meaning.” When linguistic forms are brought into mimetic correspondence with this act of imaginative creativity, iconicity results. This, I believe, is the ideal poets attempt to achieve: the breaking down of the conventionally arbitrary barrier between form and essence in order to bridge the gap between stimuli (sensory, emotional) and conceptualization, to access as far as possible what Merleau-Ponty (1962, 1968) calls precategoryal experience and Tsur (1992, 2002) “lowly differentiation,” the blurring of distinct categories and forms to capture that which cannot be directly perceived, what Peirce (1955[1940]) calls “suchness,” anything immediately but not directly perceived.

3.2 Blending and Beyond: Knowledge Domains in “Mending Wall”

The phenomenological world of the semiotic base space represented in Frost’s “Mending Wall” is that of two adjacent New England farms.^v It includes both knowledge of New England farming practices as well as cultural knowledge of classical mythology. Critics, for example, tend to note that although the poet-speaker seems to be sympathetic, if not outright to identify, with the “something that doesn’t love a wall,” it is he who repairs the gaps made by hunters and who initiates the cooperative wall-mending ritual each spring. This is not a puzzling feature of authorial intention as some have supposed. According to legal

property rights, there is no such thing as a boundary wall that is owned in common. Historically, if a wall has been built equally on both sides of a property boundary, the principle of *medium filum* applies: the abutting property owners own up to the middle line of the wall and share a “common interest” in the wall as a whole.^{vi} According to a recent Scottish report on Boundary Walls, “Common interest imposes both a restraint and a positive obligation. The restraint is that each owner must take care not to disturb the stability of the wall as a whole. The positive obligation is that each must maintain his own part of the wall.”^{vii} As one would expect, the poet repairs his own walls when the hunters dismantle them. We are told that his farmer-neighbor lives “beyond the hill.” This deictic projection distances the farmer from the wall in question both visually and spatially. It would be natural and appropriate, then, for the poet to initiate the information that gaps have appeared. Finally, we are told that the poet owns an apple orchard that abuts the farmer’s pine forest. New England stone walls that can be seen today in the woods indicate that the land was once farmed or used for pasture. No one builds walls in pine woods, since there is no “need” for such walls. Walls, however, are crucial for apple orchards, to keep out cows and other animals. It is, therefore, more in the interest of the poet than the farmer to maintain this particular wall.

The situation of the semiotic base space describes the activity of the two neighbors who set out in the spring to repair a boundary wall between their properties. The poem is narrated by one of the two neighbors, so that we are presented with a discourse situation in which the narrator is also a character in his own story. The farmer is meeting his obligation to maintain his side of the wall out of his belief that “good fences make good neighbors.” Here is a man who practices what Ferdinand Tönnies (1957 [1887]) has called *Gemeinschaft* and acts upon his beliefs.^{viii} And those beliefs are even further emphasized and reinforced by the fact that there is no longer any real need for the wall that divides apple and pine trees. Had there been a real need for the wall, the significance of the farmer’s gesture would have been somewhat lessened. That significance, as George Monteiro (1988:126-129) has shown us, is deeply embedded in two historical, cultural domains: the existence of a Spanish proverbial saying (*una pared entre dos vecinos guarda mas (haze durar) la amistad*) which goes back “at least to the Middle Ages” and was recorded by Emerson in his journal of 1832 as “A wall between both, best preserves friendship”; and the myth of the god of boundaries, named *Terminus* by the Romans, who celebrated a *Terminalia* festival each year on February 23 (in early spring) when “neighbors on either side of any boundary gathered around the landmark” to offer sacrifice to the god and celebrate with a feast. The poem, Monteiro believes, is moving toward this mythological link in the speaker’s description of his neighbor at the end of the poem as “an old-stone savage armed” who “moves in darkness.” The occurrence of magical elements such as “spell” and the notion of “Elves” in the poem conjures up the mysteries of pre-scientific knowledge that is reflected in the myth as well as in the unconscious elements of the human mind.

3.3 Metaphor and Mimesis

One curious thing about Frost’s poem is that its central metaphor is expressed so simply and its meaning is so transparent that we tend not to see it as a metaphor at all. This occurs in line 24: “He is all pine and I am apple orchard.” By identifying the two characters in the poem with their land, Frost is doing two things: he is establishing the two sides of the actual boundary wall that is the subject of the poem and at the same time he is making that wall a mental representation. So one can see the presentation space as being the actual, factive story of two men repairing a boundary wall in springtime, and the reference space as being the virtual, fictive story of the operations of the mind (Fig. 1). The balanced shifts between the factive (indexical) to the fictive (virtual) create the image in the mind, so that the fictive lies within the factive, the factive within the fictive. In the blend, the poet represents the creative, open-ended operations of the mind; the farmer, the mind’s need for coherence and continuity. The meaning that emerges from this blend is the value that is being attached to the poem’s topic, that is, the gaps in the wall/mind.

[Insert Fig. 1]

The bringing together of the gaps in the physical world of Frost's poem and the mental world of his imagination occurs through a particular characteristic of mental representations. Frank Lentricchia's (1975) study of the "landscapes of the self" in "Mending Wall" reflects Elaine Scarry's (1999) argument that references to the rarefied and intangible facilitate the creation of images in the mind. He argues that not naming what it is that causes walls to fall enables Frost "to manipulate intransigent fact into the world of the mind where all things are pliable" (p.104). In making "fiction" about how the wall developed gaps, the poet is inviting the farmer to accompany him, "to take a journey in the mind."^{ix} Thus, the poem becomes a paeon to the "play spirit of imagination." For the cognitive linguist, the question becomes how Frost makes language work to make us think the poem is about minds as well as about walls.

As Scarry (1999) has shown, poetry sets up a mimesis of making and a mimesis of motion. Right from the outset, Frost introduces the idea of a (solid) wall by referring to something immaterial, "rarefied" in Scarry's terms. This "something" is unseen, unheard. It "makes gaps" which are themselves the absencing of materiality. This, Scarry suggests, is what enables us to take an image more easily into the mind.^x The image itself—the wall—is then immediately made to move through the technique of introducing light, with some force spilling its boulders into the sun. The sudden addition into the scene of rabbits and dogs as natural living organisms helps to reinforce the mental image of motion as the hunters subtract the stones from the fictive wall we have been invited to imagine. Similarly, Frost's introduction of the seemingly inappropriate images of the fallen boulders as "loaves"—associating them with plant life and relative insubstantiality compared with stones — and "so nearly balls"—associating them with a shape and a size easy to handle and pick up—enables Frost to create the image of movement and precarious balance as the neighbors "wear [their] fingers rough with handling them" as they "set the wall." Having created these mental images of the activity of wall mending, Frost has prepared the way for his speaker to "put a notion in his [neighbor's] head" as he has put mental images into ours. The "notion" challenges the need for a physical barrier. It asks the reasons why and, in wondering what might cause walls to fall, invokes the assumption of invisible natural forces and the resulting inevitability of change. It expresses the human ability to cognize, to imagine the existence of things neither seen nor heard, to acknowledge and accept the idea of change. It is no surprise, then, that many critics identify the imaginative thoughts of the poet-speaker with those of Frost and think the poem is about "modes of thought, about language, perhaps even about poetry itself" (Kemp 1979: 24) or that the wall is "a mental wall...as well as a physical one" (Holland 1988: 25).

3.4 Macrostructure of "Mending Wall": the BALANCE schema

Frost's poem moves from the idea of an invisible force breaking down walls in the first line of the poem to the idea of fences being necessary for social harmony in the last, from, in Frost's own words, "Something there is that doesn't love a wall" to "Something there is that does."^{xi} The poem iconically reflects this movement in its structure and choice of language. Two major cognitive processes are at work: our awareness of phenomena not directly presented to our senses (phenomenologically called "appresentation" and psychologically, "inferential apperception"); and the need for consistency in categorization and coherence (what Tsur (1992, 2002) calls "cognitive stability," and Turner and Pöppel (1980) "procrustean" and "synthetic"). These are brought into imaginative contrast through the interrelated devices of deixis, negative polarity, and the BALANCE schema.^{xii}

The poem's macrostructure iconically reflects the structure of the dry stone wall that is its subject (Fig. 2). First, the exact center of the poem occurs in line 23: "There where it is we do not need the wall." The line is set off from the first 22 lines by a colon, and is set off from the next 22 lines by another colon, which makes it serve almost as a ratio between the two parts of the poem, acting as a pivot, balancing the two halves. It has both indexical deixis—"there where it is"—and negation—the wall exists, but we don't need it. And the reason we don't need it is immediately provided by the metaphor we've already noticed:

because of who the two men are. That Frost creates an identity mapping between pine trees and the farmer, and apple trees and the poet is no accident. Unlike pine trees, apple trees blossom in spring. I am reminded of Emily Dickinson's poem, "This is a Blossom of / the Brain."

[Insert Fig. 2]

On either side of this wall that we don't need but that divides the two halves of the poem, each set of 22 lines falls into two parallel parts, marked by syntactic openings and closures and lexical patterns and repetitions. These are the building blocks on which the wall/poem is constructed. The first and last parts of the poem serve to frame the two inside parts. The first part (lines 1-11) introduces the idea of the "Something there is that doesn't love a wall," and the last part (lines 35-45) begins with the same line and ends the poem with the idea that "Good fences make good neighbors." The interior parts deal with the interaction of the two neighbors. Part 2 (lines 12-22) describes the collaborative process they adopt to mend the wall. Part 3 (lines 24-34) contrasts the thoughts of the poet with that of the farmer over the reasons for mending the wall. If this were not enough, each of these parts divides into two sections of five and six lines apiece, creating a chiasmic pattern or mirror image across the dividing line. In the first half, the section divisions are 5 lines followed by 6; in the second half, the section divisions are 6 lines followed by 5. These wall/poem components, though, are not so perfectly constructed as they seem. The 19 sentences of the poem (marked by end punctuation) sometimes cut across these parts and sections and occur irregularly both in position and number within them. Those familiar with New England dry stone walls, created over two hundred years ago, will know that they are not at all uniform in appearance. They are made up of irregular-sized and irregular-shaped boulders that seem to balance precariously on one another, a method called "random rubble" in the dry-stone-wall making trade. It is these irregularities that enable the frost heaving that occurs when ice forms and melts to "spill the upper boulders in the sun." The BALANCE schema of the poem is therefore not a static one. It is a dynamic process of ongoing annual activity that the neighbors must undertake to maintain their wall, just as the mind must be engaged in continual activity to create coherency and consistency from multiple and inchoate experience, to achieve cognitive stability, to make sense out of things.

This iconic macrostructure creates a structural blend of wall and poem, so that in the blend what is true of one is true of the other. Just as the wall is embodied in the poem, the poem is embodied in the wall. What happens as a result is that the gaps in the wall become gaps in the mind. And the poem becomes a way of responding to and dealing with those gaps. The techniques we use, linguistic or literary, to articulate and explore these gaps are all salient and valid ways to understand them. The poet calls the object of their mending a wall, the farmer calls it a fence. This is not arbitrary naming. The meaning network of the word *wall* encompasses more than the word *fence*. A fence forms a barrier to divide one space from another. A wall not only has this function but also may be constructed as a shelter and a refuge (it is used in this way by the rabbits in the first part of the poem). As the literary critic Lawrence Raab (1996) has noted, "mending fences" is an idiom for restoring communication and harmony. He writes: "The repetition of *between* [in lines 14 and 15] should give us pause and remind us of its two equally common meanings: *between* as separation, as in 'something's come between us,' and *between* as what might be shared and held in common, as in 'a secret between two people' or 'a bond between friends.' The wall divides but it also connects, if you look at it that way." Looking at language "that way" is what literature does. It opens up the possibilities created by the gaps between our conceptualizations and our experiences of the world.

3.5 Mind in the wall and the wall in mind: Deixis and negative polarity

Mental representations occur on two planes—the virtual or fictive and the actual or factive—depending on whether they are generalized and unspecified or individualized and particularized (Langacker 2005).

That is, conceptualizations may be construed as generalized abstractions or as specific representations, depending on whether reference is being made to an imagined or virtual situation (fictive) or an actual one (factive). This distinction is created in the poem by the two cognitive processes of deixis and negative polarity.

Deixis is of two kinds: the kind that introduces something into the fictive plane (“existential”) and the kind that points out something in the factive plane (“indexical”). The first notable use of deixis in the poem is the existential “there” of the first line: “Something there is that doesn’t love a wall.” It introduces the unrepresentable, that which cannot be seen or heard by the embodied senses, thus invoking the cognitive process of the imagining of “things unseen.” The indefinite article, “a wall” indicates that the wall exists in a virtual mental space or plane; that is, it is a generalized mental conception, not a reference to an actual wall. Part 1 is framed by the movement from the existential “there” of line 1 to the indexical “there” at the end of line 11, which serves to introduce the actual physical wall that the neighbors will mend. A similar movement occurs in the plural form of the word “gaps” in line 4 on the virtual plane and in the definite article of “the gaps” in line 9 on the actual plane. Once deictic “there” has placed the gaps in physical space, the means has been opened up for “the wall” on the actual plane to be introduced in the second section (lines 12-16).

The second section establishes the cognitive stability of the factive action of wall construction, reflected in the balance achieved by end-stopped, regularly metered lines and the repetition of equivalent phrases—*set the wall / keep the wall; between us / between us; to each / to each*—as the neighbors “walk the line.” However, the negative polarities that have been running through part 1 (*doesn’t love, gaps, not one, but, no one*) surface in the very next section (lines 17-22) with the limited polarities of not-quite expressions (*so nearly, just another, little more*) that make balance precarious and prepare for the indexical repetition “there where it is” in line 23, introducing the idea that the wall is, after all, not needed, and yet is expressed in the line which serves as the boundary dividing the two halves of the poem. Once this boundary wall has been presented, it again loses its deictic specificity in all the references on the other side: the general “fences” of the farmer’s comment and the hypothetical fictive musings of the poet as he thinks of why he would build “a wall,” preparing for the repetition of the first line, “Something there is that doesn’t love a wall” at the beginning of the last part (line 35).

Deictic and negative polarity terms contrasting conceptions in the mind (virtual-fictive) and representations of objects in the world (actual-factive) are tossed through the poem like the “loaves” and “balls” of line 17 (Fig. 3). The existential “there-where” of lines 1 and 7 is repeated in the deictic “there-where” of lines 11 and 19 that prepares for the deictic “there where” of the pivot line 23. On the other side of the pivot, “there” occurs at the end of the two word phrases in the existential “where there” and deictic “here there” of line 31, creating another kind of chiasmus with the phrases on the other side. These deictic alternations culminate in the final existential-deictic contrast of the last part of the poem in the repetition of “Something there is” (line 35) and “I see him there” (line 38), which parallels the move from fictive to factive in the first part. This existential-indexical alternation balances the fictive and the factive. It embodies the actions of the mind as phenomenally real.

[Insert Fig. 3]

Fictive-factive alternation also occurs across two different kinds of negative polarity: the kind that establishes a subtraction from positive existence, as in “not one stone on a stone” (line 7), and the kind that results in the opening up of possibilities beyond the physical, as in “No one has seen...or heard” (line 10). In the first kind of negation, an element created in the fictive plane is cancelled out in the actual plane. In the second, only a portion of possible elements in the fictive part is cancelled, thus leaving open the possibility of the rest being actualized. These two kinds of polarities are repeated in the second half of the poem with the contrasts between the subtraction of “no cows” (line 31) and the opening up of possibilities in “not elves” (line 37) and their chiasmic reversal in “Not of woods only” (line 42) and “He

will not go behind” (line 43). In other words, what the poem is doing is oscillating between the fictive and factive planes as the poet plays with ideas of balancing the imagined and the real, the possible and the actual.

3.6 Balancing deixis and negation in the poem/wall, poet/farmer, mind/world

The making of such balance occurs also in the self-referential, endophoric iconic functions at the lexical as well as the structural level. The verb *make* occurs in parallel usage. It is used three times in the first half of the poem to indicate the destructive force creating gaps in the wall and three times in the second half to indicate the constructive force creating social harmony (good neighbors). It is also used to make repair (line 6) and to make balance (line 18). Making repair occurs in the context of the destruction of a wall by seen and heard forces (the hunters). Making balance occurs in the context of the destruction of a wall by unseen and unheard forces (the something that doesn't love walls). This distinction is reinforced by the invocation of a “spell” in the act of balancing, which, both semantically in its meaning and phonetically in its relation to the “spills” of line 3, suggests something magical, beyond the known world, as opposed to the merely physical routine of repairing a wall broken by hunters. This contrast is mimetically paralleled in the language and structure of the two sections of part 1. Section 1 begins with “something” (invisible, unheard) and ends with “another thing” (seen and heard). The “something” has three verbs in section 1: *sends, spills, makes*; the “another thing” also three in section 2: *have left, would have, please*. Note the difference between these sets of verbs: that which is unseen, fictive, has immediate causal agency: *sends, spills, makes gaps*. The work of the hunters, factive, doesn't: *have left, would have, to please*. This contrast gives greater valence to the fictive which accords with the poem's illocutionary force (see note 5): the importance of the imagination.

The balanced oppositions of negation and deixis are reinforced by deictic pronoun use. In the first half, as the two neighbors work together to rebuild the wall, all references to them occur by means of the first person plural forms: *we, us, our*. In the second half, where the poet tries to create flexibility and change in the farmer's thinking, there are no *we's, us's, or our's*; only *he* and *I, me* and *him, his* and *my*. The neighbors, once joined in collaborative work to mend the wall, are now forced apart by the central line querying the need for a wall at all, just as the wall once whole developed gaps. Parts 3 and 4 also provide a kind of balance between themselves. Part 3 (lines 24-34) begins with repeated alternations of “he” and “I” forms and ends in the fourfold repetition of “I” as the speaker questions the reasons for wall building; part 4 (lines 35-45) begins with alternations of “I” and “he” forms and ends in the fourfold repetition of “he” forms as the neighbor reiterates his belief. The “I” repetitions at the end of part 3 question the use of a wall as a barrier, ending in the echo of “fence” in “offense” (line 34).

At the graphemic level, too, the repetition of the letter *l* in *wall, swell, spills, hill, fallen, balls, spell, wall, all, tell, walling (in and out), will, well*, reflects the two sides of the barrier.^{xiii} The word “spring” occurs twice, one on each side of the pivot line in the center of the poem, and is related to mending and mischief respectively, another kind of balance between cognitive stability and opening up the mind to alternative possibilities. Finally, the opposition of “sun” (line 3) and “darkness” (line 41) on either side points to the idea of openness and illumination created by gaps and the idea of closed conservancy that nevertheless signifies in the poet's mind something beyond the physical pine woods and “shade of trees.”

4. Conclusion: Literature, linguistics, and cognitive poetics

Robert Graves (1963) was the first critic to identify the possible pun Frost is playing with in not naming the “frost” that causes walls to heave, which serves to identify the poet-speaker with unseen forces that upset solidity and disrupt order. However, Mark Richardson (1997: 141) is surely right in enlarging the idea to include “the vernal mischief of spring and its insubordinations.”^{xiv} The creation through deixis of identification between the factive and the fictive, between the physical gaps in the actual wall and the

mental gaps of the mind in its reception of multiple and overlapping information, is paralleled by the identification of the volcanic nature of the unseen forces (that spew out the boulders to cause gaps in the actual wall) with the “Spring” that “is the mischief” in the mind of the poet-speaker that wants to create a similar unsettled disturbance in the mind of his farmer-neighbor, to open up his mind to the recognition of mental gaps in the articulation of knowledge and feeling. The poet is thus kicking against the obligation of restraint in undermining stability of wall and feeling. Spring mischief leads him to “wonder” if he “could put a notion” in the farmer’s head. Literary critics (e.g., Lentricchia 1975, Kemp 1979) are divided over whether the poet actually utters the words that follow (lines 30-36). However, these are the climactic words of the poem. They bring the thoughts of the poet (fictive) into communication (factive) with the farmer, and thus make the “mischief” of making gaps phenomenally real. They point to the possible answer the farmer might give, the “Elves” reflecting his cultural mythological heritage, and the answer he does in fact give, the reiteration of “Good fences make good neighbors.” In the end, the only direct speech acts in the poem are four in number, all indicated by quotation marks: the joint admonition to the stones to “Stay where you are until our backs are turned” (line 19) that both poet and farmer participate in, the poet’s questions (lines 30-36), and the repetition of the proverb, “Good fences make good neighbors” (lines 28 and 46) uttered by the farmer. It is noteworthy that in all these cases, it is inanimate objects (stones and fences) that are ascribed agency. Frost’s restatement of the Spanish proverb ascribes more causal agency in the act of making than either the proverb or Emerson’s translation of it do. It is this “making,” this construction of the fictive in the factive that creates the poem’s iconicity, and explains why Frost saw himself in both characters.^{xv} It is people that make fences (factive), but it is fences that make good people (fictive).

Cognitive poetics, I suggest, is in essence an exploration into poetic iconicity, as I am defining the term. It links the literary text to the cognitive processes of the human mind, and provides a theoretical cognitive linguistic basis for literary intuition. That’s what makes it different from purely linguistic or literary approaches. It does not replace these approaches; rather, it shows how they evidence ways in which a literary text bridges the gap between mind and world. It is for this reason, I believe, that cognitive poetics can contribute to both the scientific and the humanistic enterprise. It does not try to transform humanistic enquiry into a science. Nor does it presume that scientific enquiry could replace humanistic enquiry as an adequate way to account for artistic creativity. As it “walks the line” between the two, it defines the boundary that both separates and joins the two endeavors.

Appendix

MENDING WALL Robert Frost

1	Something there is that doesn't love a wall,
2	That sends the frozen-ground-swell under it,
3	And spills the upper boulders in the sun,
4	And makes gaps even two can pass abreast.
5	The work of hunters is another thing:
6	I have come after them and made repair
7	Where they have left not one stone on a stone,
8	But they would have the rabbit out of hiding,
9	To please the yelping dogs. The gaps I mean,
10	No one has seen them made or heard them made,
11	But at spring mending-time we find them there.
12	I let my neighbor know beyond the hill;
13	And on a day we meet to walk the line
14	And set the wall between us once again.

15 We keep the wall between us as we go.
16 To each the boulders that have fallen to each.
17 And some are loaves and some so nearly balls
18 We have to use a spell to make them balance:
19 “Stay where you are until our backs are turned!”
20 We wear our fingers rough with handling them.
21 Oh, just another kind of out-door game,
22 One on a side. It comes to little more:
23 There where it is we do not need the wall:
24 He is all pine and I am apple orchard.
25 My apple trees will never get across
26 And eat the cones under his pines, I tell him.
27 He only says, “Good fences make good neighbors.”
28 Spring is the mischief in me, and I wonder
29 If I could put a notion in his head:
30 “Why do they make good neighbors? Isn’t it
31 Where there are cows? But here there are no cows.
32 Before I built a wall I’d ask to know
33 What I was walling in or walling out,
34 And to whom I was like to give offense.
35 Something there is that doesn’t love a wall,
36 That wants it down.” I could say “Elves” to him,
37 But it’s not elves exactly, and I’d rather
38 He said it for himself. I see him there
39 Bringing a stone grasped firmly by the top
40 In each hand, like an old-stone savage armed.
41 He moves in darkness as it seems to me,
42 Not of woods only and the shade of trees.
43 He will not go behind his father’s saying,
44 And he likes having thought of it so well
45 He says again, “Good fences make good neighbors.”

Figures

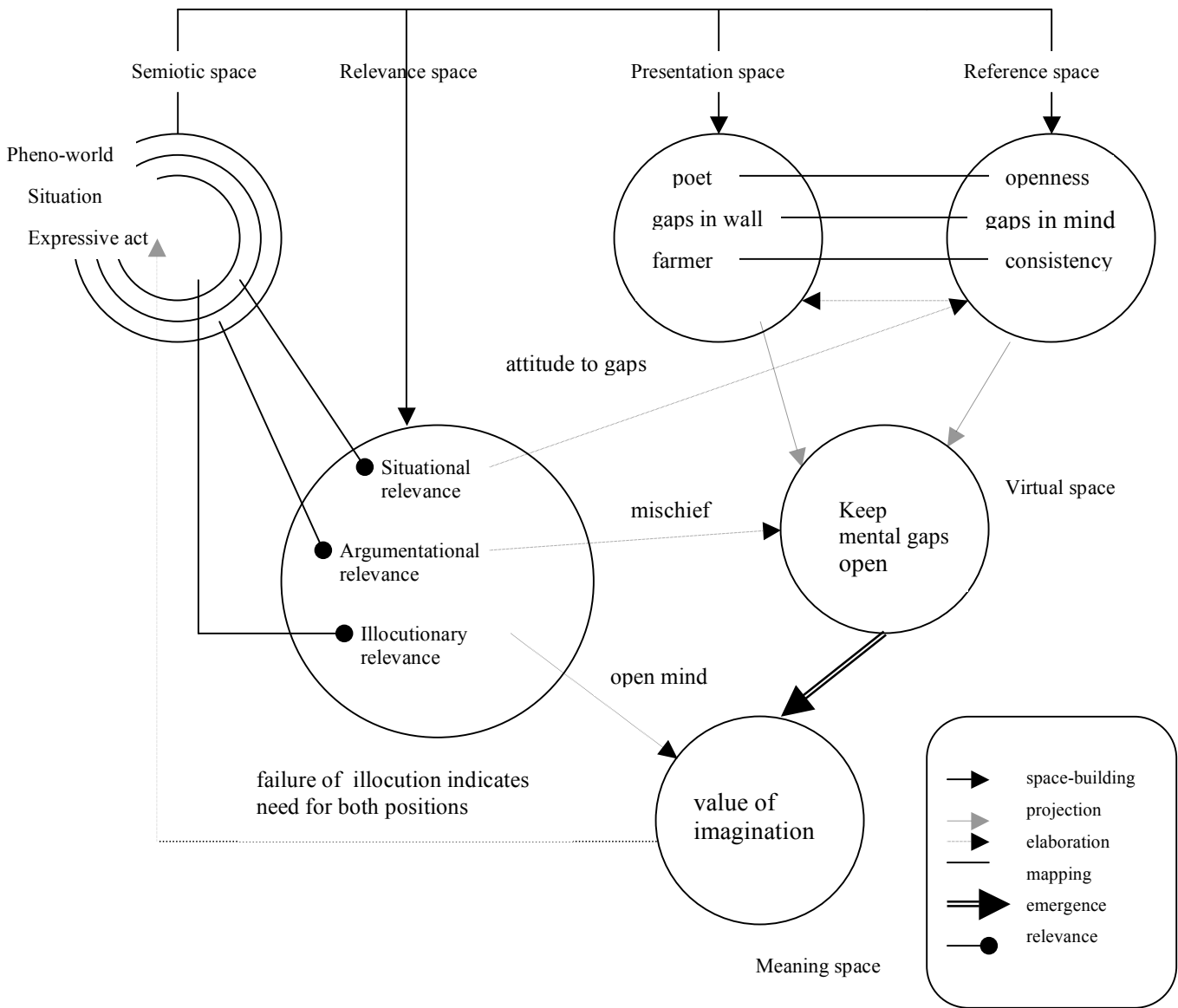


Figure 1. The cognitive-semiotic blend in "Mending Wall" (based on Brandt and Brandt 2005: 239)

First half, lines 1-22: Something there is that doesn't love a wall.

Part 1, lines 1-11: Something there is that doesn't love a wall,

Section 1, 1-5: Something...another thing:

Section 2, 6-11: I have come...we find them there.

Part 2, lines 12-22: I let my neighbor know beyond the hill;

Section 3, 12-16: I let my neighbor...to each

Section 4, 17-22: And some... little more:

Line 23: There where it is we do not need the wall:

Second half, lines 24-45: He is all pine and I am apple orchard

Part 3, lines 24-34: He is all pine and I am apple orchard

Section 5, 24-29: He is...his head:

Section 6, 30-34: "Why do they... give offense.

Part 4, lines 35-45: Something there is that doesn't love a wall,

Section 7, 35-41: Something there is...an old-stone savage armed.

Section 8, 42-45: He moves in darkness...makes good neighbors."

Figure 2. The structure of "Mending Wall"

Line 23: There where^a it is we do not_c need the wall:^a

..... there ⁱ doesn't _c a wall, ⁱ	He I
.....	My never
.....	..... his I him.
..... gaps ⁱ	He only fences ⁱ
..... another thing ^a	..... me, I
I .....	..... I his
Where ⁱ not one _c .....	.....
.....	Where there ⁱ here there ^a no _c
..... The gaps ^a I .....	..... I a wall ⁱ
No one _o them them .....	..... I
..... we them there ^a	..... I
I the hill ^a	..... there doesn't _c love a wall ⁱ
..... we the line ^a	..... I him,
..... the wall ^a us .....	..... not _o exactly, I'd
We the wall ^a us ... we	He himself. I him there ^a
..... the boulders ^a .....	.....
..... some some so nearly _o .....	.....
We	He me,
..... where ^a our	Not _o only _o
We our	He not _c his
..... just another _o .....	..... he
..... little more _o	He fences ⁱ

ⁱ fictive ^a factive _c closed _o open

Figure 3. Deixis and negative polarity in “Mending Wall”

Acknowledgments

I am grateful to Christina Ljungberg, Claiborne Rice, and the editors of this volume for helpful suggestions to the ideas broached in this essay. I trust that issues of theory and interpretation that emerge as a result will contribute to further discussions in the field.

Notes

1. See Gavins and Steen (2003) and Stockwell (2002) for introductory texts in cognitive poetics. There are many cognitive poetics articles appearing in various journals, such as *Poetics Today*, *Style*, *Language and Literature*, *Journal of English Linguistics*, all of which have published special issues on cognitive approaches to literature. See also Hogan (2003). For a survey of recent work in the field, see Freeman (in press). The following websites contain other bibliographic sources: cognitive approaches to literature at <http://www.ucla.edu/~coglit/>; blending at <http://markturner.org/>; iconicity in language and literature at <http://home.hum.uva.nl/iconicity/>; textworld theory at <http://www.sheffield.ac.uk/textworldtheory/>; art and cognition at <http://www.interdisciplines.org/artcog/>; literature, cognition, and the brain at <http://cogweb.ucla.edu/>.
2. Robert Frost. "FROM IRON: Tools and Weapons. To Ahmed S. Bokhari." As James Reston noted in *The New York Times* for October 27, 1957: "The United Nations, disturbed by Mr. Frost's opposition, suggested to him recently that he might like to write a poem celebrating the ideal of the interdependence of the nations. Sweden had given the U. N. a huge chunk of solid iron, and somebody thought that this should be built into the U. N. building as a symbol of nature's strength and unity. Frost was not interested. Iron, he said, could be used to strengthen the U. N. building, or it could be used for weapons of war. That was the way with nature, he said: always confronting mankind with decisions. So he rejected the invitation with a couplet. . . ." <http://www.frostfriends.org/FFL/Periodicals/reston-nyt.html>. Accessed March 21, 2006. I am grateful to Nick Fleck for drawing my attention to this couplet.
3. Spolsky's line is an adaptation of W. H. Auden's line, "mad Ireland hurt you into poetry" in his poem, "In Memory of W. B. Yeats."
4. The speaker of the poem is not Frost but the poem's persona. However, the ability of the speaker in contrast to his neighbor to see the difference between the gaps made by seen and unseen forces and recognize their significance marks him as a poet. I shall therefore refer to the two characters as the poet and the farmer.
5. Here, I am following Per Aage Brandt's (2004) modification and elaboration of Fauconnier and Turner's (2002) blending model. Blending accounts for how new information can emerge from old through the projection from given input spaces into a new space, called the blend. Brandt adds a "semiotic base space" which includes the phenomenological world, or "pheno-world" for short, the situation in which communication occurs, and the actual semiosis of the discourse, including the participants and what is being communicated. The input spaces of the blend are renamed as Presentation and Reference spaces. Instead of the generic space in the original model, Brandt substitutes a "relevance space" from which situational, argumentational, and illocutional relevance triggers activity at various points in the development of meaning.
6. Scott Sylvester (New England forester), personal communication.
7. Report on Boundary Walls. Scottish Law Commission No. 163. Printed 25th March, 1998. (584 Edinburgh: The Stationery Office) 2. New England followed common law practice in establishing the metes and bounds of property, and the wording of the Scottish report (though not part of English common law) reflects New England practices.
8. Tönnies (1957: 223) distinguished between *Gemeinschaft* (community) and *Gesellschaft* (society) as follows: "There is a contrast between a social order which—being based upon consensus of wills—rests on harmony and is developed and ennobled by folkways, mores, and religion, and an order which—being based upon a union of rational wills—rests on convention and agreement, is safeguarded by political legislation, and finds its ideological justification in public opinion."

-
9. The first poem, “The Pasture,” in Frost’s *North of Boston* immediately preceding “Mending Wall,” is just such an invitation.
 10. Scarry’s theory is suggestive, even if there is as yet little empirical evidence that the mind entertains insubstantiality more readily than solidity. Limitations of space and exigencies of presentation prevent me from documenting all the cognitive science research that supports this and subsequent claims throughout this paper. I refer readers to Scarry’s book and my other reference citations for further cognitive literature on the topics raised.
 11. Lawrence Raab (1996) recounts Frost’s reaction to the Russians making use of his poem to defend the construction of the Berlin Wall by dropping the first line. Frost wonders how they “got the poem started” and said he could have done better for them by saying: “Something there is that doesn’t love a wall / Something there is that does.” It is noteworthy that Frost continues: “Why didn’t I say that? I didn’t mean that. I meant to leave that until later in the poem.” Why he meant to leave it until later results I think from the poem’s iconicity.
 12. Johnson (1987: 29) defines a schema as “a recurrent pattern, shape, and regularity in, or of, [the] ongoing ordering activities” of our actions, perceptions, and conceptions. See Johnson (1987: 18-30) for a detailed discussion of how this use of the term *schema* differs from earlier uses in cognitive science. Examples of schema are PATH, CONTAINMENT, CHANGE, and the one I am referring to here: BALANCE. For a discussion on how schemas can illuminate a poet’s poetics, see Freeman (2002).
 13. I am grateful to Christina Ljungberg for pointing out the phonetic repetition of the [I] sound in the poem. A full cognitive-phonetic analysis of the poem would show other iconic functions at work, but that would lengthen what is already a long paper on a short poem.
 14. It is rather the melting of the frost that causes subsidence and imbalance, as the *Encyclopedia Britannica*’s entry on *frost* notes: “Frost action, the freezing and thawing of moisture in the ground, has long been known to seriously disrupt and destroy structures in both polar and temperate latitudes. In the winter the freezing of ground moisture produces upward displacement of the ground (frost heaving), and in the summer excessive moisture in the ground brought in during the freezing operation causes loss of bearing strength.”
 15. Norman Holland (1988: 26) quotes Frost’s comments on the poem as follows: “Maybe I was both fellows in the poem” (*Interviews with Robert Frost*, ed. Edward Connery Lathem (New York: Holt, Rinehart and Winston 1966) 257).

References

- Aleksander, Igor
 2005 *The World in My Mind, My Mind in the World: Key Mechanisms of Consciousness in People, Animals and Machines*. Exeter, UK: Imprint Academic.
- Brandt, Per Aage
 2004 *Spaces, Domains and Meaning: Essays in Cognitive Semiotics*. European Semiotics Series No 4. Bern: Peter Lang.
- Cook, Reginald L.
 1974 *Robert Frost: A Living Voice*. Amherst, MA: University of Massachusetts Press.
- Crane, Mary Thomas
 2001 *Shakespeare’s Brain: Reading with Cognitive Theory*. Princeton, NJ: Princeton University Press.
- Crane, Mary Thomas, and Alan Richardson
 1999 Literary studies and cognitive science: Toward a new interdisciplinarity. *Mosaic* 32: 123–140.
- Emmott, Catherine
 1997 *Narrative Comprehension: A Discourse Perspective*. Oxford: Clarendon Press.
- Fauconnier, Gilles, and Mark Turner
 1994 *Conceptual Projection and Middle Spaces*. San Diego: University of California, Department of Science Technical Report 9401 (available on-line at markturner.org/blending).
- 2002 *The Way We Think: Conceptual Blending and the Mind’s Hidden Complexities*. New York: Basic Books.
- Fludernik, Monika
 1993 *The Fictions of Language and the Languages of Fiction*. London and New York: Routledge.

-
- Freeman, Margaret H.
2002 Momentary stays, exploding forces: A cognitive linguistic approach to the poetics of Emily Dickinson and Robert Frost. *Journal of English Linguistics* 30 (1): 73–90.
In press. Cognitive linguistic approaches to literary studies: State of the art in cognitive poetics. In *Handbook of Cognitive Linguistics*, Dirk Geeraerts and Hubert Cuyckens (eds.) Oxford: Oxford University Press.
- Gavins, Joanna
2005 Text world theory in literary practice. In *Cognition in Literary Interpretation and Practice*, Bo Pettersson, Merja Polvinen, and Harri Veivo (eds.), 89–104. Helsinki: University of Helsinki Press.
Gavins, Joanna, and Gerard Steen (eds.)
2003 *Cognitive Poetics in Practice*. London and New York: Routledge.
- Graves, Robert
1963 Introduction to *Selected Poems of Robert Frost*, ix–xiv. New York: Holt, Rinehart and Winston.
- Henkel, Jacqueline
1996 *Language of Criticism: Linguistic Models and Literary Theory*. Ithaca, NY: Cornell University Press.
- Hogan, Patrick Colm
2003 *Cognitive Science, Literature, and the Arts: A Guide for Humanists*. New York and London: Routledge.
- Holland, Norman
1988 *The Brain of Robert Frost: A Cognitive Approach to Literature*. New York and London: Routledge.
- Jakobson, Roman
1987 *Language in Literature*. Cambridge, MA and London: The Belknap Press of Harvard University Press.
- Johnson, Mark
1987 *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago and London: The University of Chicago Press.
- Kemp, John C.
1979 *Robert Frost and New England: The Poet as Regionalist*. Princeton, NJ: Princeton University Press.
- Lakoff, George, and Mark Johnson
1980 *Metaphors We Live By*. Chicago and London: The University of Chicago Press.
1999 *Philosophy in the Flesh*. New York: Basic Books.
- Lakoff, George, and Mark Turner
1989. *More than Cool Reason: A Field Guide to Poetic Metaphor*. Chicago and London: The University of Chicago Press.
- Langacker, Ronald W.
1987 *Foundations of Cognitive Grammar. Vol I: Theoretical Perspectives*. Stanford: Stanford University Press.
1991 *Foundations of Cognitive Grammar. Vol II: Descriptive Application*. Stanford: Stanford University Press.
2005 Dynamicity, fictivity, and scanning: The imaginative basis of logic and linguistic meaning. In *Grounding Cognition: The Role of Perception and Action in Memory, Language, and Thinking*, Diane Pecher and Rolf A. Zwaan (eds.), 164–197. Cambridge: Cambridge University Press.
- Langer, Susanne K.
1953 *Feeling and Form: A Theory of Art*. New York: Charles Scribner's.
1967 *Mind: An Essay on Human Feeling*. Baltimore: The Johns Hopkins Press.
- Lentricchia, Frank
1975 *Robert Frost: Modern Poetics and the Landscapes of Self*. Durham, NC: Duke University Press.
- Merleau-Ponty, Maurice
1962 *Phenomenology of Perception*, C. Smith (tr.). London: Routledge and Kegan Paul.
1968 *The Visible and the Invisible*, Claude Lefort (ed.), Alphonso Lingis (tr.). Evanston: Northwestern University Press.
- Modell, Arnold H.
2003 *Imagination and the Meaningful Brain*. Cambridge, MA: The MIT Press.
- Monteiro, George
1988 *Robert Frost and the New England Renaissance*. Lexington, KY: The University Press of Kentucky.
- Nöth, Winfried
2001 Semiotic foundations of iconicity. In *The Motivated Sign*, Max Nänny and Olga Fischer (eds.), 17–29. Amsterdam: John Benjamins.

-
- Peirce, Charles Sanders
1955 *Philosophical Writings of Peirce*, Justus Buchler (ed.). New York: Dover.
- Raab, Lawrence
1996 *Touchstone: American Poets on a Favorite Poem*, Robert Pack and Jay Parini (eds.). Hanover: University Press of New England. http://www.english.uiuc.edu/maps/poets/a_f/frost/wall.htm. Accessed April 15, 2006.
- Richardson, Alan
2000 Rethinking romantic incest: Human universals, literary representation, and the biology of mind. *New Literary History* 31(3): 553–572.
- Richardson, Mark
1997 *The Ordeal of Robert Frost: The Poet and His Poetics*. Urbana: University of Illinois.
- Scarry, Elaine
1999 *Dreaming by the Book*. Princeton, NJ: Princeton University Press.
- Schauber, Ellen, and Ellen Spolsky
1986 *The Bounds of Interpretation: Linguistic Theory and the Literary Text*. Stanford: Stanford University Press.
- Semino, Elena, and Jonathan Culpeper (eds.)
2002 *Cognitive Stylistics: Language and Cognition in Text Analysis*. Amsterdam: John Benjamins.
- Spolsky, Ellen
1993 *Gaps in Nature: Literary Interpretation and the Modular Mind*. Albany: State University of New York Press.
- Steiner, George
1970 *Extraterritorial: Papers on Literature and the Language Revolution*. New York: Atheneum.
- Stockwell, Peter
2002 *Cognitive Poetics: An Introduction*. London: Routledge.
- Tabakowska, Elzbieta
1993 *Cognitive Linguistics and Poetics of Translation*. Tübingen: Gunter Narr Verlag.
- Tönnies, Ferdinand
1957 *Community and Society: Gemeinschaft und Gesellschaft*, Charles P. Loomis (ed. and tr.), 223–231. Ann Arbor: The Michigan State University Press. <http://www2.pfeiffer.edu/~lridener/courses/GEMEIN.HTML>. Accessed March 18, 2006.
- Tsur, Reuven
1983 *What Is Cognitive Poetics*. Tel Aviv: The Katz Research Institute for Hebrew Literature.
1992 *Toward a Theory of Cognitive Poetics*. Amsterdam: North Holland.
2002 *On the Shore of Nothingness: A Study in Cognitive Poetics*. Exeter, UK: Imprint Academic
- Turner Frederick, and Ernst Pöppel
1980 The neural lyre: Poetic meter, the brain, and time. *Poetry* 135: 224.
- Turner, Mark
1991 *Reading Minds: The Study of English in the Age of Cognitive Science*. Princeton, NJ: Princeton University Press.
- Velmans, Max
2002 How could conscious experiences affect brains? *Journal of Consciousness Studies, Special Issue 9* (11): 3–95.
- Werth, Paul
1999 *Text Worlds: Representing Conceptual Space in Discourse*. London: Longman.