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What Poetry Makes Happen: Neurocognition, Negative Capability, and the Intricacies of Imagined Experience

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What Poetry Makes Happen:
Neurocognition, Negative Capability, and the Intricacies of Imagined Experience

By

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Abstract

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To take W.H. Auden's "poetry makes nothing happen" at its word would be to ignore what happens while reading a poem: not only linguistic meaning, but also imagined experiences of emotions, persons, places, times, voices, imagery, and sensations. *What Poetry Makes Happen* draws on theoretical and empirical perspectives from the cognitive sciences to explicate how language on the page guides imagining in the reader's brain, and to explain the actual effects of 'virtual' experiences. Though multisensory imaginings are 'nothing' from an external perspective, neurocognitive theory treats them as real happenings constituted by the brain's circuits for actual perception, emotion, and action. Imagination is not a distinct faculty of segregated fictions, it is a multi-system activity always-already integrated with the cognitive structures of non-literary life. I argue that non-linguistic imaginings both ground and complicate our construals and interpretations of a poem, and connect poetic techniques to aesthetic effects as *happening to* the reader. Because poetic experience is composed from existing cognitive structures, imagining a poem's "way of happening" can modify readers' dispositions and form new cognitive resources. By analyzing these interactions, I make an empirically-grounded case for certain poems' potential to influence some of what happens in the world.

In order to unpack the intricacies of aesthetic experience itself, and to build from that analytic appreciation to consideration of imagined experiences' social values, my dissertation alternates between two parallel sequences of inquiry. Both progress from the more textual to the more diegetic dimensions of imagining. Chapters one, three, and five recursively examine John Keats's vivid-yet-ambiguous "This living hand," explicating how its textual structures guide semantic/affective, personal/loco-temporal, and vocal/perceptual experiences, respectively. While critics have deemed "This living hand" contradictory or indeterminate, in imagination the hand can be both written and spoken of, presently seen though long dead, held out in earnest yet also manipulative and threatening. Keats's poem thus demonstrates how the reader's experience can exceed both physical possibility and logical non-contradiction; indeed, I show that it is the reader's oscillation between absorption in *both* the speaker's and addressee's viewpoints that generates the poem's lyric interiority and intimacy. Chapters two and four complicate the aesthetic dimensions of this "Negative Capability," turning to 20th/21st century poems that leverage 'impossible' experiences of systemic perception (Snyder, Hillman, Hass, and Roberson) and cross-racial perspective-taking (Hughes, Hayden, and Rankine) in order to cultivate ecological consciousness and redress anti-black racial bias. By making poetic imaginings into real happenings and analyzing the experiential construals

motivated by specific textual features, *What Poetry Makes Happen* reveals the multimodal intricacy of particular lyric effects and argues for certain poems' social values.

Table of Contents

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Introduction

What Poetry Makes Happen

> … Mad Ireland hurt you into poetry.
> Now Ireland has her madness and her weather still,
> For poetry makes nothing happen: it survives
> In the valley of its making where executives
> Would never want to tamper, flows on south
> From ranches of isolation and the busy griefs,
> Raw towns that we believe and die in; it survives,
> A way of happening, a mouth.
>
> —W. H. Auden, from "In Memory of W. B. Yeats"[1]

To take W. H. Auden's "poetry makes nothing happen" at its word would be to ignore what happens while reading a poem: not only linguistic meaning, but also imagined experiences, including emotions, persons, places, times, voice(s), imagery, sensations, and actions. *What Poetry Makes Happen* draws on theoretical and empirical perspectives from cognitive linguistics, psychology, and neuroscience in order to explicate how language on the page guides imagining in the reader's brain, and to explain the actual effects of such 'virtual' experience. I show that non-linguistic imaginings both ground and complicate our construals and interpretations of a poem, connecting poetic techniques to aesthetic effects as *happening to* the reader. Though from the outside this imagining looks like "nothing," from a neurocognitive perspective it is a happening as real as any other experience, even when the experience is subjectively understood as imagined rather than real. This imagining is not segregated in a distinct faculty; rather, it is composed by the same neural circuits that constitute experiences of actual perception, emotion, and action. Poetic figures and fictions are therefore always-already integrated with the cognitive structures that mediate non-literary life. Because the process of imagining modifies the neural structures it involves, the experience of a poem's particular way of happening can cultivate particular dispositions and construct altered and/or new cognitive resources, to influence subsequent subjective experiences as well as social and cultural behaviors. The aesthetic qualities and effects of imagined experience thus comprise a mechanism for poetry's pragmatic values. By making imagined experiences happen, poems change their readers' brains, to influence what those readers make happen in the world. Lacking a theory for these dimensions and effects, literary criticism has heretofore been limited to analyzing only part of what poetry makes happen.

Imagination and Multimodal Neurocognition

What Poetry Makes Happen argues that, while language is the means of poetry, the reader's imagination is a poem's true medium. In addition to the construal of conceptual meanings from the text's words, the imagining I analyze goes beyond the linguistic to include: emotional qualities that may be ascribed to the poet, to diegetic personae, to the text as itself expressive, or to the reader's response; relations to persons, places, and times; phonological qualities of the voicing of the language; and perceptual imagery in multiple sensory and somatic modalities.[2] These multimodal forms of meaning are not 'contained' in the poem's language but rather are constituted within the reader's brain. Reflective processes of formal analysis, aesthetic judgment, interpretation, and contextually-informed critique are all ultimately grounded in the pre-reflective processes of

imagining-while-reading. By analyzing the interactions between these dimensions of imagining, the qualities of aesthetic experience, and interpretive construal, *What Poetry Makes Happen* illuminates the contributions that multimodal neurocognition makes to poetic meaning.

We can better understand the structures and dynamics of imagination, and the stakes of imagining, by drawing upon research and theory in the cognitive neurosciences concerning language-processing and experience-construal. I present a novel approach to the imagined experience of reading literature by adopting the neurocognitive theory of simulation semantics. Simulation semantics holds that linguistic meaning is not only conceptual but also involves the multimodal neural circuitry that processes actual, fully embodied experiences. That is, understanding language involves neurally simulating what it would be like to experience what the language evokes. While the degree to which simulations are integrated into consciousness varies, simulation appears to be neurotypical and constitutive of language-processing: evolutionarily, our linguistic capabilities are not independent systems but "exaptations" that functionally extend non-linguistic neural systems; developmentally, linguistic meaning is learned through embodied experience and remains multimodally grounded; ecologically, linguistic behavior is always embedded in the context of being a creature in the world. Rather than the medium of thought, language is one structuring system among many in the brain; multimodal neurocognition contains linguistic structures as components within it, language is not a "prison-house" that contains imagining. The theory of simulation semantics is supported by evidence from psycholinguistic research using multiple investigative methodologies, including behavioral measures, electroencephalography, transcranial magnetic stimulation, functional magnetic resonance imagining, and computational neural modeling. Though virtual from an external standpoint, imagined experiences are real neural events.[3]

Neural simulations can be understood by a (simplifying) contrast between 'bottom-up' and 'top-down' cognitive processes. In actual perception, bottom-up neural activation flows from sense organs through perceptual processing systems and then into multimodal association networks, including linguistic processing as verbal categorization/description of the percepts. In reading, after visual processing of the text inputs to linguistic processing, activation flows through the same structures, but in a top-down direction, from linguistic processing out through multimodal association networks and into perceptual processing systems. In bodily actions, the top-down flow from executive control through the motor control system fully activates muscle contractions; in the simulation of actions, however, this full enactment is inhibited, such that activation largely stops in the premotor cortex, with detectable but non-contracting output along the peripheral nervous system. Similarly, where fully-actualized emotions involve changes in body states, affective simulations may extend only as far as the brain's representations of those states, which thereby function as an "as-if body loop."[4] A reader does not passively receive a poem's conceptual meaning and/or perceive its representations—rather, the neural systems for her own body actively construct a multimodal imagining of the poem. To read a poem is to be a participant in, not an audience to, the poetic experience.

The form of a reader's imagined experience extends beyond the form of the poem. Multimodal neurocognition is compositional: in the same way that a text is composed of words arranged in a particular form, an imagined experience is composed of multiple component simulations connected to each other to form an integrated construal. However, linguistic and cognitive structures are not isomorphic; rather than equating the units of words with units of ideas as mental objects (or even as semantic spaces marked off by binary oppositions in the signifying chain of difference), words and formal structures evoke "neural cascades" that are internally complex, comprising networks of branching and nested structures. Understanding of a discourse is composed by integrating the cascades evoked by words, phrases, and sentences together, recruiting further background knowledge, and resolving inferences based on, and elaborations extending from,

the cognitive structures of those component meanings and knowledges. All language is thus underspecific, impoverished in its encoding relative to the richness of the meanings communicators construct. Furthermore, where in spoken language underspecification may be compensated for by vocal qualities, co-speech gesture, shared embodied contexts, and the context of preceding discourse, with written texts such qualities and contexts depend upon emergent construal, such that written language is even more underspecific than speech. As a text evokes multidimensional simulations that go beyond language, certain linguistic structures guide certain parameters within the simulations, while other parameters and qualities are inferred and improvised in the compositional process of integrating the components into a more-or-less coherent overall experience. These processes both progress incrementally in the course of reading and recursively combine with and can revise each other, as the sequential and cumulative structure of language gives rise to cognition's parallel processing in multiple dimensions.[5] *What Poetry Makes Happen* leverages compositional accounts of cognitive linguistics and insights into the parameters and qualities of the various dimensions of neural simulation in order to analyze the form as well as content of imagined experience as it emerges from the form of the poetic text.

Where "imagery" and "expression" are ambiguous concepts in literary studies, variously taken to refer to language that describes objects or emotions, or to perceptions or emotions 'represented,' 'contained,' or 'communicated' by a text's language, simulation semantics enables us to reconceive of such contents as effects that emerge from beyond-linguistic simulations, both below and within consciousness. I leverage this neurocognitive perspective to develop a theory of poetic absorption.[6] Because imagining and actual experience both use the same neural systems, they compete with each other for the limited cognitive resources of activation and conscious attention. As the processes of simulation absorb more and more of a reader's cognitive resources, her present situation becomes "backgrounded" out of her attentional focus and may even become excluded from consciousness altogether; simulation semantics thus explains how imagined experience replaces the reader's reality during the course of reading. However, this imagined experience does not constitute access to a poem's meaning as an objective content of "transparent" language, nor is absorption equivalent with ideological capture by the text. On the one hand, being compositional and underspecified by language, imagined experience is not isomorphic with linguistic 'representation'; rather, the determinate text's effects are contingent upon readers' various ideological structures, expectations, and intentions. On the other hand, despite the metaphorical spatial contrast between absorption and critical distance, interpretation involves reflection not only upon the form of the text, but also upon its imagined contents, as well as upon the formal relationships internal to the absorptive experience of those contents. Even when mental imagery and absorption receive little conscious attention, the same multidimensional construals contribute to aesthetic qualities of a poem's language, inferences about its meaning, and further conceptual interpretation. Experimental evidence supports the theory that multimodal simulation is a typical part of linguistic processing, its effects indirectly observable even if they are not always evident to introspection. That is, understanding language remains grounded in imagining, even if that imagining is unconscious.[7] Beyond illuminating the immediate imagined experience made in reading, neurocognitive analysis helps us to understand how interpretation also happens through multidimensional construals and integrations.

Furthermore, this neurocognitive perspective enables us to understand how imagination and actual experience overlap. Concepts, percepts, and affects are not mental objects or substances that can move around, received from the world or retrieved from memory and then assembled now in the space of actual experience, now in the space of imagination; instead, they are constituted by physical structures in the brain that do not move but rather are dynamically connected to each other across the brain to compose integrated experiences, whether actual or simulated.[8] Imagining, as a

process, is functionally different from actual perception and action, but it does not involve distinct systems or structures. The imagining of fictional worlds and non-imagined experiences of the actual world are always-already commensurate with each other, as both are constituted by the same component circuits, not segregated in two separate faculties. Though his model was theologically rather than neuroscientifically motivated, Samuel Taylor Coleridge was on the right track in theorizing a "primary" imagination as "the living Power and prime Agent of all human Perception" and a "secondary" imagination "as an echo of the former, co-existing with the conscious will, yet still as identical with the primary in the *kind* of its agency, and differing only in *degree*, and in the *mode* of its operation."[9] Or, as Brenda Hillman puts it, "you don't have to use [your imagination], you are in it."[10]

Poetry as Pragmatic Experience

The multimodal nature of poetic meaning as composed through neural simulation calls for a return to a theory of poems as pragmatic experiences. This perspective combines the two senses of "experience past ('lessons') and experience present (full and active 'awareness')" with a sense I'll call 'experience future,' in which present experience becomes past learning that informs future awareness.[11] Experience past is pragmatic in the sense of having practical effects on the present experience of a poem, such that a poem's meaning can never be theoretical or dogmatic but depends upon the reader's "knowledge gathered from past events" as much as upon the text.[12] That is, the implications, imagery, and feelings evoked by, say, Auden's "In Memory of W. B. Yeats" will be informed not only by a particular reader's knowledge and attitudes regarding Auden and Yeats, but also comprise personal experiences and learned associations with Ireland, executives, ranches, towns, labor, grief, capitalism, and poetry broadly, as such associations are more-or-less evoked, and sub-sets of them integrate and resonate with each other or are inhibited as irrelevant. I approach experience present from the perspective of pragmatist philosophy, according to which meaning is understood in terms of its interactional, emergent effects; in pragmatist terms, a poem is the experience it makes happen in such a process of evocation and resonance. Finally, the critical speculations I undertake about experience future are pragmatic in taking poetic values as contingent upon circumstances as well as the audience, considering the practical effects of poems on readers and, through readers' behavior, on the world. Auden's poem might contribute to make us more inclined to look to poetry for consolation rather than inspiration in some future contexts, or it might contribute to our ability to recognize and critique quietism in other future contexts, depending both on whether we experienced it one way or the other in the past and on the relations of the components of that experience past those of the various experiences present. Poems that take happenings other than poetry as their subject likewise influence future experiencing; the possible effects of particular readings of such poems on non-literary behavior can hence be analyzed and evaluated in ways that account for the differing effects of different readings without simplifying the inevitable contingency of poetic influence.

To elaborate, beginning with experience present: as argued by pragmatist philosopher John Dewey, the work of art is the experience an art object produces in the "living creature," who does not apprehend the object in itself but rather perceives and responds to its components and qualities dynamically, such that the object is a means to the work of meaning-making.[13] As discussed above, while the object of the text has a determinate form, what that text makes happen is the reader's compositional response to that form, underspecified by it. Put another way: a poem is a happening that emerges in the interactions between reader and text.[14] As this pragmatic premise has been seminal to reader-response criticism, my project participates in that tradition, extending its methods through my neurocognitive approach to analyzing the processes of reader response.

Because the determinate terms of "cause" and "effect" would be inaccurate, I articulate these interactions in terms of "motivations" and "affordances." The concept of "motivation" is used in cognitive linguistics to refer to multifactorial causation "between the poles of arbitrariness on the one hand and predictability on the other hand."[15] While the term is traditionally used of historical processes to describe causal factors that have contributed to specific linguistic constructions, I apply it to the reading process to describe how a text's structures push the reader towards, but do not determinately produce, certain imaginings and interpretations rather than others. To analyze certain textual features as motivating certain construals, while other textual features may motivate other construals, enables me to provide an accurate account of the complex compositional processes through which meanings, imaginings, and interpretations are constructed in the experience present of reading.

The concept of an "affordance" derives from James J. Gibson's ecological theory of psychology: an affordance is the use or value that an object offers an animal. While an affordance depends on the properties of the object, it is also always relative to the capabilities and needs of the specific animal. For example: a small branch affords support to small animals but not large ones; a lake's surface affords support for water bugs, its interior affords a habitat and oxygen for fish, along with the affordance of the aforementioned bugs for food, while for humans the lake affords drink, fish for food, support for boating, an interior for swimming, etc.[16] Applying the concept of affordances to poetry enables me to theorize the interrelations between experience past, the present reading experience, and experience future. I define a poem's affordances as the range of imagined experiences and interpretive construals that a reader may derive from the text—a larger set than individual readers may typically encounter, since individual experiences will vary, being motivated by both the text itself in experience present and by the reader's pre-existing neural structure and current cognitive state, as constituted by her experience past. The concepts of motivation and affordance thus supply principles for navigating the space of variability where real reading happens, between the poles of expert-defined 'true' meaning and an abstract infinity of *un*-motivated possible reader-responses. The experience present of poetic meaning is not contained in or represented by the text, it is pragmatically construed by the experiencer in response to textual motivations and inferences of intersubjective plausibility motivated by experience past.

To theorize experience past in neurocognitive terms enables a more nuanced perspective on cultural context. On the one hand, the fact that cognitive structures are learned from experience, including cultural experience, grounds analysis of the motivating force of the linguistic structures and the mediating affordances of beyond-linguistic parameters as more-or-less intersubjectively valid, depending on degrees of similarity-or-dissimilarity in structures of cultural and other experiences (which can themselves be analyzed). On the other hand, understood as experience past informing experience present, cultural context cannot be treated as a synchronic regime evenly impressed upon all users of a language. Variations in individual life trajectories of exposure to the complex systems of language and culture (including discursive and non-linguistic knowledges, reading practices of particular interpretive communities and/or critical methods, personal social identities, differences of cognitive style, etc.) entail that, while many cognitive structures will be similar among persons of similar backgrounds (such that analysis of historical cultural/cognitive structures enhances our ability to attempt the reconstruction of historical meanings), poetic experiences will vary. Indeed, depending on the relative circulation of a poetic text versus critical texts about it, unhistoricized interpretations may be *more* representative of the poem's historical and present affordances than the research-informed interpretations of expert scholars. If, in addition to the questions of what made poems happen and what those poems made happen in their authorial context, we are interested in what poems continue to make happen across the variety of their real readers, then we should pragmatically describe a poem's full range of motivated interpretations, not

only those interpretations afforded by scholarly knowledge. From this perspective, critical analysis of poems' social values should seek to illuminate the variety of a poem's motivated affordances.[17]

This consideration of descriptive inclusivity beyond prescriptive adjudication becomes especially important in addressing experience future, which speculative analysis is pragmatic in the sense of theorizing how literary works practically make things happen by influencing their readers.[18] The question of experience future is: what are the affordances of experience present, specifically the experience of reading a specific poem, and of imaginatively experiencing it in a specific way? Recognizing that experience past motivates experience present, can we analyze how experience present may motivate experience future?

From a neurocognitive perspective, the imagined experience of a poem's way of happening functions as practice for actual thinking, feeling, relating, perceiving, and acting. The neural overlap between imagination and actual cognition means that literary experience can directly modify cognitive structures that apply to non-literary life. The biochemical processes of neural activation increase the weighting of the synaptic 'connections' between the neurons that compose a simulation; intermediate-term memory processes then consolidate these short-term activation patterns as longer-term composite structures, strengthening the component structures involved in the composite memory and building connections between those components, as well as, potentially, a whole-memory gestalt circuit. This principle of neuroplasticity, known as "Hebb's rule," is often summarized: 'neurons that fire together, wire together.' Jerome A. Feldman describes the interaction between experience past, present, and future as a "structure-experience-adaptation cycle."[19] The reader's cognitive system simulates an imagined experience when reading a poem, which simulating modifies that system's structure, which modified structure then governs future experiences—not only of poems, but of any experience that involves the component structures. As Feldman puts it, "*learning does not add knowledge to an unchanging system—it changes the system.*"[20] Rather than being mere fantasy, imagining in itself motivates changed affordances, habituating the structures of thought and feeling involved in a poem's way of happening.

Combining the neurocognitive understanding of imagined experience as participatory simulation with these principles of neuroplasticity expands our understanding of the ways a poem may function as (in Kenneth Burke's phrase) "equipment for living."[21] Yes, a poem can be an object within a field of knowledge, and yes, a poem can be a memory actively recalled to inform present reasoning; but we shortchange poetry if we only recognize pragmatic influence in situations where a reader consciously applies her knowledge of a poem to her present situation. The experience past of having read a poem, because it modifies multimodal components of both general and specific knowledge structures, also influences future reasoning, feeling, relating, perceiving, and acting, even without the poem itself (or interpretation of it) being specifically recalled. It's possible that a single reading of a poem might form a new structure, or constitute an incremental tipping point, such that the reader's cognition is significantly altered.[22] However, more typically the effects will be incremental contributions to the always-ongoing updating of cognitive structure. Poems need not have heroic effects to affect readers' future behavior; the experience of reading poetry, in interaction with all of one's experiences, has the potential to change who one is and inform one's life, especially in the case of poems one reads repeatedly.[23]

In my theorization, then, poems afford values on two different scales. First, there are the values of the experience present of the poem, e.g. pleasure, beauty, catharsis, meaningfulness, insight, surprise, a sense of social connection or of intimacy, etc. These I consider to be a poem's aesthetic values, the qualities of the imagined experience that the reader finds valuable. The range of values I admit to this category extends beyond traditional aesthetic theories, which often focus on one or two canonical effects (therapeutic harmony, beauty, sublimity, defamiliarization, shock, etc.) that in some cases are understood as determined by formal properties inhering in the artwork more

than by its content or the reading process. As form, content, and cognitive processes are co-motivating in my theory, I analyze how the multiple dimensions interact in affording various qualities and values. A poem's verbal music may be pleasurable and/or surprising to simulate, or it may evoke an experience (such as being the target of a profession of love) which may be pleasurable and/or pathetic (or not) to imagine, depending on the reader and the particular way she construes the situation (as, for example, requited or unrequited, relating to a person desired in her own life or to someone long dead). Again, these qualities and values are not in the text, they are constituted by the activation of neurocognitive structures and embodied effects within the reader in the process of imagining.

Second, there is the value of the difference this process of imagining makes in the reader's cognitive structure—the degree to which it changes the reader's mind—and the values that may be afforded by that change. I conceive of this value as experiential learning rather than didactic instruction; poems afford opportunities for readers to change their own minds through their imagining, rather than transmitting information that moves readers from ignorance to knowledge. These pragmatic effects might then be described as a 'weak rhetoric.' In strong rhetoric, the goal is to definitively persuade, such that the audience adopts particular beliefs and attitudes and/or undertakes particular actions. In a weak rhetoric, however, the goal is to afford experiences that will inform readers' lives, potentially involving strategy that motivates certain experiences rather than others, but which leaves the audience to construct the experience and its values themselves. As much as a poet may aim to motivate particular experiences, individual readers' experiences will vary depending on their backgrounds, dispositions, intentions, and explorations. Within the context of such contingency, the task for a neurocognitive poetics is to analyze the range of impact(s) motivated by a poem, and to speculate as to those afforded impacts' subsequent pragmatic affordances.

Neurocognitive Poetics

What Poetry Makes Happen develops a neurocognitive poetics that theorizes the multidimensional intricacies of readers' imagined experiences. In his address on "Linguistics and Poetics" Roman Jakobson describes poetry as linguistic communication in which the poetic function—"focus on the message for its own sake"—is dominant, with varying subsidiary involvement of the other dimensions of communication—the referential, emotive, conative, metalingual, and phatic functions. Where Jakobson initially defines poetics as dealing "primarily with the question, 'What makes a verbal message a work of art?' … with problems of verbal structure, just as the analysis of painting is concerned with pictorial structure" he also points out that "scrutiny of poetry cannot limit itself to the poetic function."[24] Analysis of literary works in terms of their experiential effects, of course, dates back at least to Aristotle's *Poetics*. In my pragmatic poetics, analysis of a poem aims to identify not what makes it a work of art but how it artfully works upon the other functions through its verbal structure. I also extend the verbal functions into their non-linguistic dimensions by accounting for their constitution in multiple modalities and cognitive relations.

The theory I develop is grounded in convergent empirical and theoretical research in cognitive linguistics; psycholinguistics; cognitive, affective, and social neuroscience and psychology; and computational neural modeling. This interdisciplinarity aims at an understanding of poetics that is biologically plausible, though I do not myself use experimental methods. My approach is, in part, a practical matter of not having access to experimental subjects and technologies; it offers literary critics who are in the same position a resource that synthesizes a range of neurocognitive insights and demonstrates how they can be integrated into conventional methods of close reading. Where

empirical methods require the isolation of single pairings of independent and dependent variables, and may elide variation in establishing statistical correlations, the principled synthesis of such research enables consideration of literary objects in their full multi-variable complexity.[25] Furthermore, where survey methods used in empirical literary studies are limited to readers' introspective (and, typically, retrospective) judgments, my multi-level theory extends to unconscious and pre-reflective processes. Finally, where the responses of a small sample of actual readers poses problems of the variability and/or representativeness of those readers' reading practices, analysis in terms of the multiple parameters of construal inherent to the dimensions of imagining makes it possible to both unpack the full range of affordances and to parse the motivations of the text as well as the co-motivations of readers' varying interpretive dispositions. The theoretical work of *What Poetry Makes Happen* will, I hope, contribute to the design of future empirical studies; and, of course, my theories may need to be refined in response to the results of future empirical work. Neurocognitive poetic theory and empirical literary studies constitute reciprocal modes of inquiry.

This theorization of multidimensional imagined experience and its consequences fills several gaps within, and offers important extensions to, both cognitive literary studies and the broader field of poetics. First, it contributes to the underdeveloped sub-field of cognitive poetics that addresses poetry specifically, rather than 'poetics' as literary stylistics in general. Most work within cognitive literary studies to date has focused on aspects of narrative, such as text worlds, characterization, focalization, and discursive stance. Where non-narrative aspects of poetry have been considered, typically single aspects, such as metaphor or iconicity, are treated in isolation. Beyond the bulk of narrow studies, three theorists have published books addressing multiple dimensions of non-narrative poetics: Reuven Tsur, Peter Stockwell, and George Lakoff.

Tsur's methodology is interdisciplinary, drawing on gestalt psychology, structuralism, Russian formalism, and phonological analysis of vocal performances of poems. While he has been critical of cognitive linguistics, his analyses are highly nuanced, often compelling, and may very well be accurate in many respects. But several aspects of his theory are problematic: he makes frequent recourse to theorization by analogy; his systematizing involves binary oppositions that are suspiciously consistent in aligning with each other at multiple levels of analysis; and he synthesizes an idiosyncratic and often dated collection of sources without working out the explanatory mechanisms for how each fits with the rest.[26] *What Poetry Makes Happen* instead recognizes that many parameters of construal involve three or more options, not simply binaries, and grounds poetic qualities and their interactions in the latest neuroscientific research.

Where Tsur's theory is a methodological hodgepodge, Stockwell's work derives from an integration of stylistics, cognitive psychology, and cognitive linguistics, particularly Ronald Langacker's Cognitive Grammar. In drawing on and systematizing some facets of cognitive linguistics as applicable to literary analysis, Stockwell's theory is the most representative of prevailing research methods in cognitive approaches to poetics, especially in Europe. However, Stockwell's framework, in being cognitivist without being neurological, focuses on conceptual meaning without addressing the intricacies of multimodal imagined experience. Focusing on the stylistics of texts themselves, Stockwell's analyses also tend to treat readers' construals as isomorphic with textual structures, rather than treating construal as underspecified and open to variable dynamic composition.[27]

Lakoff's contributions to cognitive poetics have primarily consisted in his development of the theory of conceptual metaphor. He is best known within literary studies for his 1980 book with Mark Johnson, *Metaphors with Live By*; his 1989 book with Mark Turner, *More Than Cool Reason: A Field Guide to Poetic Metaphor*, applied conceptual metaphor theory to poems, focusing on how semantic meaning emerges from poetic elaborations of conventional metaphors, with slight attention to non-semantic aspects of poetics.[28] This theory of poetic metaphor stands to be updated

in light of Lakoff and his fellow cognitive linguists' subsequent work developing a theory of dynamic conceptual integration and a neural theory of language, including the theory of simulation semantics. Such updating, applying the now neural theory of metaphor to poetic particulars, is incorporated into *What Poetry Makes Happen*; at the same time, the theory I develop also goes far beyond metaphor in applying the neural theory of language to many types of textual features and multidimensional construals. Furthermore, the project of *What Poetry Makes Happen* differs from the work of cognitive linguists in that those scientists analyze literary language in order to make generalizations about cognitive phenomena beyond the specific poem; in contrast, as a literary scholar, my approach is to apply an understanding of general cognitive principles in order to analyze specific literary phenomena and the particularities of individual poems. What generalizations I pursue are centered on textual motivations and experiential effects in the context of the intricacies of poetry; my work then offers cognitive linguistics a model of enhanced sensitivity to poetic nuances.

Though they have not focused on poetics, a number of other literary scholars have drawn upon cognitive scientific research in recent work theorizing the imagined experience of reading. Most of these works have focused on only one modality or mode of relation: visual imagery in Elaine Scarry's *Dreaming by the Book*; bodily imagery in Guillemette Bolens' *The Style of Gestures*; theory of mind in Blakey Vermeule's *Why Do We Care about Literary Characters?*; and empathy in Suzanne Keen's *Empathy and the Novel*.[29] The current project takes the next step in this field of inquiry by theorizing how the modalities and relations interact with each other in producing multidimensional experiences, which I analyze as neurally simulated by the reader rather than as diegetic imagery and persons 'represented' by the text. While G. Gabrielle Starr's *Feeling Beauty* has addressed multiple modalities (as well as multiple forms of art), like much work in the field of "neuroaesthetics," its consideration of imagined experience is narrowly focused on a traditional formalist aesthetics of beauty.[30] Taking aesthetic experience as overlapping with non-aesthetic experience, *What Poetry Makes Happen* more expansively aims to address the full range of qualities and responses that poetic texts evoke. Most recently, Terence Cave's *Thinking with Literature* recognizes the multiple dimensions of imagining involved in meaning construction and makes a well-informed argument for a cognitive criticism. The theory that I've developed is largely in accord with that presented in *Thinking with Literature*; but where Cave, adopting the framework of relevance theory, focuses on cognitive processes of inferring the intentions of the author, I use simulation semantics to focus on the neural processes of readers' imagining itself, analyzing the affordances of the reading experience more than the thinking it communicates.[31] *What Poetry Makes Happen* synthesizes neurocognitive insights and literary analysis, addressing the motivation of variable qualities and parameters of neural simulation by specific textual features, unpacking the integration of the full range of modalities and relations in composing the complex particularities of readers' imagined experiences, and leveraging an understanding of the participatory nature of neural simulation to postulate specific poems' affordances of concrete pragmatic values.

The ultimate point of this neurocognitive theorization is to enhance our understanding of key issues of non-narrative poetics. *What Poetry Makes Happen* leverages cognitive linguistic accounts of the nested semantic structures and the processes of their evocation, integration, elaboration, and extension to provide a novel account of the composition of poetic meaning and the quality of personally resonant meaningfulness. By drawing on affective neuroscience, I explain how the experience of text as emotionally 'expressive' involves the reader's affective systems in simulating represented, implied, and evoked emotions. Decomposing lyric address into an integration of discourse roles, self-concepts, and the reader's cognitive viewpoint, I analyze the flexible dynamics of identification, perspective-taking, empathy, and intimacy. The addition of the cognitive construals and viewpoints of place and time then clarifies experiences of lyric transport and presence, as well as construals of fictionality and reality. The neuroscience of the articulatory and auditory processing of

written text clarifies the reality of poetic voice, the underspecification of the "vocal viewpoint" of speaker or hearer typical in lyric poetry, and the motivating features affording variable construals of qualities such as tone and rhythm. By analyzing sensory and bodily imagery as not only constituted by neural simulations but entailing the construal of certain embodied perspectives relative to those perceptions, I reveal how poems involve readers as participants in the diegetic scene(s), perceiving and acting persons, and/or figurative imagery. The multidimensional neurocognitive poetics of *What Poetry Makes Happen* thus contributes to the development for poetry of what narratology offers for narrative: a systematic account of the art's techniques and aesthetic effects.

Aesthetic Education: Poems as Vectors in the Cognitive Field

In addition to novel perspectives on the intricacies of aesthetic experience and their artful motivation, a neurocognitive theory of poetics enables pragmatic appreciation of the potential social values of poems. To imagine a poem's ways of happening is to practice, and hence habituate, thinking and feeling in that way. By unpacking the cognitive structures involved in particular imagined experiences, I analyze how poetic forms of thinking and feeling function as experiential lessons for non-literary life, modeling ways rather than communicating knowledge. This approach improves upon claims for literature's value as cognitive calisthenics, which hold that the exercise of some general faculty (e.g. creativity, empathy, etc.) in the activity of reading will strengthen readers' deployment of that capability in non-literary life.[32] Though my claims for habituating practice are similar to such calisthenic claims, a neurocognitive understanding that experience strengthens specific structures of thinking and feeling, rather than general faculties, calls for case-by-case evaluation of individual poems' affordances rather than over-arching claims about literature in general. For example, in chapter four's argument for the values of poems of racial double consciousness, I analyze particular combinations of same-race and cross-race perspective-taking, cognitive reappraisal, empathy, antipathy, and compassion, considering the values of the practice of each for black as well as white readers. It is not just that such poems have us imagine other persons and represent experiences of racism, but the motivation of specific shifts in viewpoint and in-group/out-group affiliation/disaffiliation that cultivate habits for navigating one's experiences and relations in more adaptive, anti-racist ways.

This experiential learning is a form of aesthetic education, by which I mean aesthetic experience that affords not only knowledge *of* art, or knowledge represented *in* art, but knowledge and dispositions constructed *through* art-induced imagining. I have been inspired in this conception by Friedrich Schiller's *On the Aesthetic Education of Man*, which argues that aesthetic experience is a developmental stage in the "transition from a passive state of feeling to an active state of thinking and willing": "Man in his physical state merely suffers the dominion of nature; he emancipates himself from this dominion in the aesthetic state, and he acquires mastery over it in the moral."[33] Within this developmental progression from slavish sensuousness to moral reasoning founded upon a general aesthetically-afforded recognition of human freedom, Schiller also conceives of the aesthetic as a psychic state, in which the "play drive" brings the nature-determined "sensuous drive" and the law-giving "formal drive" into reciprocal harmony. Thus, even once one has progressed to the stage of moral reasoning, the aesthetic state continues to be valuable by bringing duty and desire into accord: "He must learn to desire more nobly, so that he may not need to will sublimely."[34] For Schiller, aesthetic experience teaches the general lessons that humans have the freedom to imagine and to reason beyond actual experience, and that the greatest freedom is to learn to naturally desire what one rationally wills.

In developing a theory of poetics rather than a philosophy of aesthetics, my project addresses aesthetic education as specific experiential lessons rather than general states and stages of

recognition. My interest in pragmatic effects regarding certain social issues also departs from Schiller's claim that beauty and its effect of freedom is based in form and limited by subject matter that arouses passions, didactically teaches, or morally improves.[35] In my neurocognitive version of aesthetic education, form and content together structure the imagined experience, which functions as a lesson through Hebbian habituation of particular structures of thought and feeling. On the one hand, imagined experiences can entrench their ways of happening as knowledge available for reflection and conscious implementation as models of behavior. On the other hand, neural simulation also modifies the dispositions that motivate behavior in parallel with reasoning, such that imagining can serve as practice for future life. Individual poems thus afford both the construction of particular cognitive resources and specific modifications to one's dispositions, motivating each in experience present in interaction with one's pre-existing cognitive structure and intentions, and then motivating subsequent effects that are contingent upon the contexts of experience future.

In order to conceptualize this dynamic process of aesthetic education, I propose a theory of poems as "vectors in the cognitive field." This metaphorical theorization maps poems and their contexts to "vectors" and "fields" as those terms are used in both physics and epidemiology. In physics, a vector is the combination of a magnitude and a direction; in the physics of motion, vectors are used to represent the combined speed and direction of an object, and they can also represent the magnitude and direction of external forces acting upon that object. The object's motion will thus be the result of the interactions of these multiple vectors as they develop over time within the system. A vector field is a representation of the overall system, like the fluid motion of winds in the atmosphere, composed by assigning a vector to each point within the field. I propose that we can conceive of a neural system as a vector field, where each neuron is a point, arranged not in absolute space but in the network of synaptic connections (also known as the "connectome"); the neuron's vector combines the magnitude of its current activation with a 'direction' in the form of the relative weighting among its downstream synaptic connections.[36] Given its current structural connections and synaptic weightings, each neuron contributes to the overall activity of the brain by distributing the activation arriving from upstream neurons to downstream neurons according to the ratio of its weightings.[37] At the cognitive level, a poem, functions as a new set of force-vectors introduced into the reader's cognitive field: its effects interact with both the current pattern of activation in the reader's cognitive system—the magnitudes of the vectors in the field—and the structure of that system—the directions of the vectors. The structures of thinking, feeling, and acting that the poem-vector strengthens constitute its direction, while the degree of strengthening is its magnitude.[38]

As a more concrete analogy, consider rain falling on a landscape. The individual raindrops start out traveling in various directions, their downward force combined with horizontal motion in some direction. After they hit the ground, each drop's vector is channeled along the contours of the ground. On level ground, the drop will continue traveling in the horizontal direction of the original vector; heavily slanting rain might briefly flow up an incline, but will eventually follow the path of least resistance; rain whose horizontal motion is aligned with the incline where it falls will flow faster than on level ground. The path of each drop will thus depend on its initial vector and on the pre-existing structure where it lands. Hebbian learning is also reflected in this analogy as the process of erosion where the paths the raindrops take become entrenched and therefore more likely to channel future flow. To return from this analogy to the neural landscape, each reader's experience and interpretation of the same poem, and the Hebbian effects of that experience, will depend on her individual cognitive structure—though, of course, in reading there is more complex interaction between the vector of the poem and the reader's current cognitive state and intentions, as in a rainstorm in which there are prevailing, and/or dynamically shifting, winds. The words of a poem "Are modified in the guts of the living" and effect modifications to readers' neural structures both.[39]

Where the physical vector and field metaphor, along with the landscape analogy, illustrates the effects of poems on individual readers' cognitive structures, the epidemiological senses of vector and field capture the aggregate effects of poems' circulations within a society and its culture. In addition to functioning as a field of interacting forces, the dynamic system of the cognitive field can be conceived of as an ecosystem in which organisms and objects (like humans and poems) interact. In epidemiology, a vector is a host that transports an infectious agent, such as a virus. In the same way that a virus at one level causes an experience or knowledge of illness, while at another level it modifies the genetic code of the infected person's cells, the communicated agent of a poem-as-vector may not only be a conscious experience or the standalone conceptual structure of the memory of a poem, but also modifies the reader's neural structure by strengthening the component structures of the reading experience. If a particular reader is susceptible, that change may have a significant functional effect; if the reader's system is more resistant, it may take multiple exposures to the poem, or exposures to multiple different poems, for the full-blown 'infection' of significant modifications of cognitive structure to result.

Once a poem has passed its way of happening to a reader, its influence upon her may result in the same or similar structures being spread to others in the society through the reader's subsequent behavior and/or cultural productions. Poems can thus be vectors that motivate structures of thought and feeling that subsequently 'go viral' beyond those poems' actual readers. Nonetheless, we should not leap to fantasies of heroic poetic agency—that a poem, simply by existing, changes language, culture, or the course of history. Rather, understanding the socio-cultural cognitive field as an aggregate of individual cognitive fields, we can better recognize that the spread of a poem's afforded experiential lessons will depend on the number of vectors in the field, their circulation, and the number of exposures of particular individuals. Furthermore, the poem-vector's 'infectiousness' will depend on individuals' pre-existing structures and their ongoing exposures to other cultural and experiential vectors, which form a complex ecosystem of competing, reinforcing, combining, and/or complicating motivations. Thus, while neurocognitive analysis can specify potential effects of poetic motivations on readers' individual cognitive fields, the affordances of these afforded changes will inevitably remain speculative, contingent on the broader dynamics of the aggregate cognitive field.

Negative Capability as a Reading Experience and Critical Practice

Accepting that imagined experiences can function as valuable vectors of change to individual and social cognitive fields, one might still ask: why poetry? I don't claim that poetry has any kind of monopoly on the affordance of imagined experiences. However, I do think that poetry typically, and lyric poetry especially, because of the underspecification of viewpoint and context, afford more extensive experiential experimentation in multiple dimensions of imagining, compared to the more frequent determination of construal in other genres. For example: in performed drama, vocal qualities are actualized in the delivery of dialogue and supplemented by co-speech embodied expression; in novels, narration typically includes information about speakers' manner of speech and/or subjective states; in both, the larger narrative supplies a containing world and contextual implications as to the significance of a discourse's meaning. In written (rather than performed) lyric poetry, however, there is only the language itself, which depends on the reader to imagine the speaker's manner and context, the reader's relations to that speaker and context, and the import of the discourse beyond its implied context. As I discuss in Chapter 3, to decide that lyric is definitively fictional or to choose one or another theory of lyric address is to close down lyric's possibilities and fail to recognize how lyric poems themselves afford multiplicity and motivate certain construals over others. We are more true to lyric when we recognize underspecification as a means for the

affordance of open-ended imagining rather than as a deficit to be resolved by the application of poetic theory.

To describe this approach of receptive, open-ended imagining, I adopt John Keats's term "*Negative Capability*, that is when a man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason."[40] Keats coined the term in reference to a quality belonging to "great" writers, whose achievement he thought involved receptivity to "the sense of Beauty [that] overcomes every other consideration," whereas lesser writers, who constrain their imagining to what is coherent and accords with knowledge or s philosophy, lack negative capability.[41] I want to extend this conception of writers' imagining to also apply to the imagining that readers may engage in when experiencing a poem—that, in addition to pursuing the positive capability of determining a single interpretation, one may engage in the negative capability of imagining experiences and exploring possible construals for the sake of values other than "fact & reason." In another letter a month prior, Keats professed a similar preference for "the authenticity of the Imagination" and affective experiences over knowledge from philosophical reasoning as sources of "truth":

> I am certain of nothing but of the holiness of the Heart's affections and the truth of the Imagination—What the imagination seizes as Beauty must be truth—whether it existed before or not—for I have the same Idea of all our Passions as of Love; they are all in their sublime, creative of essential Beauty. … The Imagination may be compared to Adam's dream—he awoke and found it truth. I am the more zealous in this affair because I have never yet been able to perceive how any thing can be known for truth by consequitive reasoning—and yet it must be—Can it be that even the greatest Philosopher ever arrived at his goal without putting aside numerous objections—However it may be, O for a Life of Sensations rather than of Thoughts![42]

Though critical practice might conventionally be inclined to follow after philosophy in attempting to establish truth through reasoning, like Keats I am arguing for a criticism that recognizes imaginings themselves as "true" experiences that can be valuable both as aesthetic "Sensations" and by contributing to our knowledge structures and dispositions.

I further claim that poetically-prompted imagining and experiential experimentation can provide practice in forms of thinking, feeling, and perceiving that may be unavailable outside poetry. Again, even though a poem comprises a single determinate text, the reader is not required to settle on a single construal. When approached with readerly negative capability, poems afford variant imaginings and interpretations—not only as motivated ambiguity or underspecific indeterminacy, but as open-ended multiplicity. Compared to novels and drama, poetry is frequently less invested in realism and more invested in atypical figuration; especially from modernism on, poetry has also been the genre most capacious in leveraging both conventional and unconventional language structures to construct new ways of evoking meaning and imagining. More broadly, because poetic experiences are imagined, they need not follow rules of physical possibility or of logic that hold for actual experiences. Poems can therefore afford experiences that would be impossible in actuality.

In addition to doing justice to textual open-endedness, adopting negative capability as a critical practice can increase the value that may be derived through experientially exploring a poem. While the text motivates structures of imagining that may be more or less novel to an individual reader, the reader's pre-existing cognitive structure always motivates the most habitual construal. That is, the interpretation that initially strikes a reader as most apt is likely to be the one that best coheres with, and hence reinforces, her expectations. Whether we consider this filtering of experience by expectation as an effect of ideology, the habitus of an interpretive community, or

according to the cognitive principle "What You See Is All There Is," the takeaway is that experiential novelty occurs not only through engaging novel poems (what's 'experimental' relative to the archive) but also by considering alternatives to one's initial responses (experimentation relative to individuals' cognitive fields).[43] As Keats wrote in another letter, "The only means of strengthening one's intellect is to make up one's mind about nothing—to let the mind be a thoroughfare for all thoughts."[44] By experientially exploring a poem rather than seeking a singular interpretation one may better get beyond one's own habituations to learn from and be modified by the poem.

In theorizing the alternative construals entailed by the parameters of specific modalities and dimensions of relation, *What Poetry Makes Happen* presents tools for displacing from one's initial experience to explore the other possible construals a poem affords. Such exploration is central to poetic value as "equipment for living," because, though one can speculate, one can never be sure what structures of thought and feeling may prove valuable in future situations. Beyond offering a chance to practice dispositions one expects to be valuable, exploring imagined experiences with negative capability offers the chance to cultivate habits of flexibility. By affording multiple construals of the same content, poetic texts demonstrate how a particular situation can be thought and felt about in various ways, which differing perspectives enrich and complicate each other and, therefore, enrich and complicate the reader's cognitive structure, cultivating multi-conceptualism and cognitive flexibility. Rather than reaching after a single interpretation that best coheres with fact and reason, criticism should identify the multiple construals afforded by literary works, clarify how textual features structure and complicate readers' imagined experiences, and explore the possible values of those imagined experiences and multiple interpretations as means of expanding readers' repertoire of cognitive structures and as particular sources of novel insights or adaptive practices.

A Recursive Presentation of the Dimensions of Poetic Experience

In presenting this neurocognitive poetics, *What Poetry Makes Happen* proceeds from the more textual to the more diegetic aspects of imagination. In order to elucidate how the dimensions layer and interact, chapters one, three, and five recursively analyze a single poem: John Keats's vivid-yet-ambiguous "This living hand." Respectively, those chapters theorize the semantic/affective, personal/loco-temporal, and vocal/perceptual dimensions of poetic experience. In between that multidimensional excursus, chapters two and four investigate how the same dimensions are leveraged by 20th/21st-century poems that address ecological reasoning and anti-black racism. I argue that these poems produce their aesthetic and social values specifically by constructing experiences in imagination that cannot be had in other forms.

The first pair of chapters provide concrete illustrations of this introduction's claims concerning the construction of poetic meaningfulness from semantic and affective knowledge, and the consequent effects of various construals on that knowledge. Though poetic experience may not serve immediate practical purposes, its composition out of general cognitive and emotional structures means that literary imagining itself (and not just the judgment *of* artworks) can serve as practice for non-literary thinking and feeling. Chapter 1, "Haunting Thy Days" shows that the meaning and interpretive multiplicity of Keats's almost-entirely-literal text derive from compositional integration of multiple metaphorical mappings stored in readers' background knowledge, including constructions that link semantics and affect. The hand, "warm and capable / of earnest grasping," is understood as a figure of affection and desire; in "hold[ing] it towards you," the persona offers not so much that hand itself, but an opportunity to reciprocate those feelings and balance an implicit moral debt. The semantic-affective complex constructed in reading the poem can modify one's understandings of love, desire, loss, fear, and obligation, thereby enriching,

interconnecting, and complicating the neural structures that will mediate future thought, feeling, and action in those domains.

Chapter two expands from the complication of dyadic social relations to the construction of systemic ecological consciousness. In contrast to accounts of ecopoetry that focus on the redirection of attention from the poem to (supposedly unmediated) perception, "To See the Earth Burning" argues that poetic mediation itself can help readers overcome a key challenge to ecological reasoning: the difficulty of mentally moving from an immediate situation to its systemic causes and effects. Through figuration and formal patterning, poems by Gary Snyder, Brenda Hillman, Robert Hass, and Ed Roberson connect abstract knowledge and complex causal relationships to concrete objects and actions, compressing ecosystemic interconnections into human-scale perceptions that can then inform real life. The poems also integrate affects into this ecological consciousness, connecting cross-species grief with solidarity, eros for beauty and prosperity with debasement and exploitation, and the drive to survive with a sense of choice under the specter of certain risk. By involving readers in an invested experience of systemic causality beyond conceptual information, such ecological poems offer novel orientations for navigating the interconnected, warming world.

The second pair of chapters provides a novel account of lyric address, identification / empathy, and presence / transport. While critical interpretations of "This living hand" (and recent lyric theories generally) presume that the reader aligns with a single discourse role (whether the speaker, addressee, or overhearer), reader viewpoint is not restricted to the point-of-view of the discourse or audience, but is an open-ended and even dynamic experiential phenomenon. Chapter 3, "This Living Hand, Now" unpacks the layered subjectivities, spaces, and times evoked by Keats's poem; as these are cognitively related to each other and to factual or fictional persons and contexts, they afford identification or displacement, presence or transport. This neurocognitive analysis of "This living hand" reveals that the contrasting canonical models of the lyric are in fact variations on a core cognitive integration of written and spoken communication. Where Jakobson observed that poetry is ambiguous as to addresser and addressee identities, I show that this negative capability extends the reader's ability to take the perspective of the writer and/or speaker, as well as that of the hearer.[45] Such multiplicity is not an accident but rather is strategically leveraged by Keats to enhance the poem's emotive and conative effects, on the one hand, and to constitute a meta-lyric experience, on the other.

When the reader is absorbed in not one but two (or more) viewpoints, this constitutes either literary empathy or a divided subjectivity. Chapter 4 examines multi-voiced lyrics by Claudia Rankine, Robert Hayden, and Langston Hughes. Shifting between both black and white perspectives on imagined but non-fictive events of racism, these poems provide experiential lessons in "double consciousness" as a literal cognitive duality. As the reader moves through relations of empathy and antipathy, double consciousness is re-construed as critical "second sight," in which the white imagination of black consciousness is recognized from the black perspective as a projection. For those readers who identify as black, these poems model coping strategies including practice in cognitive reappraisal, a sense of community, and critical consciousness. For those readers who identify as white, they can raise awareness, offer practice in disaffiliation, and motivate cross-race solidarity. For both (and for others), imagined experience serves as an opportunity for reflective and affective exploration free from determined identities, a "suspension of belief" that can develop new dispositions.

Whereas chapters three and four deal with cognitive viewpoint, chapter five deals with embodied perspective—the ways that the reader's own systems for speaking, hearing, sensing, and acting are involved in the imagery of poems. Theorizing vocal absorption, I show that it is the reader's participation in *both* imagined speaking and imagined hearing that generates the lyric effects of interiority and intimacy in "This living hand." In perceptual absorption, linguistic features like

deixis motivate construal of mental imagery from specific perspectives, such as that of an agent-participant, a patient-participant, or an observer. This includes not only the conventional imagery of sensory perception, but also the less-recognized phenomena of bodily imagery involving the neural simulation of actions and sensations. As in vocal simulation, the poem motivates that the reader's perceptual simulations oscillate between the embodied perspectives of the speaker and addressee both. However, the simulations in various modalities do not necessarily sync up with one another, such that the sense of intimacy created in the vocal dimension is further elaborated by the reader's inhabitation of both personae as they empathetically imagine each other.

By making poetic imaginings into real happenings and analyzing the experiential construals motivated by specific textual features, *What Poetry Makes Happen* reveals the multimodal intricacy of particular lyric effects and argues for certain poems' social values in the construction of ecological consciousness and anti-racist second sight.

Notes

[1] W. H. Auden, *Collected Poems,* ed. Edward Mendelson (New York: Vintage International, 1991), 248.
[2] On the reduction of imagination to the conceptual dimension, even in reader-response criticism, see Ellen J. Esrock, *The Reader's Eye: Visual Imagining as Reader Response* (Baltimore: The Johns Hopkins University Press, 1994).
[3] On simulation semantics, see: Rolf A. Zwaan, "The Immersed Experiencer: Toward an Embodied Theory of Language Comprehension," *The Psychology of Learning and Motivation* 44 (2004): 35-62; Jerome A, Feldman, *From Molecule to Metaphor: A Neural Theory of Language* (Cambridge: The MIT Press, 2006); Lawrence W. Barsalou, "Grounded Cognition," *Annual Review of Psychology* 59 (2008): 617-45; Benjamin K. Bergen, *Louder than Words: The New Science of How the Mind Makes Meaning* (New York: Basic Books, 2012).
[4] On the "as-if body loop," see the work of Antonio Damasio, e.g. *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (San Diego: Harcourt, 1999), 281-3.
[5] Bergen, *Louder than Words*, 121-50.
[6] Cf. Charles Bernstein, "Absorption," *The Princeton Encyclopedia of Poetry and Poetics*, 4th ed., ed. Roland Greene et al. (Princeton: Princeton University Press, 2012), 1; Charles Bernstein, "Artifice of Absorption," in *A Poetics* (Cambridge: Harvard University Press, 1992), 9-89.
[7] Abstract language and concepts, too, are grounded in neural systems for embodied experience, action, and affect. Benjamin Bergen and Jerome Feldman, "Embodied Concept Learning," in *Handbook of Cognitive Science: An Embodied Approach*, eds. Paco Calvo and Toni Gomila (San Diego: Elsevier, 2008), 313-331.
[8] Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic, 2002).
[9] Samuel Taylor Coleridge, *Biographia Literaria*, ed. Adam Roberts (Edinburgh: Edinburgh University Press, 2014), 205-206.
[10] Brenda Hillman, "Experiments with Poetry are Taken Outdoors," *Seasonal Works with Letters on Fire* (Middletown, CT: Wesleyan University Press, 2013), 67.
[11] Raymond Williams, *Keywords: A Vocabulary of Culture and Society*, revised edition (New York: Oxford University Press, 1983), 127.
[12] Ibid., 240, 126.
[13] John Dewey, *Art as Experience* (New York: Minton, Balch & Company, 1934).
[14] Louise M. Rosenblatt, following Dewey and Arthur F. Bentley (among others) argues for the adoption of the term "transaction" rather than "interaction," claiming that phrasing in terms of interaction

> makes it difficult to attempt to do justice to the nature of the actual reading event. The reader, we can say, interprets the text. (The reader acts on the text.) Or we can say, the text produces a response in the reader. (The text acts on the reader.) Each of these phrasings, because it implies a single line of action by one separate element on another separate element, distorts the actual reading process. The relation between reader and text is not linear. It is a situation, an event at a particular time and place in which each element conditions the other.

Louise M. Rosenblatt, *The Reader, the Text, the Poem: the Transactional Theory of the Literary Work* (Carbondale and Edwardsville: Southern Illinois University Press, 1994), 16 and passim.
While I am in accord with Rosenblatt in preferring models of perception-and-response that have been termed "transactional," I opt to continue to use "interaction" because I feel its non-specialist

use is more suggestive of a dynamic emergence of effects, whereas the non-specialist use of "transaction" suggests a simpler model of transfer. I hope that my adoption of the terms "motivation" and "affordance" sufficiently clarifies the transactionalist nature of the model of interaction I am presenting.

[15] Günter Radden and Klaus-Uwe Panther, eds., *Studies in Linguistic Motivation* (Berlin: Mouton de Gruyter, 2004), 1-2.

[16] James J. Gibson, *The Ecological Approach to Visual Perception* (Hillsdale, NJ: Lawrence Erlbaum Associates, 1986). C. Namwali Serpell, Caroline Levine, and Terence Cave also adopt the term "affordance"; however, Levine abandon's Gibson's insight that an object's (or, in her case, a form's) affordances depend upon the creature/reader, such that "affordance" becomes synonymous with the properties of the object, while Cave decides to apply to term to the object itself "viewed in the light of those uses," rather than the uses themselves. C. Namwali Serpell, *Seven Modes of Uncertainty* (Cambridge: Harvard University Press, 2014); Caroline Levine, *Forms: Whole, Rhythm, Hierarchy, Network* (Princeton: Princeton University Press, 2015); Terence Cave, *Thinking with Literature: Towards a Cognitive Criticism* (New York: Oxford University Press, 2016), 48.

[17] It is of course ironic that my method for analyzing and speculatively evaluating non-scholarly reading experiences itself depends upon vast interdisciplinary scholarship; this is a structural inevitability of the attempt to theorize and analyze non-linguistic, pre-reflective, compositional, and potentially unconscious parameters and levels of experience, which may not be evident to uninformed introspection.

[18] See M. H. Abrams' analysis of pragmatic versus mimetic, expressive, and objective critical theories. Abrams, "Introduction: Orientation of Critical Theories," in *The Mirror and the Lamp: Romantic Theory and the Critical Tradition* (New York: Oxford University Press, 1953), 3-29.

[19] Feldman, *From Molecule to Metaphor*, 71-82.

[20] Ibid., 72.

[21] Kenneth Burke, "Literature as Equipment for Living," in *Philosophy of the Literary Form: Studies in Symbolic Action*, 3rd ed. (Berkeley: University of California Press, 1973), 293-304.

[22] Neural firing takes one-thousandth of a second, while neural simulations appear to take on the order of hundreds of thousandths of a second, presumably because they involve hundreds of neural firings—so even a short poem involves at least thousands of neurons running at least hundreds of component simulations in parallel and in series, each contributing to the modification of the synapses involved. Feldman, *From Molecule to Metaphor*, 78-82; Bergen, *Louder than Words*, 143-7 and passim.

[23] This general process also helps to clarify the phenomena of individual variance and trans/cultural similarities across populations. Each individual's brain-structure initially develops in utero according to processes guided by their genetic code, entailing variation amid species similarity. That structure then continues to develop throughout life in response to the individual's trajectory of experiences. Many of those experiences will be similar across cultures, while many others will be experiences *of* culture—that is, transpersonal ideological formations—as well as *of* the culture's construction of the individual's identity, social relations, and other personally-viewpointed variations within a culture. Inflection points of feedforward and feedback may occur anywhere within these developmental processes, such that small early differences may become amplified due to reflexivity, while the hegemony of certain ideological forms may overcome variation. At the same time, whereas some theories of psychology and ideology have assumed coherence within the individual, the compositional nature of cognitive structure means that individuals may possess many bespoke 'dissonant' or 'incoherent' alternative frames. Such multiconceptual individuals may actively use

different conflicting frames in different contexts, or in similar contexts due to different motivating factors; it may also be that certain frames are entrenched for self-initiated construal, their alternatives only passively available, as when one understands the reasoning of an argument one would never produce oneself. While alternative frames can have relations akin to the forms of dialectical development and repression, neurocognitive theory also departs from critical theory and psychoanalysis in many ways; I think the cognitive sciences have reached the point where literary studies ought to update its understandings of human psychology, taking contemporary research into consideration.

[24] Roman Jakobson, "Linguistics and Poetics," in *Style in Language*, ed. Thomas A. Sebeck (Cambridge: MIT Press, 1960), 356, 350, 357.

[25] Admittedly, the same issues affect the non-literary research that I draw upon; I try to approach correlations with a critical eye, and I use negative capability to consider the affordance of multiple construals beyond those most motivated, as discussed below. I also hope that the study of literary applications will feed back into experimental design to investigate variability rather than looking only for significant consistency.

[26] The binary categories of Tsur's analyses in *Toward a Theory of Cognitive Poetics* include: wit vs. emotional, logical vs. emotional, convergent vs. divergent, split/sharp focus vs. integrated/soft focus, conclusive tone vs. suspensive tone, clausal style vs. phrasal style, order vs. disorder, closure vs. open-endedness, requiredness vs. randomness/unexpectedness, referential/coded sound vs. expressive/precategorial/musical sound, high cognitive functions vs. regression/pleasure, vigorous rhyme vs. tame rhyme, compact vs. fuzzy, analytic/linear/disintegrated vs. global/diffuse/integrated, shape-perception vs. orientation, fixing/ruling vs. negative capability, objects disjunct from ego/world vs. diffuse atmosphere inseparable from ego/world, perceptual constancy vs. shifting/moving visual proprioception, cognitive stability vs. flux/slowed perception/disorientation/unsettledness, The Beautiful vs. The Sublime, boundedness vs. infinity/absence/nothingness, vision vs. less-differentiated senses. Reuven Tsur, *Toward a Theory of Cognitive Poetics* (Portland: Sussex Academic Press, 2008).

[27] Peter Stockwell, *Cognitive Poetics: An Introduction* (London: Routledge, 2002); Peter Stockwell, *Texture: A Cognitive Aesthetics of Reading* (Edinburgh: Edinburgh University Press, 2009).

[28] George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: The University of Chicago Press, 1980); George Lakoff and Mark Turner, *More than Cool Reason: A Field Guide to Poetic Metaphor* (Chicago: The University of Chicago Press, 1989).

[29] Elaine Scarry, *Dreaming by the Book* (New York: Farrar, Straus and Giroux, 1999); Guillemette Bolens, *The Style of Gestures: Embodiment and Cognition in Literary Narrative* (Baltimore: The Johns Hopkins University Press, 2012); Blakey Vermeule, *What Do We Care about Literary Characters?* (Baltimore, The Johns Hopkins University Press, 2010); Suzanne Keen, *Empathy and the Novel* (New York: Oxford University Press, 2007).

[30] G. Gabrielle Starr, *Feeling Beauty: The Neuroscience of Aesthetic Experience* (Cambridge: MIT Press, 2013).

[31] Terence Cave, *Thinking with Literature: Towards a Cognitive Criticism* (New York: Oxford University Press, 2016).

[32] "Cognitive calisthenics" is Cave's term for these generalizing claims. Cave, *Thinking with Literature*, 150.

[33] Friedrich Schiller, *On the Aesthetic Education of Man: In a Series of* Letters, ed. and trans. Elizabeth M. Wilkinson and L. A. Willoughby (Oxford: Oxford University Press, 1967), 161, 171.

[34] Ibid., 169.

[35] Ibid., 151-9.
[36] Olaf Sporns, *Discovering the Human Connectome* (Cambridge: The MIT Press, 2012); Sebastian Seung, *Connectome: How the Brain's Wiring Makes Us Who We Are* (New York: Houghton Mifflin Harcourt, 2012).
[37] This account simplifies the complexities of brain states by focusing only on neural activation and therefore excluding the factors of the distribution of neurotransmitters and cellular resources such as oxygen.
[38] Terry Eagleton has similarly suggested "that words have force as well as meaning. 'Force' means the effect or intended impact of a piece of language, which may not be at one with its meaning. … Poems do things to us as well as say things to us; they are social events as well as verbal artefacts. … Poems are material events and fields of force, not simply verbal communications. Or rather, they are the latter only in terms of the former." Terry Eagleton, *How to Read a Poem* (Malden, MA: Blackwell Publishing, 2007), 90.
[39] Auden, *Collected Poems*, 247.
[40] Letter to George and Tom Keats, December 1817; Keats, *Keats's Poetry and Prose*, 109.
[41] Ibid. Cf. Keats's discussion of the similarly receptive "poetical Character" of the "camelion Poet":

> As to the poetical Character itself, (I mean that sort of which, if I am any thing, I am a Member; that sort distinguished from the wordsworthian or egotistical sublimne; which is a thing per se and stands alone) it is not itself—it has no self—it is every thing and nothing—It has no character—it enjoys light and shade; it lives in gusto, be it foul or fair, high or low, rich or poor, mean or eleveated. It has as much delight in conceiving an Iago as an Imogen. What shocks the virtuous philosoper, delights the camelion Poet. It does no harm from its relish of the dark side of things any more than from its taste for the bright one; because they both end in speculation. A Poet is the most unpoetical of any thing in existence; because he has no Identity—he is continually in for—and filling some other Body….

Letter to Richard Woodhouse, October 27, 1818; Keats, *Keats's Poetry and Prose*, 294-5.
[42] Letter to Benjamin Bailey, November 22, 1817; Keats, *Keats's Poetry and Prose*, 102.
[43] Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 85 and *passim*.
[44] Letter to George and Georgiana Keats, September 1819; Keats, *Keats's Poetry and Prose*, 371-2.
[45] Jakobson, "Linguistics and Poetics," 371.

Chapter 1

Haunting Thy Days: Semantic and Affective Absorption in "This Living Hand"

The Problem of Semantic Absorption

When you read a poem, you experience more than the vision of its words on the page. Provided you are not otherwise distracted or disengaged due to tiredness or boredom, your attention is absorbed in an experience of complex meaning, composed in part by the meanings of the words, phrases, and sentences, but also going beyond them. How does a poem mean more than it says? How is its meaning meaning*ful*, with regard to particular contexts and to one's life?

It is a commonplace that poems are not significant because of the truth or falsity of the facts they contain, but that poetic meaning involves something other or more than information. This position has been canonical within literary study at least since the New Criticism's opposition of poetic statement and experiential knowledge to scientific statement and factual knowledge, and arguably it stretches back to Plato's theorization of mimesis (and perhaps beyond, to verse as a religious and magical technology).[1] Jonathan Culler identifies a "hyperbolic quality"—the poetic enactment or articulation of an experience of epiphany, even in descriptions of the mundane—as one of four parameters that typify the lyric.[2] Modernist poets' departures from the lyric tradition, eschewing coherent expressive or thetic statement, have not been interpreted as "just … rhythmical grumbling," but as meaning by indirect means.[3] Postmodernist poetics—most obviously those identified as affiliated with or inheriting from "Language writing"—have been theorized as involving "constructivist" reading practices, where meaning is not determined by the author but produced by readers in interaction with the text. Thus, as with literature more generally, poetic significance is typically understood as being both *un*stated ('between the lines') and in excess of represented content ('open to interpretation'). What is it to understand a poem as meaning one thing and not another—or, more fittingly, as meaning more than one thing, as you shift between different interpretations over the course of one or multiple readings? Beyond stating information or didactically persuading, how can a poem afford an experiential lesson as a "way of happening," enabling new ways of understanding certain situations or topics?[4]

In the Introduction to this project, I defined poetic absorption as the involvement of the reader's attention in experiences beyond the visual perception of the text itself. This chapter will address two dimensions of poetic absorption. I call "semantic absorption" the experience of a text's meaning—its "content"—and of the meaningfulness of that meaning, its having significance beyond simply being information. My theory of "affective absorption," in turn, explains how the semantic structures for emotions and emotional stimuli are connected to the brain's affective circuitry, such that the activity of imagination can produce real feelings.

I will be pursuing two main points in this chapter's work of theorizing semantic and affective absorption. The first is the compositionality of meaning (and a parallel compositionality of affect). While phrases, lines, sentences, and poems are composed of words, those words do not in fact 'contain' meaning but rather are underspecific signs, which prompt the reader in building her construal of the greater meaning. Literary studies may address interpretive cruxes, but the field rarely employs a theory of semantics in its method, relying either on the apparent 'transparency' of meaning, or on poststructuralist linguistic theories which, for all their critical power, lack the empirical grounding that I seek to provide by bringing literary theory up to date with neurocognitive research. Cognitive linguistics enables analysis of a variety of structures, in texts and in readers' cognitive systems, to replace the idea of "content" with a conventional core semantic skeleton that is fleshed out in absorptive experience and the extensions of interpretation. By analyzing poetic

meaning in terms of cognitive frames and neural integration, we can recognize how varying experiential and interpretive possibilities are afforded by such a common semantic core, which is constructed from background knowledge in response to the underspecific prompts of the text. Likewise, rather than reifying affect as a substance that is transmitted from the poet (or speaker) to the reader as a quality inhering in the 'expressive' text, analyzing readers' feelings as complexes built from the neural components of the affective system enables us to analyze how particular textual features prompt particular affective components, and how the same components can be felt to have different meanings by differently attributing and contextualizing them.

The fact that meaning is composed of knowledge is the ground of the second main point of this chapter: rather than an autonomous experience that "makes nothing happen," reading actually changes the reader's brain.[5] The formation of a more-or-less coherent memory of the poem itself is the most obvious example of such change; however, just like meaning and interpretation in the initial reading, such a memory is not a singular cognitive object but a composite of structures distributed throughout the brain. Even without the successful formation of a long-term memory, the wiring within and between those component structures is altered to a greater or lesser extent in the formation of the experience of a poem's meaning, as a result of the neurochemical processes of Hebbian learning (as I explained in the introductory chapter). By analyzing the internal structures of possible interpretations of a poem, we can appreciate the changes to readers' cognitive structure that the poem affords. This chapter lays the groundwork of a method that will enable such analysis.

The Haunting Meaning of "This Living Hand"

What happens when you read this poem?

This living hand, now warm and capable
Of earnest grasping, would, if it were cold
And in the icy silence of the tomb,
So haunt thy days and chill thy dreaming nights
That thou would wish thine own heart dry of blood
So in my veins red life might stream again,
And thou be conscience-calm'd—see here it is—
I hold it towards you.[6]

The course of the discourse could be described as follows: the text names and describes the hand as the topic, states a complex proposition about that hand and the reactions an addressee would have to it, then finally commands an act of perception, to see it, and describes an action by "I," holding the hand "towards you." Do you understand this language as being about a disembodied hand, about a person's hand (whose?), or about the writing itself? Do you have a sense of an intention behind this communication, of emotions such as affection, hostility, and/or guilt? What of this understanding is explicitly stated in the text? What of the meaning is actually a phantom presence produced by your imagination reading beyond the lines?

Literary critics have argued for a variety of interpretations: early responses read the text as a piece of dialogue intended for a play; others have read the poem in the context of Keats's life, taking its address as an imagination of Fanny Brawne or future readers, written with the prospect of an imminent early death on the poet's mind. It has been felt to be compelling, frustrated, threatening, pathetic, uncanny, touching, and shocking. However, the fact that the text is meaningful—that one experiences not a mere sequence of ideas in series, but readily construes words on a page as a situation with significant implications—is treated as a given, the poem a 'transparent' representation

of content, with interpretation addressing the style and significance of the content's presentation. But a poem is not a window. How does the text—determinate on the page yet depending on the reader's brain to construct its meaning—evoke understanding that goes beyond what it explicitly says? What core structures, beyond the prompting text, are shared by its varying interpretations? What motivates construal one way or another, and what might be afforded by acceptance of multiplicity in meaning, or combination in complexity?

In what follows, I deviate from typical critical practice by taking a descriptivist stance, focusing on how the text can afford multiple differing experiences, and on the use-values of those experiences, rather than arguing for one interpretation or another on the basis of its truth-value. After all, one of the widely valued aspects of literary texts is their meaningful multiplicity and openness to interpretation.[7] One point of my approach is to demonstrate just how compositional and "constructivist" all reading is, even when meaning may introspectively or even reflectively *seem* 'transparent.' My method thus involves at times laborious attention to the text in its word-by-word unfolding, in an attempt to establish exactly what is prompted by the language itself in the course of reading. Focusing on the reading process serves my focus on absorptive experience itself, with its range of underspecificity, alternativity, and open-endedness, as a state of "negative capability" that may be extended, revised, and determined in interpretation. In place of an ideal reader who is maximally knowledgeable about the literary tradition, the poet's work, his life, and his historical contexts, I posit what might be thought of as a naïve reader, idealized as agnostic about the possible interpretive moves she could make, and attentively responsive to the cues and options presented by the text, rather than being motivated by habitual methods, expectations, interests, and contextual information. Given my interest in the possible social effects of poems, I want to consider the effects of reading for members of society who don't have scholarly knowledge and/or who don't necessarily read in scholarly ways. I recognize that the non-academic readership for many poems may be small—but so is the high-information readership. Despite the highly-technical work of this specific project theoretically explaining the affordances of poetry, my general hope is to encourage the wide circulation and reading of poems for the values they afford, in absorptive experience itself, as well as in reflection, interpretation, and scholarly study.

The Theory of Cognitive Frames

In cognitive linguistics, the fundamental unit of meaning is a "frame." The theory of frames has been adopted as fundamental to the Neural Theory of Thought and Language, as well as to Embodied Construction Grammar, which theorizes language in terms of "constructions," pairings between linguistic forms (including grammatical and syntactical forms beyond lexemes) and simulational semantic meanings.[8] A frame is a unit of organized knowledge. Frames are composed of two types of elements: "roles" and "relations"; each role is understood via its relations to other roles, such that the parts are made meaningful by the context of the whole. A theory of *lexical* frames—sets of vocabulary that evoke sets of associated knowledge—was originally formulated by Charles Fillmore. One purpose of Fillmore's theory of frame semantics was to address the problem that no word's meaning can be understood in isolation; understanding the meaning of any particular word requires understanding a frame of related knowledge.[9] For example: the word "Tuesday" is understood relative to an understanding of a week as composed of a named series of days; a "tomb" is not defined by its referent but rather in the context of knowledge about life, death, and burial (otherwise it might be construed as an unrefrigerated meat locker for cannibals); understanding "conscience" requires an understanding of mind, reflection, moral responsibility, and affects such as guilt or pride. Each frame is thus a gestalt, a coherent unit for producing inferences, the whole being more basic than the parts. This is explained, at the neural level, by each cognitive frame being

composed of neural circuits for the roles, connected to each other by neural circuits for their relations, with the "core" roles being wired to a gestalt-circuit, such that activation of any element triggers activation of the whole frame, the necessary background context for understanding.[10] Besides the core elements which are integral to the gestalt, frames also have many "non-core" circuits that are not automatically activated by the gestalt-circuit; these comprise additional roles and relations that represent the broader range of one's associated knowledge and memories, optional in not being wired to the gestalt-circuit, but still neurally connected to the core components of the frame.

While frame networks are highly complex, cognitive scientists have developed designations to describe their organization. Frames have largely been analyzed in terms of hierarchies of categories (categories being themselves constituted in the brain as frames). At one end of such a hierarchy are highly schematic frames representing abstract concepts (like the generic Interpersonal Relationship frame), and towards the other end are highly specific frames (like the frame for one's own marriage, or a specific friendship); increased specificity typically involves increased complexity.[11] It is important to note here that, whereas the function of categorization involves a distinction between categories and the 'things-in-themselves' that get categorized, cognitive structure is composed by frames all the way down.[12] Specific frames are not separate from schematic frames, but rather *are built upon* the frames they "inherit from" while adding additional structure; thus, the 'levels' of frames form a "nested hierarchy" rather than as a tree diagram. The network of hierarchically connected frames that are activated in the evocation of a particular frame is known as a "cascade."[13] The cascade for one's own marriage would include a host of details specific just to one's own marriage, in the form of specifications of and extensions upon the more generic components of one's Marriage frame, one's Romantic Love frame, one's schematic Interpersonal Relationship frame, and even one's abstract Interaction and Event frames. Thus, the details, in all their personal richness, already incorporate more abstract knowledge as the supporting structure internal to specific knowledge and singular experiences, such that multiple general concepts are subsumed in any meaningful particular instance, rather than particulars being subsumed by concepts. In addition to such a nested hierarchy of semantic structure, the cascade would also have what might be thought of as "lateral" connections, such as to affective frames; it is important to note that these lateral connections are wired to particular sub-frames within the hierarchy, so that different elements within the cascade-network—the institution of marriage, one's wedding day, wedding planning, a specific habit of one's partner—may evoke different feelings and evaluations.

Within a hierarchy of frames, there is a particular level which is, in a sense, optimized, in that the frame at this level incorporates a maximal amount of knowledge schematized from experience, the knowledge that most usefully applies to the situations most commonly encountered; this most useful and most used frame within the cascade is called "basic-level." Frames which are more schematic than the basic-level frame are known as "superordinate," while frames that are more specialized than the basic-level frame are called "subordinate" frames. (Most crucially, basic-level frames differ from superordinate frames in that basic-level frames include visual imagery and motor-control programs for interaction; Furniture is superordinate, while Chair entails a prototypical shape and the use of sitting, which get elaborated in the subordinate Rocking Chair.) Different vocabulary evokes frames at different levels (i.e. *tree*, *oak, cork oak, Quercus suber*).[14] Whichever level is evoked, the superordinate frames it inherits from are also activated as components of its cascade.

It is helpful to consider the difference between the neurocognitive theory of frames and philosophical theories of "concepts," which are variously conceptualized as atomistic ideas, as regions in a semantic field, as categories containing object-ideas or meaning-regions, as mental acts of categorization, as specifications of particular-general relations, and so on.[15] Frames have networked internal structure, constituted in the brain by neural circuits; their meaningfulness is the

combination of the meaning of the frame's roles, the relations between them, and ultimately the relations between those neural structures and embodied experience of the world. Situating particular elements in the contexts of events, frames go beyond reference by including knowledge of typical scenarios and their sequential structures. Rather than a specific idea being contained in the set of a more general category, the complex circuit of a specific frame includes the circuits of more schematic frames as components of its cascade. Not all members of a category are equal, and the category boundaries are fuzzy: because neural synapses are weighted, categories exhibit prototype effects and, though binary circuits of mutual inhibition are a common feature of cognitive structure, the metonymic connections that govern construal and interpretation are graded, exhibiting stronger or weaker degrees of association.[16] From a neurocognitive perspective, meaning and experience are shot through with structure, yet also exhibit indeterminacy, stretch far beyond conscious awareness, and comprise distributed dynamic processes that proceed in parallel as well as in sequence at rates faster than are perceivable by consciousness and introspection.

As schematic cognitive models learned from experience and cultural knowledge, frames endow 'raw' perceptual experience with human meaning: specific elements in perception "fill" the frame's roles, and are thus construed as having the relations entailed in the frame.[17] For example, the Love frame has roles for the Lover and the Beloved, with relations such as Affection and Care between them; in the subcase of Romantic Love, there are added relations of Attraction and Desire, along with a rule that the Lover and Beloved should not have a kin relation between them. The roles of the Romantic Love frame might be filled with Romeo and Juliet, or with Petrarch and Laura, or with John Keats and Fanny Brawne, etc. In the subcase of Unrequited Romantic Love, the Lover desires the Beloved, but this relation is not reciprocal. In contrast, in the Seduction frame, the Seducer desires the Seducee, but may not feel Care for the Seducee, and uses Manipulation different from the Declarations typical of the Unrequited Love frame.

Different meanings thus arise from integrating the same fillers into different frames; in construing a textual expression, the framing that is active in the reader's cognitive system governs what the expression is taken to express. Such construals are not interpretive deductions from evidence so much as inferences that arise from background knowledge, their different entailments resulting from the differences between the frames that are brought to bear. Even "ordinary" situations that we might assume to be unframed, such as talking or walking, are in fact framed unconsciously; talk or walk in an abnormal way, and the unnoticed frame becomes apparent by its conventions having been broken.[18] Frames are learned from embodied experiences and cultural exposure, such that persons with similar life experiences will typically possess many similar frames, but the total set and at least some specific structures of individuals' frames will vary according to each person's unique life-trajectory. Social experience, and especially the use of communication to compare interpretations, enables us to recognize the existence of prevailing conventions, as well as the possibility of deviations. And yet, cognitive bias may limit such recognition, such that members of a subculture (such as a political party or academic field) may take knowledge and/or acceptance of their habitual framings for granted, and have difficulty understanding the perspectives of alternative framings. Frames thus provide a method for analyzing how individual understandings are mediated by background cultural knowledge, as well as how those specific cases elaborate upon and complicate the general frames they involve.

This chapter will show how frame analysis can help reframe literary interpretation as an interaction between textual details and the background knowledge of readers; I will presently focus on semantic and affective knowledge that can be expected of most competent readers of English, in an effort to analyze the meaning that would arguably arise for any reader on a first reading, as the ground of further interpretation. More extended knowledge, such as of ideas about the poet, literary traditions, historical contexts, will be addressed in later chapters. This theory of frames as the

components of meaning will serve my development of a method for theorizing poetic affordances. By affecting the frame structures in a reader's brain, a poem can affect how that reader then understands the world and subsequently acts within it when reasoning (and even merely reacting) from framed conceptions. To analyze such affordances, we need to understand each step in the process of semantic absorption: first, how texts evoke frames; second, how meaning-construal connects frame structures, yielding particular interpretations grounded in more generic knowledge; and third, how the resulting interpretations are integrated with wider knowledge, to transfer beyond the immediate literary experience to one's frames for life more broadly. Each of these processes has been theorized within the field of cognitive linguistics. The first process can be understood in terms of frame metonymy, conceptual metaphor and grammatical constructions; the second has been modeled using the theories of mental spaces and conceptual integration; and the last involves applying the general neurocognitive principles of neural simulation and Hebbian learning discussed in the Introduction to theorize the effects that simulating poetic meaning can have on the networks of hierarchical frame cascades that comprise those simulations. In explicating these three processes, I will use Keats's fragment "This living hand, now warm and capable." (Later chapters will return to this text to theorize the dimensions of personal, loco-temporal, vocal, and perceptual absorption.) The next chapter will then apply this theorization to ecopoems as integrating aspects of systemic causation into basic-level frames, to provide a cognitive mapping between human actions, ecological effects, and evaluative relations to both.

The Composition of Semantic Meaning via Frame Metonymy

Let us now apply the theory of frames to "This living hand," deepening our reading of the poem through analysis of the processes of meaning construction and interpretive construal. To reiterate, reading words activates the cognitive frames for the meaning of those words, including the contexts (that is, additional frames) in which those lexical meanings are themselves meaningful. This phenomenon is known as "frame metonymy," where a whole frame is evoked by the activation of an element of that frame, either thanks to the gestalt-circuit that connects all of the frame's core elements to each other, or by sufficient activation spreading from a non-core role to other elements to trigger the frame.[19] (The evocation of semantic knowledge by the activation of linguistic form can itself be considered a frame metonymy, as both the form and meaning are parts of the whole frame for a word or other linguistic construction.) Frame metonymy explains the background knowledge that is automatically evoked as context for the text. In the poem's opening phrase, for example, "living" not only evokes the Life frame, but also metonymically evokes the Organism frame as the entailed entity that is living. Likewise, the frame that "hand" evokes is itself an element of a Person frame, whose body the hand is part of; the Hand frame thus metonymically evokes the Person frame, which fills the role of the Organism that is living (as motivated by the Adjective-Noun construction). This complex of frame associations constitutes our understanding that the poem is talking not about a hand on its own (which it otherwise could be) but about the person to whom it belongs.[20]

The rest of the description not only adds information, it also motivates extensions of the construal beyond the topic of this hand. The Warmth, Capability, and Grasp frames, while grammatically referring to the Hand, are also construed through the metonymy as applying to the implicit Person.[21] The Earnestness frame fills the Grasp frame's role for the Manner of grasping, and similarly transfers to the Person, who fills the Grasper role. Whereas aliveness and warmth can be perceived by someone other than the person who possesses the hand, a capability, such as grasping, and an act's earnest manner, are typically known subjectively. Because the discourse's producer would need to have access to the Grasper's subjectivity in order to have knowledge of capability and

manner, these subjective details prompt the reader to construe the hand-possessor and discourse-producer as the same person; that is, the Person entailed by the Hand frame fills the Producer role of the Discourse frame (the basic cognitive model for an event of communication, evoked by instances of language). This interpretation of the text as the persona's act of referring to their own hand (rather than as description or narration about someone else's hand) is thus motivated in the first line and a half, by the implicit entailments of the evoked frames and how they fit together, even before any personal pronouns have appeared in the poem to explicitly specify the Producer's "I" as the Possessor of the Hand (first via "my veins" in line six) or the addressed "you" as the potential Graspee.

The discourse-producer having in this way been brought "onstage" as an element of the overall construal, there is an open question as to the nature of the discourse—whether the text is to be construed as the persona's writing or as speech. The Hand frame may metonymically evoke the Writing frame, the hand itself being used for writing the text, and the Object role within the Grasp frame even being fillable by a pen or pencil. If the discourse is instead construed according to the Speech frame—as is motivated by the proximal deictics "This" and "now," which imply a co-present hearer with access to the scene of speaking—then the Grasp frame's Object role may instead be construed as an as-yet-unspecified second person, who could fill the Addressee role of the Discourse frame. The opening's description, while explicitly about a hand, thus metonymically motivates the construction of a communicative situation, partially defined with the persona as the discourse-producer, framed either as a Writer using their hand to compose the text, or as a speech act by a Speaker calling an Addressee's attention to the Speaker's present hand.[22] (The construal of poems as events of writing, reading, speaking, or thinking will be fully theorized in Chapter 3.)

It should be noted that, while the reader's cognitive system is construing the text according to these metonymies and provisionally fitting the frames together, the evocation of a frame does not necessarily mean that that frame becomes the focus of conscious attention. One can read the poem's opening two lines without having a sense of the decision between construing the event as writing or as speech, and one's natural assumption that there must be a body attached to the hand may be "backgrounded," in contrast to the way the hand itself is explicitly "profiled" in consciousness as the topic about which new information is being added.[23] But even if it is not part of conscious focus, a frame being evoked means that it is brought "online" ("recruited" from one's "offline" knowledge) as part of the active set of cognitive resources currently in use in understanding. Interpretation is thus not only a conscious, reflective process applied to content, but involves assumptions constituted in the process of constructing that content, even before it rises to consciousness.

By addressing structure beyond conscious focus, neurocognitive methods allow us to extend analysis beyond introspection. Through such analysis, we can appreciate both the textual details that make only one interpretation seem possible, and therefore obvious as the 'transparent' meaning, and the details that afford multiple interpretations. This method can also help us to pursue negative capability as critics, rather than falling victim to natural tendencies to tunnel vision, as the activation of certain frames and the inhibition of others can result in a lack of awareness that there even *are* alternative construals or interpretations possible; psychologist Daniel Kahneman refers to this framing effect as the cognitive bias "What You See Is All There Is."[24] Students of literary criticism often must learn and habituate the reading practice of second-guessing the initial construals generated under the "best-fit" principles of neurocognitive efficiency, by devoting additional attentional resources and willing the consideration of alternative possibilities. These developed habits of attention and cognitive flexibility, and the experiences of the multiplicity and complexity of meaning that they afford, are often identified among the central values of literature.

Extending Semantic Absorption via Conceptual Metaphors

Frames and their elements aren't only connected by metonymic associations. Cognitive linguistics has theorized metaphor as grounded in structured mappings from one frame to another, connecting multiple roles within each with preservation of the relations between them, such that inferences are transferred from the "source" frame to the "target" frame (that is, from the frame of the vehicle to the that of the tenor of the metaphor). [25] Metaphorical linguistic expressions are surface forms, while "conceptual metaphors" are those expressions' underlying cognitive structures, background knowledge that has been learned from experience (of specific cultural forms and, more basically, of embodiment in the physical world).[26] Metaphorical language—whether in the form of conventional expressions (many of which are often taken to be literal) or creative literary figures—prompts construal according to conceptual metaphors by activating both the source and target frames. Language that evokes frame elements beyond the core mappings prompts inferences that go beyond the schematic version of the metaphor, thereby generating novel elaborations, extensions, and reconfigurations of metaphorical meaning.[27]

According to a traditional theory of metaphor, the only non-literal expressions in "This living hand" would be "icy silence" and "dreaming nights." Both of these can be analyzed as poetic locutions rather than metaphors, "dreaming nights" being a fairly conventional grammatical transformation of 'nights of dreaming,' and "the icy silence of the tomb" derivable either from 'the silence of the icy tomb' or as a description of the air (or 'atmosphere') of the tomb as both silent and icy.[28] However, the cognitive theory of metaphor allows us to appreciate how the conceptual metaphor Affection Is Warmth contributes to the meaning of "This living hand." This conceptual metaphor comprises mappings from the Temperature frame to the Affection frame: Warmth is mapped to Affection, Tepidness is mapped to Indifference, Coolness is mapped to Disaffection, and Iciness is mapped to Hostility. Thus, while "Warm" can be construed literally, its activation of the Warmth role of the Temperature frame can also metaphorically entail that the Intention behind the hypothetical "earnest grasping" is one of affection (rather than, say, the fearful clutch of another's hand when watching a scary movie). Indeed, the Affection frame is not only available via this entrenched mapping circuit within offline knowledge, it is brought online as a sub-frame of the Hand Holding frame that is itself evoked by "earnest grasping," such that this detail motivates understanding the persona's affect as one of earnest affection. Its mapping circuit having been activated, The Affection Is Warmth metaphor remains active, framing construal as elements of both its source and target frames continue to be evoked. Like "warm," "cold" and "icy silence" can also be construed both literally, as qualities of the corpse and tomb, and metaphorically as the dead hand's (and persona's) inability to be affectionate. Furthermore, the metaphorical implication extends beyond the absence of affection to a presence of disaffection, the haunting hostility that is "chill[ing]" for the addressee. Keats has thus taken advantage of the conventional conceptual metaphor, using it to extend the *carpe diem*'s solicitous strategy, in which death is equated with the loss of any opportunity for affection, into a "*carpe diem*—or else," death made a specter not of tragedy but of threat.

An interesting outcome of this form of analysis is that we can differentiate whether the reader's viewpoint is absorbed in (that is, framing the meaning according to) the source frame or target frame. When warmth is initially mentioned, the frame for the physical Body is already active, having been metonymically evoked by "hand;" the warmth is therefore construed from the literal viewpoint of the Temperature frame, with Affection as a metaphorical implication—part of the meaning, but not what's being *said*. This viewpointing persists in the counterfactual scenario of the tomb, where the hand literally is cold because it is a corpse. Arguably, however, "haunt" shifts the focus to the Affection frame, and therefore the subsequent "chill" is construed according to its metaphorical sense of disaffection rather than as a literal description of temperature—that is, "chill

thy dreaming nights" means that a negative affect (hostility and/or possibly fear, via the Fear Is Cold metaphor) has occupied what was a refuge of pleasure, not that the addressee feels a need for socks and an additional blanket. Whether the reader's viewpoint is absorbed in the source or target frame thus constitutes whether the hand is understood first and foremost as the literal subject of the poem or instead as a metaphorical figure for the affective dynamics of the persona-addressee relationship.[29]

Below, I will further explain both viewpointing and the dynamics of mappings between frames in constructing integrated construals of complex meaning. Chapter 3, on personal and loco-temporal absorption, will further elaborate how differences of viewpointings and mappings among the reader's sense of persons, places, and times, constitute variant absorptions in the poem as an event of speech, writing, or thinking, addressed by one specific person to another, while Chapter 5 will explain how viewpointing can operate dynamically within vocal and perceptual absorption. My present point, with regard to absorption in metaphorical meaning, is that the source and target frames do not need to be evoked within the same phrase (as they would be in a traditional metaphor or simile), but that grammatically unrelated textual features may activate the source and target frames separately, thereby activating the metaphorical mapping 'from each side,' as it were. Alternatively, the source frame may be evoked alone, with metaphorical construal depending on the reader's background knowledge and/or reflective interpretation to fill in the target frame and mappings, as in minimalist poetics and allegory.[30] Once the whole conceptual metaphor is active, meaning can be construed from the viewpoint of either frame, even though the transfer of inferences is unidirectional (from source to target).

Affective Absorption as a Dimension of Meaningfulness

Metonymy and metaphor get us some way in understanding how meaning is constructed from a poetic text, and its implications construed. But significance isn't only a matter of signification, it's also a matter of feeling. To fully account for the reader's absorptive experience of not just meaning but meaningfulness—the sense that the text has to do with values—my theorization needs to connect semantic frames to the brain's affective systems. The following account thus combines semantic absorption with theorization of affective absorption, which will also be addressed elsewhere in accordance with its dependence upon the mechanisms of the other dimensions of absorption.

Contemporary neuroscience understands the affective systems as having evolved to maintain and pursue the basic biological values of homeostasis, survival, reproduction, and well-being.[31] Contrary to idealizations of a rationality that transcends emotion, affective inputs have been found to be vital to effective decision-making concerning the self and social relationships, both in immediate contexts and in planning for the future. In this framework, bodily states—including the behaviors of emotional reactions—are differentiated from feelings, which are the brain's neural representations of the body's internal and behavioral states—perceptions of the body, accessible to consciousness. Certain bodily states are governed by "survival circuits," that execute largely automated changes (including emotional reactions) when triggered by either external or internal stimuli.[32] The interoceptive signals that give rise to feelings derive from multiple sources in the body (including the internal milieu, the viscera, the musculoskeletal system, the vestibular system, and chemical molecules in the bloodstream) and they appear to be registered by multiple different brain structures, which constitute the neural substrates of feelings. Affects are thus compositional, and can aptly be analyzed as frames, with the various body-monitoring circuits theorized as component roles (that are filled with particular values as to the degree of each signal) that are nested in frames, which can themselves be nested as components of yet more complex frames, forming the hierarchical network of the affective system. The neuroscientist Antonio Damasio analyzes the nested

hierarchical structure of the body-regulation system as follows: 1) immune responses, basic reflexes, and metabolic regulation; 2) pain/punishment/avoidance and pleasure/reward/approach behaviors; 3) drives and motivations; 4) emotions-proper, themselves hierarchically arranged as a) background emotions, e.g. moods, b) primary emotions, and c) social emotions; and 5) conscious feelings.[33]

In addition to forming a networked hierarchy among themselves, the affective frames, simple and complex, are also connected to other frames throughout the brain. These associations, including metonymic links and metaphorical mappings, integrate the affective system with the exteroceptive perceptual systems, semantic knowledge, and cognition. Neural pathways that lead from other parts of the brain into the affective system explain how stimuli both trigger emotional reactions and motivate feelings, while bidirectional connections explain how certain emotions (especially the social emotions) are understood as being about certain kinds of situations; strong bindings even afford identifications of subjective affects as qualities of objects and events.[34] Some of these associations, like the ensembles that make up the emotions executed by survival circuits, are innate, having been 'pre-programmed' by evolution. Most, however, are learned through experience, wired into neurocognitive structure as a result of conjunctions between certain bodily states and particular behaviors, stimuli, events, and even ideas.[35] Such frame-to-frame connections having been formed, evocation of the semantic frame activates the associated affective circuit(s), constituting an affective simulation of the effects of the particular stimulus on the body's state—or, in some cases, triggering a partial or fully-actualized emotional reaction. As Antonio Damasio formulates in his "somatic marker hypothesis," the metonymically-evoked "as if body loop" of affective simulation is a key input in decision-making, as a ground for appraisal of significance and value in bodily terms, as the mechanism of conscious "gut feelings," and as a modifier of working memory, attention, and reasoning; according to his research, somatic marking both covertly biases decision-making processes, as well as overtly serving as an object of consideration in deliberation.[36] Through association with nodes within the auditory/articulatory systems, somatic marking would function as the neural mechanism for the affective connotations of particular words. But frame roles apart from diction can also evoke affective associations, influencing understanding of and behavior in the world without *requiring* linguistic thought of a particular phrasing, though of course a particular phrasing contributes to the determination of affective construal. Because they are learned from experiences generally, these associations can be influenced by literary experiences specifically.

This understanding of the compositional structure of affects affords a theoretical integration of affective absorption as an aspect of meaning construction, a novel method for analyzing how textual features motivate the addition of feeling to meaning. The word "warm," for example, in addition to being construed as meaning 'living' and, metaphorically, 'affectionate,' prompts activation of the Warm role in the Temperature affective circuit—a simulation by the reader's brain of the feeling of warmth. Warmth is associated with, and so may metonymically evoke, the Pleasure affective frame, such that a positive feeling may be activated via a pathway through the affective network, 'separately' from (though reinforcing) the semantic mapping of the Affection Is Warmth conceptual metaphor.[37] The evocation of the Pleasure frame is also motivated by the activation of the Capability frame, since successful performance of actions triggers the reward system (consider the contrasting feeling of frustration that arises from incapability) and is associated with ease, goal-achievement, freedom, and power.[38] The Earnestness frame might be loosely associated with positive, i.e. pleasurable, affects as well; but its primary effect would be to motivate construal of the Intensity of the current affective simulation as high.

While Pleasure and (less prototypically) Affection can be derived from and directed toward non-human objects, the poem's implicit and then explicit evocation of a social relationship motivates activation of the affective system at the level of the social emotions. Affection therefore being elaborated as Social Affection, it frames "grasping" as not any act of grabbing, but as a

pleasing action occurring in the context of a caring social relationship; this caring hand-action may thus evoke the Hand Holding frame as its prototypical case. By evoking the conceptual metaphor Purposes Are Desire Objects, "grasping" may also add the Desire and Purpose frames as further layers of meaningfulness, recruited from the drives and motivations level of the affective network. Indeed, activation of these appetitive frames, as extensions of the caring Affection into Sexual Desire frame, might motivate an alternative semantic construal of the underspecific "grasping" as a more intimate, aggressive, and/or desperate reach than hand holding. Variations in the simulations active in the affective and semantic systems thus feed into each other through their associative, metaphorical, and mapping interconnections, as the reader's cognitive system elaborates an understanding from the text's prompts.

These multiple affective construals of Warmth—from Pleasure to Social Affection to Sexual Desire—involve frames that fit with each other, forming layers of meaning that add up to a rich absorptive experience.[39] With the shift to the Cold role of the Temperature frame, however, the multiple affective construals do not necessarily fit together, but rather constitute alternative simulations. Because they clash with each other, these alternatives may either compete, with the set of construals that end up best fitting together being delivered to consciousness as the dominant sense of meaning, or they may be partitioned from each other as differentiated options. (These partitioned construals, beyond being mutually exclusive options for interpretation, can also organized into a complex understanding, as will be discussed in the next section on mental space networks.)

The shift from Warmth to Cold is first meaningful as an insult, before its alternative construal as an injury. The cancellation of the previously active Warmth/Affection simulations by the phrase "if it were cold" constitutes an event of Loss (even though what is lost is only an absorptive experience of pleasure), such that it motivates activation of the primary emotion Sadness; that is, the affective response is metonymically evoked as a component of the Loss frame. Both the semantic frame of Loss and its associated affective frame of Sadness are further activated by the subsequent description of a scenario of the persona's death, the Death frame (and its metonymic associations) explicitly evoked by "tomb." This semantic specification thus motivates elaboration of the Loss and Sadness frames as components of the social emotion of Grief, which may be simulated as the reader's own absorptive affect, or partitioned as the object of the social emotion of Sympathy/Compassion, which shares the component of Sadness with Grief. Thus, articulation of persona's hypothetical death evokes not only an idea of loss, but elicits negative affects by its shift from pleasant thoughts to sad thoughts.

Within these social and primary emotions of Grief and Sadness is the component frame for Pain, the negatively valenced "primordial" affect associated with injury, ill-being, and avoidance behaviors. As a result of increasing activation of the Hostility frame (evoked metaphorically by "icy" and "chill," and directly by "haunt"), the construal of this Pain may shift from the Sadness/Grief frames to elaboration as the social emotion Indignation. This alternative construal will also evoke the primary emotions Disgust (appropriate to thoughts of a corpse/tomb) and Anger as the hierarchical links between Pain and Indignation.[40] In order to fit this Indignation into the scenario, the reader might in the abstract construe it as belonging to the persona or to the addressee, as a response to the persona's death or to the addressee's survival; however, the specification "would … so haunt they days and chill thy dreaming nights" motivates that the addressee be identified as the object of the Indignation belonging to the persona (via the metonymy of the hand).

Indignation's component Anger, however, is typically metaphorically mapped with Heat, and so clashes with, and would be de-motivated by, the repeated activation of the Cold frame here. This clash may then prompt a shift from Indignation itself to evocation of Fear as a response to indignation, available through a metonymic link between social emotions of counterpart roles in a

relationship or event; evocation of the Fear frame is also motivated by the Cold frame via the Fear Is Cold metaphor, by association of one's own mortality with the Death frame, and as a metonymic elaboration of the active component Pain/Avoidance. Finally, even if these multiple motivations are insufficient to activate the Guilt frame, it will almost certainly be metonymically evoked as an entailment of the Conscience frame once the reader reaches "conscience-calm'd." Thus, in the same way that Indignation may replace Grief as the construal of Pain and Sadness, Fear may replace both Indignation and Grief. What's more, this Fear may even integrate with the previously activated Sadness, such that together they evoke the social emotion of Guilt as a more elaborate construal. Indeed, while the Grief and Guilt frames are not canonically interrelated (and so may compete, prompting either a singular construal or novel integration in combining them), Guilt actually fits the Indignation frame as a reaction, so that those two affects would be prone to reinforce each other in an extended simulation, in which the Violation entailed by the Guilt frame would be construed as the *cause* of the Indignation, even though it is evoked *after* the Indignation frame. Thus, while "earnest" and "haunt" are the most explicitly affective words used, the poem's first four lines evoke metonymies and metaphors within the affective network to afford an absorptive experience in which a shared Pleasure of Affection suddenly shifts to a core Pain that is then elaborated, consecutively and cumulatively, into multiple different social emotions, which may integrate and/or clash, to comprise multiple complex construals.

In addition to the metonymic links between semantic frames and affective frames, frames that categorize more abstract forms and organization can also motivate affective responses. I've already mentioned the Loss frame, which has a role for an Object Of Value and a sequential structure where that Object is first possessed by a Person and then that relation of Possession is cancelled; the end result of this sequence of events is the evocation of the Sadness frame. As another example, I propose that the meanings and affects of "This living hand" may, as a sequence, evoke first the Anxiety frame and then the Relief frame. One of the components of the Anxiety frame is a mode of cognitive processing in which attention shifts from even pleasant ideas lead to possible alternatives and/or future situations, the consequences of which are imagined to be negative; this generic pattern of ideation, as a role, could easily be filled by the poem's specific movement from the happy hand to thoughts of death and haunting. The Haunting frame is then followed quite aptly by evocation of the Wish frame, and subsequently ends on the Calm frame, a specific case of the generic sequence Negative Affect > Action > Decrease/Elimination Of Negative Affect, which as a component of the Relief frame results in Pleasure as a reward for the successful resolution of the problem. Psychological research on the effects that specific affects have on modes of cognitive processing can thus provide supporting evidence for interpretive claims about the emotional expressiveness of the structuring of content in a poem, as well as of its style.[41]

In addition to appraising the persona's affective state from the style in which the meaning is presented, readers also of course appraise their own evaluative feelings in response to a text, both as a discourse and as an artwork. The processes of constructing meaning entails not only progressive assumptions but also proleptic expectations about what may come next. Even if frames and construals are backgrounded, they still affect the reader's sense of coherence or deviation, as well as semantic interpretation. For example, bothering to state the prototypical, that a hand is "living," sets up the pragmatic implicature that the hand's non-life will be a future content, which expectation motivates construal of the hand's being "cold" construed as signifying a corpse-state, even before the explicit confirmation of "tomb."[42] Some expectations will vary depending on the weightings within individual readers' cognitive structure. For readers whose Death frame includes, or is strongly linked to, their Ghost frame, "tomb" may prime an expectation, with "haunt" fully activating the role of such a spectral entity. For other readers, however, "haunt" may be weighted more to evoke their Guilt frame than their Ghost frame, yielding a psychological rather than supernatural

interpretation, which ends up being confirmed by "conscience" in the penultimate line. Interpretation thus extends into the earliest stages of the reading process, including proleptic construals that may be backgrounded, as meaning emerges from inferences and integration processes below consciousness. Both the fitting together of components and the fulfillment of expectations can produce the pleasure of coherent understanding; psychologists have found that "cognitive ease" resulting from the match between a stimulus and one's online or offline frame(s) makes the stimulus feel right, true, or appealing.[43] This positive response to cognitive coherence is likely a factor behind theories of "harmony" as a quality of aesthetic beauty. However, repeated activation of the exact same pattern can decrease the responsiveness of the reward system, such that there may be diminishing returns if expectations are continuously fulfilled, resulting in boredom.

When the text deviates from what's expected, the reader may have various affective responses—pleasant surprise, shock, disappointment, confusion—depending on the relation between the expectation and the deviation. Literary works tend to mix the satisfaction of fulfilling expectations with the surprise of deviating from them. Surrealist language, for example, combines words that evoke frames from unrelated domains, in grammatical combinations that prompt for those unrelated frames to be related in unusual ways, such that novel meanings may be produced in the composition of construal. Indeed, as Jonathan Culler's claim for the hyperbolic quality of lyric poetry suggests, one may expect the unexpected, such as for a mundane hand to be described/discussed to epiphanic effect. As Barbara Herrnstein Smith has analyzed in *Poetic Closure*, the formal patterns and the content of a text set up expectations by evoking various formal and thematic frames, including the frames constituting the reader's literary knowledge of specific genres, modes, styles, conventions, etc.[44] This formulation of a three-way interaction between textual cues, reader's frames, and affective responses, reflects the ways that aesthetic evaluations and tastes are habituated within historical, cultural, and personal contexts, as discussed by Bernstein in his discussion of variable responses to coherent and disjunctive poetics, and documented in the sociological work of Pierre Bourdieu.[45] In addition, we can observe that such aspects of aesthetic taste may also be influenced by readers' personality types more generally, particularly with regard to the dimension of Openness; individuals who score highly for Openness have relatively consistent, global degrees of preference for novelty or familiarity, with correspondingly high levels of tolerance for ambiguity and uncertainty, as in Keats's concept of negative capability.[46]

As a final observation regarding the affective effects of form, I would like to point out how the line breaks of "This living hand" place extra emphasis on several of the words that have key metonymic and metaphorical relations to affective frames. At a cognitive level, line breaks (and/or white space in indentations) are significant because neural processing takes place at the scale of tenths of a second, such that even the brief pause of the reader's eye moving between lines affords an extra opportunity for activation to spread as directed by the last-evoked frame, i.e. the last word of the line. Experiments have found that meaning is simulated both progressively within a sentence, word-by-word, and also re-simulated (and reconstrued if necessary) at the end of the sentence, in what is called "wrap-up simulation;" I posit that a form of wrap-up simulation also occurs at the ends of lines of verse. By ending line one on "capable," we are encouraged to think of open-ended capability, and may experience absorption in the pleasure such complete mastery might afford. Ending on "cold" and "tomb" allows for activation to spread from the literal feeling and referent, through their frame networks, to all the negative affective associations with them. Note also how words with more positive associations—like "days," "dreaming," "wish," and "heart"—are placed in the middle of the lines, with the more ambiguous or moderately negative "nights" and "blood" at the line-ends, so that during those lines the positive affects are only simulated transiently.

The course that activation takes within the affective network thus helps to constitute the reader's understanding of the persona and addressee's attitudes, relationship, and motivations, and

hence the dynamic feelings of the meaningfulness of that content, as well as its meaningfulness for the reader herself in terms of her reactions. Let me reiterate the perspective of neural simulation and Damasio's theory of the "as if body loop," that even without the body's states actually changing, these changes in the circuits that *represent* bodily states constitute feelings of pleasure, affection, and desire, or of pain, sadness, and guilt. These reading-evoked feelings may be transient, briefly simulated for the sake of construing meaningfulness before the affective system returns to registering the actual state of the reader's body—or they can be absorptive, occupying the reader's attention in place of her actual body-state. Whether she identifies the feelings with her subjective viewpoint or her self-concept(s), or partitions them to be construed instead as belonging to the poem's persona or addressee (or both, in the initial Affection), the feelings that comprise the affective dimension of the poem's meaning are not just understood conceptually but are simulated by her own affective circuits.[47] Again, my definition of absorption holds that the extent to which the reader's attention is devoted to these "as if body loop" simulations, rather than to her actual body-state—or the degree to which her actual bodily state is changed by reading, via the emotion-triggering "body loop"—constitutes the degree of absorption in the affective meaningfulness of the poem.

The Organization of Semantic and Affective Components via Mental Spaces

The first half of this chapter has built up a theory of meaning-construction—how the underspecific prompts of the text are elaborated by the reader's cognitive system, recruiting inactive knowledge organized in frames to build a rich active experience of meaning from the starting points of explicitly specified components. My analysis has already shown how neural structure not only governs the spreading of activation from the visual system through the linguistic system to evoke semantic and affective simulations, but also how the component meanings constituted by those neural simulations fit together into more-or-less coherent and complex construals. In the cognitive sciences, the fitting together of information is known as "integration."[48] The filling of frame roles with specific entities, metonymic and metaphorical mappings between frames, and the fitting together of components into a complex cascade are all principles of integration. Along with simulation, integration is the fundamental process of imagining. Because neural circuits don't move, they can't be combined together like words can, and instead must be coordinated with each other, the components functioning together as a composite simulation.[49] Rich understanding and conscious experience thus result from neural bindings, which coordinate neural circuits in various parts of the brain via intervening neural pathways.[50]

While conscious experience may introspectively seem unified, the brain manages multiple coordinated cascades at once, some of which are integrated into attention, while others are backgrounded out of conscious focus and/or processed 'beneath' consciousness. Research on "working memory" has found that, while there is variation between individuals, humans typically have four to five "slots" for keeping simulations active for short-term recall.[51] In a sense, the "stream" of cognition is not one-dimensional, but has a width for multiple cognitive objects to flow side by side, as well as a temporal span including the recent past. After all, one's experience of a poem is not limited to the meaning of the word, phrase, or line currently being read, but involves a conceptualization of the poem's meaning of the whole (albeit with varying degrees of detail). The iconicity of sequential narration, concrete poetry, and projective verse aside, the organization of this meaning is not a matter of the space of the page but the "spaces" of the mind. In cognitive linguistics, the integration of information in partial simulations, and the organization of multiple simulations in complex construals of meaning, is analyzed using mental spaces theory.[52]

To appreciate the usefulness of a mental space analysis, let us move from the opening of "This living hand" to the propositions of its middle lines:

> would, if it were cold
> And in the icy silence of the tomb,
> So haunt thy days and chill thy dreaming nights
> That thou would wish thine own heart dry of blood
> So in my veins red life might stream again,
> And thou be conscience-calm'd

These statements not only evoke a sequence of frames, they address multiple situations, related to each other by being framed with causal logic according to the grammar of the conditional statement, "if it were," and the clauses that enumerate a chain of consequences: "would … So haunt … That thou would wish … So … might stream … And thou be." The simulations that constitute the components of this composite construal are theorized as "mental spaces," subsets of the full online conceptualization, distinguished with regard to some dimension of coherence/distinction; for example, different mental spaces may represent differing spatial domains, temporal domains, factual versus counterfactual situations, etc. A conceptualization begins from a "base space," with discourse adding information (such as frames and conceptual entities that fill frame roles) as content of the base space; additional spaces may be constructed as prompted by subsequent clauses, words such as "if" (called "space-builders"), grammatical features such as tense and negation, and implicatures (like the way in which "living" prompts an implied contrast space structured by the Death frame), forming a network of spaces built off of the base space. In addition to adding content and spaces, discourse relates elements to each other, whether within one space and as counterparts between spaces; links drawn in mental space diagrams represent neural bindings, such as the identification of "this living hand" with a counterfactual dead hand, both of which are construed as belonging to the persona, who is also understood as 'the same' across the two spaces.[53] Figure 1.1 is a space network representing the organization of some of the core semantic meaning of "This living hand."[54]

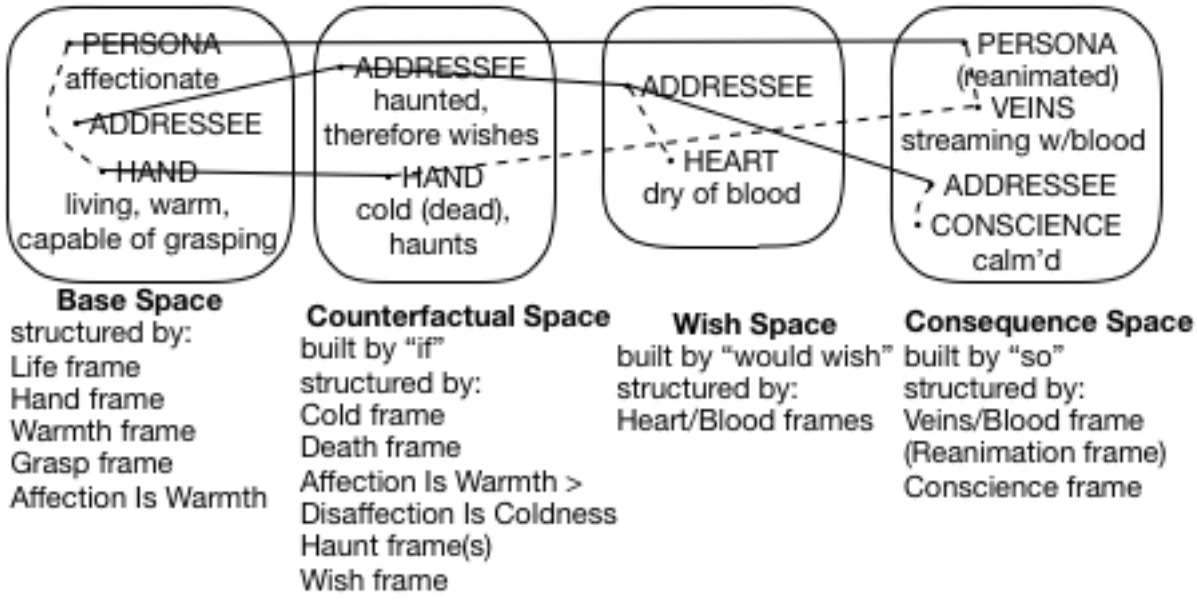

Figure 1.1

These component construals are built in sequence over the course of reading the poem, with the reader's attentional focus shifting from space to space in the process of simulating the content of each, while the previously-built simulations remain active, though backgrounded, within working memory.

In addition to semantic information, affective simulations can also be organized through this space network, attributed to the persona and addressee. The sequence of feelings and frames evoked in the reader's affective system thus becomes meaningful as an understanding of the emotions of the discourse participants: the initial Pleasure and Social Affection can be bound to both the persona and addressee, representing the mutuality of their relationship, even though those affects are only explicitly evoked regarding the persona; the Grief is construed as an initial response of the addressee to the counterfactual death, while the Indignation is ascribed to the dead hand (and/or back-projected to the living persona); that Grief and/or Fear attributed to the addressee as a response to the Indignation constitute the motivation for the wishing; and finally "conscience-calm'd" entails that the addressee had felt Guilt, which can be back-projected into the Wish and Counterfactual spaces (and even into the Base space) if it was not already evoked when initially building those spaces.

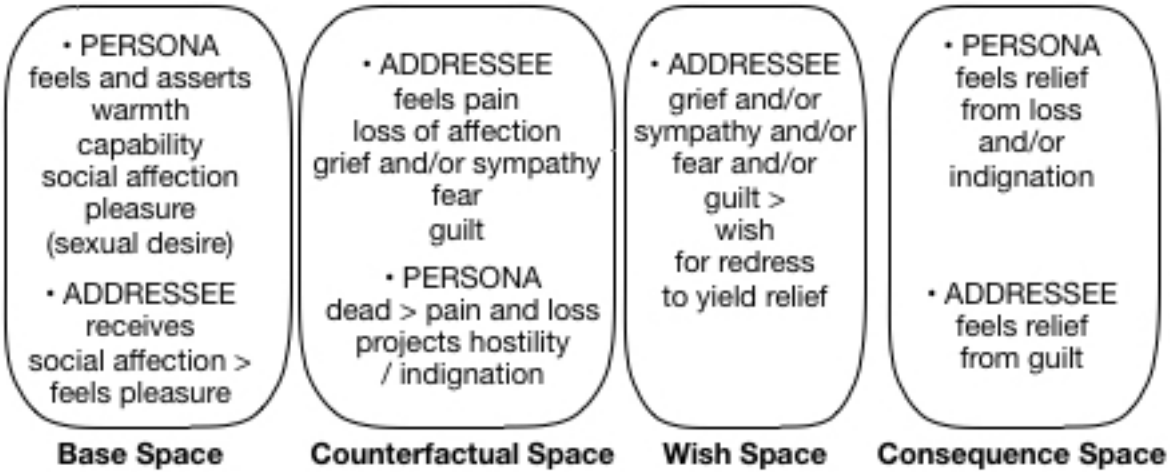

Figure 1.2

An interesting feature of this particular sequence of spaces is that, in the structure of its movements, it motivates an affective experience for the reader (in addition to those attributed to the persona and addressee) that is parallel to the "irrealis" spaces (that is, conceptualized as 'not real,' in contrast to "realis" spaces understood as factual) representing the counterfactual, wish, and consequence scenarios that are described by the discourse. As discussed above, the shift from the positive affective associations of Life, Warmth, and Affection, to the negative affects motivated by the Cold, Death, and Haunting frames, constitutes a Loss for the reader of simulated Pleasure, in parallel with the described Losses of Life and of Social Affection. In response to this Loss and the absorptive experience of negative affects, the reader might naturally (though not necessarily consciously) wish for relief from the present experience, and so subsequently experience relief in response to the canceling of the unpleasant diegetic situation; again, this sequence mirrors the affective process that is narrated as belonging to the addressee.[55] Such overlapping between the components and structure of the reader's affective responses and those of the content motivates enhanced absorption.

However, one's understanding of the passage involves more than the sequence of component construals and their affective associations; the content is also organized according to epistemic relations. Because the wish and consequence spaces form a chain of causation that is cast as occurring within the counterfactual world of the conditional proposition, they can be construed as logical entailments "embedded" inside each other, inside the counterfactual space. (That is, the integrations that constitute each space are themselves integrated into frames for Causation, which causal dependence is represented diagrammatically by setting each Consequence space within the space for its Causing situation.) Furthermore, the Wish frame entails knowledge that wishing is a subjective attitude of a Wisher; therefore, the Wish space (and hence the consequence space embedded in it) is construed as embedded within a subjectivity space belonging to a Wisher, who is the Addressee. (The construction "would … so haunt … that …" also entails a subjectivity space as the viewpoint from which the degree of haunting *so* much is evaluated.)

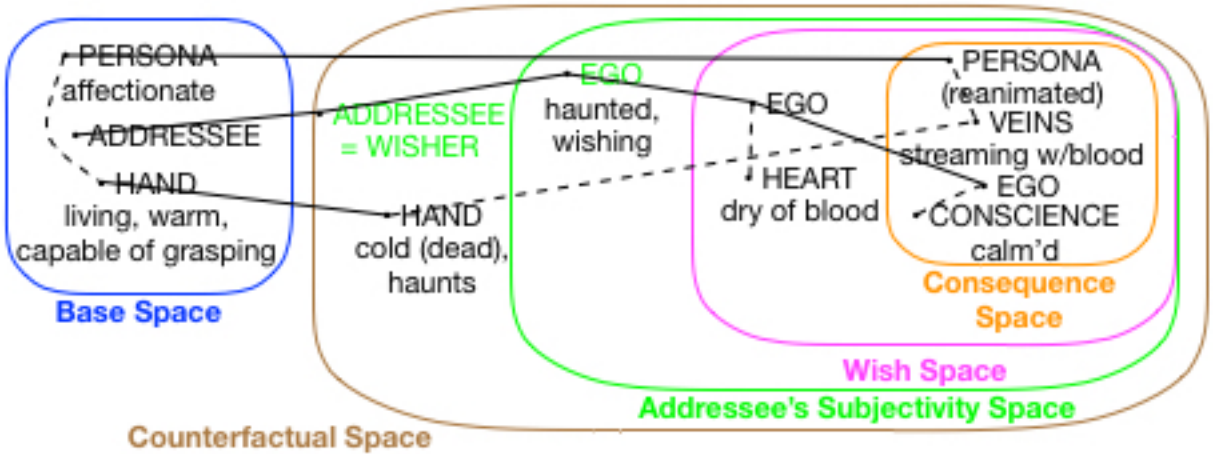

Figure 1.3

To the extent, then, that the reader experiences the sequence of feeling haunted, wishfulness, and relief that is parallel to that of the addressee, and attends to the affects attributed to the addressee while displacing from those attributed to the persona—one absorptive experience among multiple possibilities—her subjectivity becomes similar to the subjectivity ascribed here to the addressee. The addressee's subjectivity space can thus function as the "viewpoint space" within the network, framing the conceptualization of the whole from an absorptive position within it.[56] The dynamics and consequences of readers' viewpoint-alignment within absorption will be explored in depth in subsequent chapters.

The Composition of Meaningfulness via Conceptual Integration Networks (a.k.a. Mental Space "Blending")

In addition to being related to each other in networks of organization, mental spaces fit together in networks of combination, through which two or more spaces contribute to a composite simulation, referred to as a "blend" space, in which elements, frames, and structure from both are integrated together as a single, unified conceptualization. Such integration networks are analyzed as composed from two or more "input spaces," the frames and components of which not only map to each other but become bound together in the blend as a single coordinated cascade. The input spaces initially map to each other because they share some partial structure, represented as a

"generic space."[57] (That is, the input spaces' simulations intersect/overlap at some schematic level nested within their component cascades.) Metaphors are one of the clearest examples of such integration networks, where shared structure at some schematic level affords mapping between two frames, yielding an integrated construal; conventional conceptual metaphors are the entrenched result of repeated activations of similar blend integrations, while creative literary figuration often involves elaboration of a conceptual metaphor, as one input, by integration with more complex source frame imagery, as a second input, yielding a construal in the blend space that is particular to the literary work. Indeed, all the instances of binding and integration that I have analyzed previously, from the filling of frame roles with specific entities, to the attribution of affects to figures within specific spaces, could be redescribed as constituted by integration networks.

As a simple example of the analytic method of conceptual integration theory, let me present figure 1.4, representing the construal of the warm hand as embodying affection.

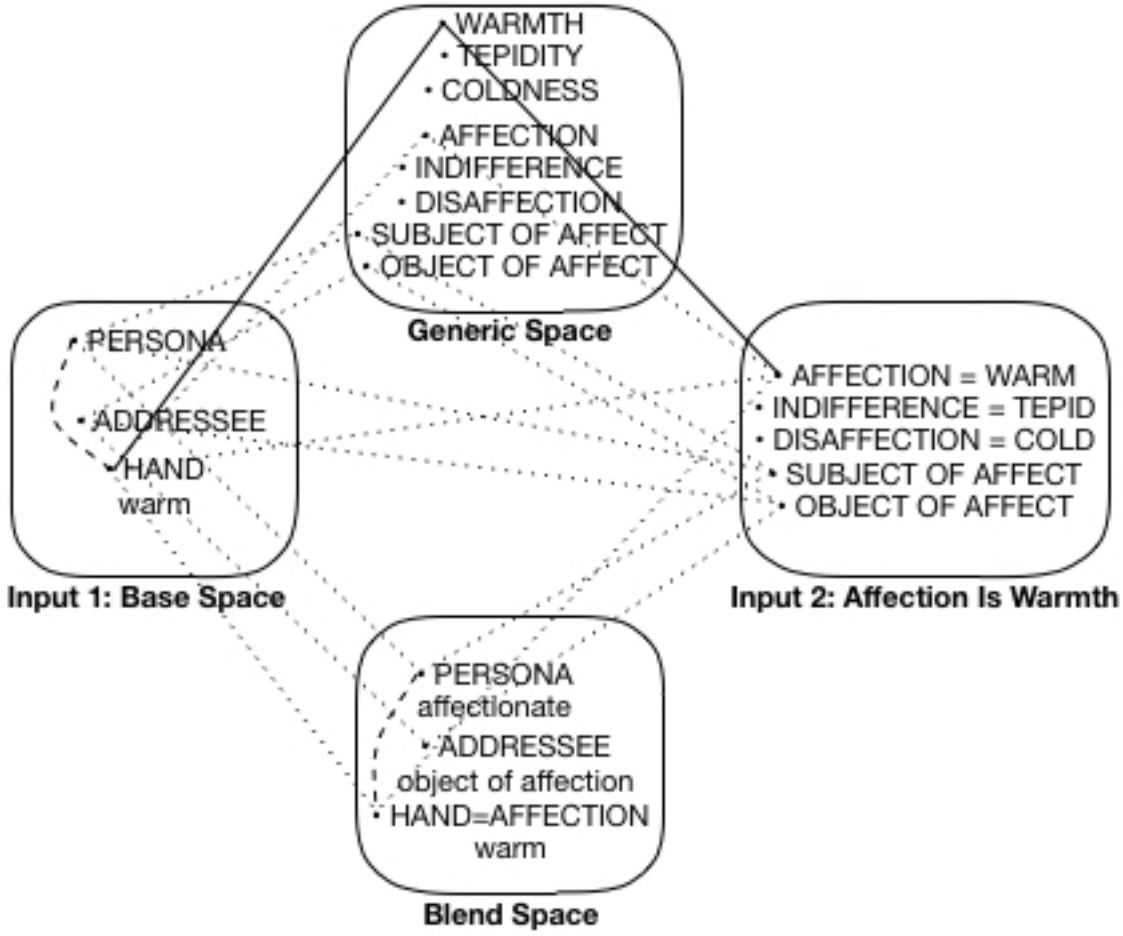

Figure 1.4

The base space, with its warm hand, functions as one input to the blend; activation spreads (as represented here by the solid line) from the Warmth frame to evoke the Affection Is Warmth metaphor as the second input; the Warmth and Affection frames are thus contained in the generic space, which represents structure that is shared by the two inputs' cascades. In the blend space, affection is not merely a metaphorical implication that the hand figuratively stands for, produced by interpretive inference; rather, the neural circuit for Affection is bound to the neural circuit for the

Hand (as well as to the neural circuit for Warmth), such that the emotion is understood as an integrated quality of the hand. From the viewpoint of the blend, then, the hand is not a sign of affection, but is itself affectionate, the affect directly inhering the same as the warmth. The same integration network affords construal of the hand's haunting hostility within the counterfactual space(s) of the middle passage of the poem, prompted by the shift from Warmth to Cold. Beyond this metaphorical mapping, the integration network also composes new structure in the blend space that is particular to the poem: because the affects of the Affection Is Warmth metaphor entails a Subject and Object of the emotion, it motivates understanding the addressee as the target of the persona's affection, the disaffection being attributed to the hand entails that the persona has agency, despite being dead.

Shifting from the composition of meaning in the base space to the counterfactual space, analysis in terms of integration shows how the hand's haunting of the addressee is complicated by the Grief, Fear, and Guilt frames. While each of these affective frames can itself function as the viewpoint for construal, motivating differing interpretations of the poem, integration also enables the alternatives to be combined together, composing a rich composite affect of haunting, as well as complex meaning that unifies the details of the poetic content. That is, Grief over the persona's death, Fear at their own death, as well as at the possibility of (sacrificial) punishment, and their Guilt about the unrepaid debt of affection—which may be construed as the antecedent cause of the persona's death and Indignation—can be fit together as a rich affective response appropriate to the complex scenario described. Such an extended integration network, with multiple inputs and/or iterations of blending, is called a "megablend."

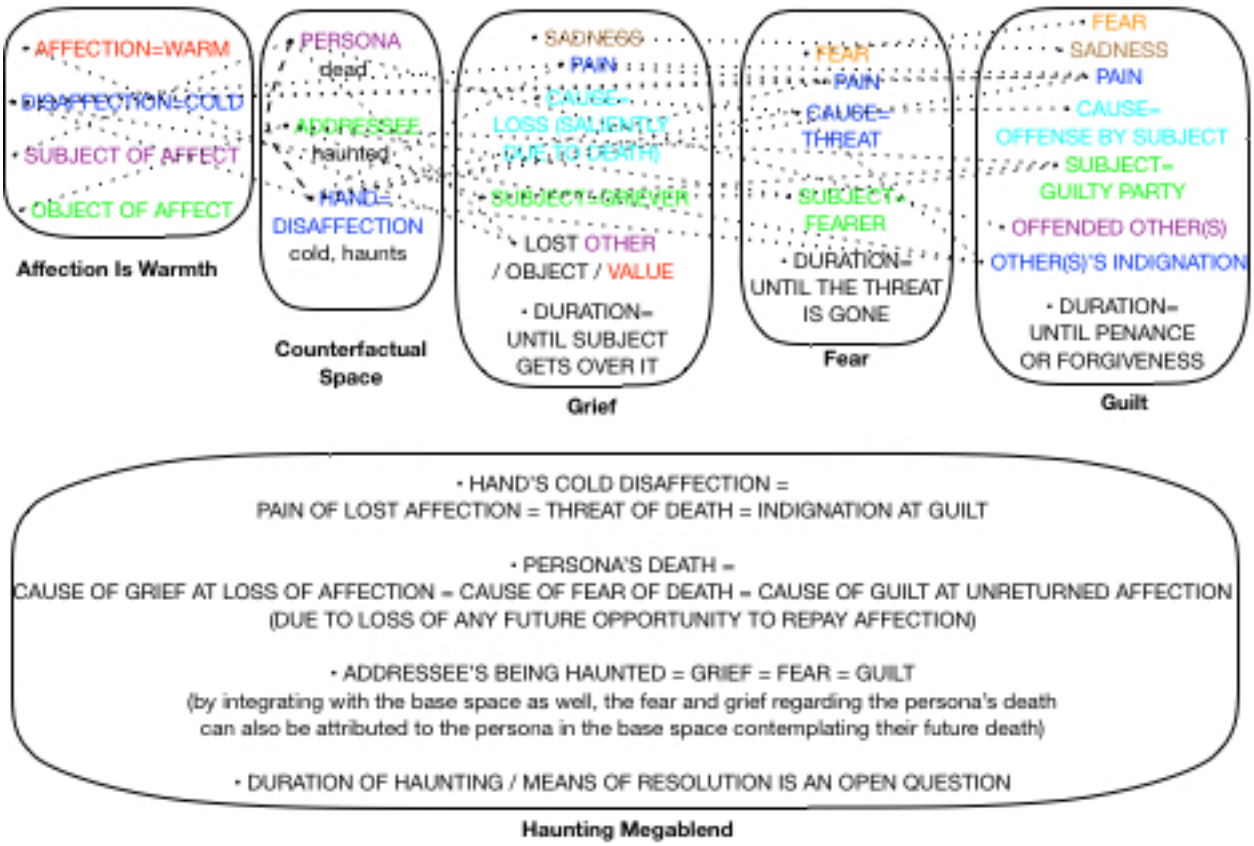

Figure 1.5

As can be seen in figure 1.5, the complex megablends of literary works quickly become too unwieldy to be diagrammed in detail. But the analytic concept remains useful for explaining how the complex meaning and absorptive richness of "This living hand" is composed from background knowledge and elaborated as that knowledge is combined according to the specific promptings of the text.

The poem's meaning continues to extend with the wish and consequence spaces—in which the addressee sacrifices their blood, reanimating the persona, and thereby becomes "conscience-calm'd"—as the imagery of blood and metonymic extensions evoked by the Guilt frame are integrated with the already-active megablend. Among the new inputs that are recruited at this juncture, the most central is the Moral Accounting metaphor system. This system comprises the generic metaphor Well-Being Is Wealth, and mappings of the logical structures and social relationships of Accounting (within the Wealth frame) onto Well-Being, constituting ways of thinking about social/moral actions that increase or decrease well-being as credits and debts between persons.[58] Among the more specific metaphors entailed in this system is a Reciprocation metaphor, according to which: "1. Moral action is giving something of positive value; immoral action is giving something of negative value. 2. There is a moral imperative to pay one's moral debts; the failure to pay one's moral debts is immoral."[59] In cultures that possess the Moral Accounting system, it would be metonymically interconnected with social emotions like Guilt and Indignation, and as a component of Conscience, framing social offenses as moral debts.[60] In "This living hand," Affection and the evoked positive affects are forms of Well-Being that fill the role of 'something of positive value,' while Disaffection and the negative affects are mapped to 'something of negative value.' When the text's scenario is framed by the Moral Accounting system, the persona is credited with having given affection to the addressee, who is hence obligated to the persona for a repayment of the debt of well-being.

In the same way that the hand functions as an embodiment of affection within the blend space of the integration network diagrammed above, in the megablend with Moral Accounting, the addressee's blood functions as the currency of the moral repayment. This meaning is composed by recruiting frames in addition to the Affection Is Warmth metaphor and the Moral Accounting system as inputs to the megablend. The initial Affection and the Blood of repayment are equated with each other thanks to two general (that is, superordinate) conceptual metaphors: Emotion Is A Fluid In a Container, which is metonymically linked to the Heart frame as a conventional container of emotions; and Life Is A Fluid In The Body, in connection with knowledge that blood is a fluid necessary for life.[61] The literal understanding of the wish and consequence spaces, where "red life" is a means of reanimating the persona's dead body, is thus extended by further blending so that the blood embodies a moral currency—specifically, the Affection that the addressee is obligated to repay to the persona. Furthermore, if this megablend version of the wish and consequence spaces is then back-projected into the counterfactual space, the act of wishing-to-sacrifice can in itself be construed as a demonstration of affection, which expression (like the wished-for transfusion) repays the affection that the persona demonstrated in the base space. The hypothetical scenario hence does not demand the addressee's actual blood, but imagines such a sacrifice as a representation of the core meaning that is at issue: the reciprocation of affection.[62]

If the reciprocation the persona seeks does not take the form of the blood in the wish and consequence spaces, what form does it take? This question is both prompted and answered by the poem's final shift, back from the consequence space's imagined resolution-through-blood-transfusion, to the base space, where the persona is making the initial demonstration of affection that is now cast as creating a social/moral obligation for the addressee. The persona's hand again functions as the anchor for this crux. Still further inputs to the megablend, evoked by the grammatical and formal structures of the last line and a half, evoke an understanding of the final phrases as describing a (manual) gesture of Offering. These structural features also motivate a sense

of uncertainty as to whether the addressee will take the persona up on this offer (implicitly, by taking the persona's hand, and thereby offering their own hand in kind) after the poem's end.

Such meaningfulness of grammar and iconicity becomes clear through cognitive linguistic analysis; however, the effects described here do not depend on conscious interpretation—they should be understood as afforded through automatic processes of meaning construction and construal, as syntax determines sense and prosody produces feeling. The "see" of "see here it is," as a verb starting a clause, is an Imperative construction, which evokes the Command frame.[63] However, the completion of an imperative that commands the addressee where to direct their attention would take the form *see it here*, parallel with *put it here* (with stress on *here*), while an imperative to perceive existence would take the form *see it is here*, parallel with *understand it is here* (with stress on *is*). The form that appears, "see here it is" (with stress on "here") is instead an instance of the Presentational Deictic construction, parallel with *here you go* or *here you are*, which evokes the Presentation frame: the act (and gesture) of handing-over.[64] The combination of the Imperative and Presentational Deictic grammatical constructions thus prompts for the Command and Presentation frames to be integrated as inputs to the blend space constituting the meaning of the clause. (This is similar to established uses of blend analysis that explain how mixing grammatical forms in indirect styles of narration combine the viewpoints of the narrator and character.[65]) Due to this blend, the imperative functions as a command to attend not simply to the hand's location "here," or its existence ("is"), but to the act of its being presented.[66]

The grammar of line eight further motivates such a construal by evoking a sense of the hand moving towards the addressee. While the prototypical meaning of "hold" is motionless, in "I hold it towards you" the clause entails motion because it instantiates the Caused-Motion construction. This construction has the grammatical structure *Subject Verb Direct-Object Preposition Indirect-Object* (as in sentences like "Pat sliced the carrots into the salad" or "Pat sneezed the foam off the cappuccino") and evokes the Caused-Motion frame.[67] This Caused-Motion frame entails a Trajector that moves due to some Cause along a Path from some Source towards some Goal. Integrating the phrase "I hold it towards you" with the Caused-Motion frame yields the construal that "it" is not held stationary, but is being moved by the persona along a path "towards you" the addressee. This fits with the preceding sense of Presentation (an act causing an addressee to have access, often involving motion), such that the two clauses integrate together, both describing a single motion-of-presentation that the addressee is commanded to see. (Consider how these frames of Presentation and Motion are *not* evoked by the otherwise parallel phrasing: *see it is here— / it sits between us.*)

Still further meaning is composed through this integration. The Presentation and Caused-Motion frames are components of the Offering frame, and so their activation metonymically evokes Offering as an elaboration of the construal. The Offering frame comprises the Presentation of some Object-Of-Value by a Giver (whose intention is the Cause of the Motion of Presentation) to a Receiver. The activation of the Offering frame thus entails an understanding that the addressee is not merely a reference point defining the Path of "towards," but more meaningfully: that "you" as the Goal of the Path is the intended Receiver of the hand; that the Giver believes the hand to be an Object-Of-Value for the Receiver; and that the next step in the sequential stages of the Offering frame, after Presentation, is for the Receiver either to take the hand, or to refuse the offer.[68] This blend, in which the hand is an Object-Of-Value being offered, fits with the megablend described above, in which Affection is the key value, embodied alternatively by the hand and by blood. Integration of the Offering blend and the Accounting for Affection megablend thus composes an understanding of the final gesture of the poem as an Offering of Affection (which may be interpreted as entailing implicit consequences, that add a sense of threat or demand). The addressee's acceptance or refusal of the hand then constitutes either their reciprocation of the already-expressed affection, or a guilt-inducing incursion of moral debt.[69]

In addition to its integration with the megablend of the full semantic and affective contents of the poem, the Offering frame can even come to frame the formal structure of the text. Both "see here it is—," with its dash at the line-end leading "towards" the empty white space, and "I hold it towards you," finishing without completing the pentameter line, can be construed as iconic of the motion of holding towards (perhaps mentally imaged as left-to-right in perceptual absorption) that awaits the offer's completion.[70] At the level of rhythm, a sense of uncertainty is evoked by the last line, which may be read as a pyrrhic spondee ("i HOLD it toWARDS YOU"), or as a hypercatalectic anapest ("i HOLD it toWARDS you"), the latter case further contributing to a sense of incompleteness due to missing the final stress.[71] Where the evoked sense of incompleteness fits with the incomplete Presentation stage of the Offering frame, the uncertainty can be attributed to the persona, uncertain as to how the addressee will respond.[72] Formal iconicity thus motivates semantic and affective frames here in ways more subtle than the obvious cases of shaped and concrete poetry or the rhyme patterns and other structures of traditional poetic form. [73]

The reader's simulations can even continue after the end of the discourse, progressing from the Presentation stage of the Offering frame to one or both of its end-states. Indeed, the poem's design actually primes the reader to imagine these possibilities of post-poem actions, by having already seeded their meanings as components of earlier simulations. The Caused-Motion and Hand frames, activated in construing the persona's action in the final clauses, are immediately available for re-integration as the answering action of the addressee—reaching out to accept the persona's hand, and so offering their own hand back, with the full meaning of reciprocated affection. This simulation would then be an actualization of the Grasping frame (and its elaboration of Hand Holding) that was initially a counterfactual, primed as the object of the Capability frame in construing the poem's opening. Similarly, the scenario of the addressee's refusal to accept the offer can be construed as an actualization of the counterfactual spaces of the haunting scenario, reintegrated as a future space linked to the base space. The haunting that was originally understood as a consequence of the persona's hypothetical death would then become the real future consequence of the addressee's immediate denial of reciprocation.[74] Indeed, this reconstrual of the hypothetical as a real prospect is how the described counterfactual scenario functions as a warning: reciprocate the offered affection, or else you'll regret it—not because of my action (other than, sooner or later, my dying causing you grief) but because of guilt about your inaction. Figure 1.6 provides a simplified representation of how multiple components of the text's content, made meaningful through elaboration by the megablend, may be reconstrued to compose an understanding of the alternative factual futures that are the poem's implicit concern.

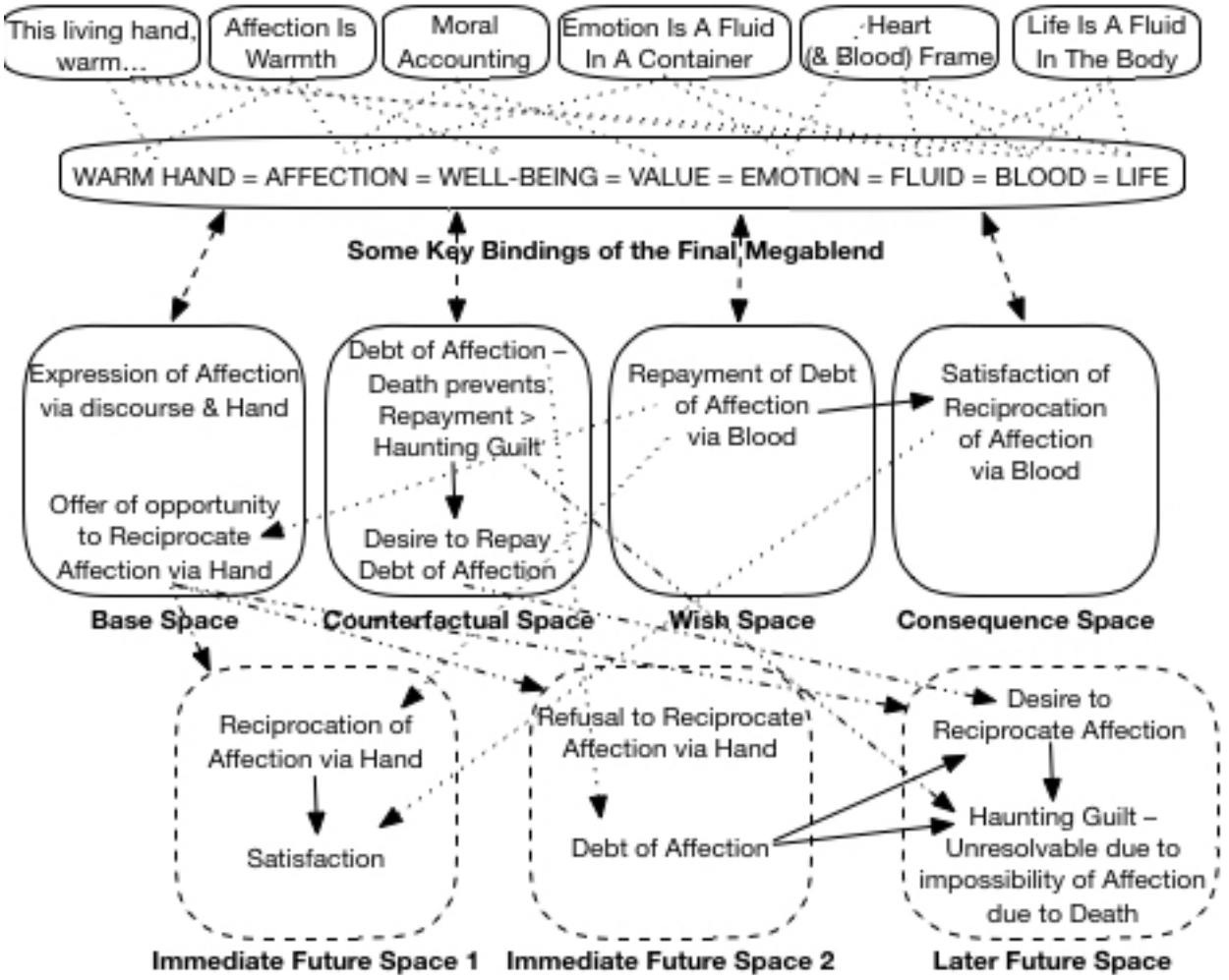

Figure 1.6

This analysis is meant to help us better appreciate how the text's relatively minimal, primarily literal language affords absorptive understanding of rich meaning, including by ingeniously prompting the reuse of already-active simulations to construct a construal that extends beyond the explicit content.

Beyond Core 'Content': Semantic and Affective Meaningfulness via Extended Integration and Resonance

In this chapter, I have focused on the semantic and affective frames that are evoked by the text, the ways those frames fit together into an organized, integrated network of mental spaces that represent the core 'contents' of the discourse as well as the implications that arise from background knowledge that should arguably be possessed by all competent readers of English. But this core meaning is certainly not the limit of a poem's meaningfulness. As in the megablend above, where components of the explicit content are projected into future spaces that are beyond the scope of the poem's discourse, meaning can be (and typically is) extended into one or more contexts, through integration of the core content with frames and input spaces that have not explicitly been evoked by the text. Taking one's construal of "This living hand" and further integrating it with one's knowledge of the rest of Keats's poetry, of Keats's life, of Keats criticism, of other Romantic poetry,

of poetics, or of the arts in general, enables one to interpret its meaning, themes, contexts, form, genre features, and aesthetic values, from the viewpoint of the frames that constitute those contextual knowledges. I call this mechanism "extended integration," and refer to the added inputs as 'external' frames and spaces. Extended integration and 'external' inputs are the final mechanisms involved in this chapter's project theorizing the compositionality of semantic and affective meaning and meaningfulness, and clarifying the consequences of imaginative absorption and real-life thinking and feeling using the same component frames.

It is useful to theoretically differentiate 'external' inputs from the 'content' that is directly evoked by a text, in order to clarify and analyze how divergent interpretations arise from alternative construals of the same core components. Some 'external' inputs may be so well entrenched for certain readers that they will be evoked and integrate into the construal during the initial meaning-construction process, even before the construal rises to consciousness, as we often 'live in the blend' of our integration networks, with experience always-already structured by knowledge.[75] Extended meaningfulness may thus absorptively seem to inhere in the text, rather than to be the result of a conscious process of interpretive mapping from the text to contextual knowledge, such that the difference between core and extended meanings may not be apparent to introspection. For example, the manuscript metonymy construal of "This living hand" (as referring to the text itself) is so readily afforded by the conventional metonymies of Instrument-For-Producer and Producer-For-Product, and by knowledge of the historical non-core sense of "hand" as meaning 'handwriting,' that this extension can arguably be considered to be inherently motivated by the text.[76] And yet, for readers with less-entrenched connections, reflection and/or rereading may be necessary for activation to spread to such extensions, which process may be more or less conscious or effortful. Other interpretations may be impossible for those who lack the contextual knowledge involved. And then there are hinge cases, such as whether one construes Keats' persona as motivated by mortality in general, or integrates external knowledge of the real author's tuberculosis. Even though the distinction between structures prompted by the text and those that are projected onto the text will often be fuzzy in practice, it is valuable as a theoretical principle. By recognizing the external inputs to an interpretation, we can better assess how effects might differ among readers with differing levels of scholarly expertise or other knowledge.

In addition to enabling analysis of the structures that underlie interpretations, the theory of extended integration also offers an enhanced understanding of the "resonance" of a text—the way one's sense of a literary work's meaningfulness bleeds over into personal associations that can't be construed as intersubjective content.[77] These personal associations are 'external' inputs, just like contextual knowledge; like contextual knowledge and the frame metonymies that compose core meaning in the first place, they are evoked through the mechanism of spreading activation, due to components of core meaning frames being shared with the resonant association's cascade. These shared components may be lexical, semantic, imagistic, thematic, genre-specific, and even formal constituting an underlying overlap between the experience of the poem and, say, an autobiographical memory or pressing concern from the reader's own life (including, but not limited to, memories of literary works she has read, and concerns about scholarly topics). The metonymic link may also be affective, with activation traveling through affective circuits to trigger 'external' frames and/or memories associated with the feelings evoked by the text.

Such a theory helps to capture why readers may find poems that are relatable, and/or that address topics they find significant, to be more resonant. The more entrenched a frame is, due to a significant history of past activation, the lower its "activation threshold"; poems that evoke contents familiar to a reader thus resonate with that reader's experiences and knowledge. Furthermore, those frames that a reader has strong feelings about, constituted by entrenched affective associations as the markers of personal valuing, constitute what may be called her "investments"; resonant activation of

these investments produces a sense of significance, that the poem relates to the reader's concerns.[78] All readers are mortal, most have grieved the death of someone they were close to, and many have experienced a fraught confrontation with someone which mixed affection, hostility, and guilt; by evoking the Affection, Death, Grief, and Guilt frames, "This living hand" can afford resonant activation of those experiences. At the same time, the degrees and particular complex qualities of these investments and experiences will vary from reader to reader, and also from reading to reading across one's life, depending on which among one's many investments are recently or currently active concerns.

Aspects of the resonant associations that the reader understands to be unique to herself will not be integrated into the intersubjective meaning of the poem. However, generic component structures, such as the superordinate frames that represent common types of experiences and investments as themes and values, can be recruited from resonant associations as 'external' inputs. Likewise, specific perceptual simulations that are activated as components of resonant memories can enrich the text's semantic meaning and general affective frames with particular details projected from personal experiences and concerns.[79] Even if these associations do not contribute components to the reader's construal of the poem, they may remain active 'beside' the poem as a partitioned cascade, constituting an aura of personal meaningfulness and significance that might be said to 'haunt' the poem's intersubjective content.[80] Finally, the cascade-circuits of the evoked resonances may direct additional activation back into the core frames of the original construal, in a feedback process that may amplify the salience and absorptive power of the components that are conduits between the resonating back-and-forth. Thus, whether the associations in their entirety remain beneath the level of consciousness, or are partitioned from the profiled construal of meaning due to being 'merely' personal, they can still contribute to the richness of the absorptive experience, and add an aura of interpretive possibility and meaningful significance.

The Affordances of Extended Integration and Compositional Consolidation

In the above cases of extended integration and resonance, contextual knowledge and personal associations are inputs to a megablend that remains focused on construal of the poem. When a certain input to the megablend becomes the viewpoint for the overall construal, it becomes the frame for one's understanding, with the poem as a specific instance of that frame's category—an example.[81] By shifting to a non-absorbed viewpoint within the network, one can compare the immediate absorptive experience to other more generic experiences, enabling appreciation of the particular, novel structures of thought and feeling that are afforded by the poem.[82] Beyond this, poems can serve not only as examples *of*, but also as examples *for* present and future use, with the cascade representing the reader's memory of "This living hand" itself—that is, the This Living Hand frame—functioning as an 'external' input to consideration of some other focal experience. This is what scholars do when they interpret a poem or make generalizations about literary history, as in comparisons of "This living hand" with *The Fall of Hyperion*'s reference to "this warm scribe, my hand" or with passages in Keats's letters to Fanny Brawne. But the focus of a present or future application of a poem as an 'external' input need not be literary; the "way of happening" prompted by Keats's text can also be recruited for reflecting about one's own mortality, or a particular love affair, whether as an example to emulate or to avoid. The mechanism of extended integration, grounded in shared components, thus enables literature to be used not only as an object of study in its own right but as "equipment for living," as Kenneth Burke put it.[83]

What's more, while it might seem that the memory of a poem must be recalled more-or-less completely in using it as an example, in fact the partial component structures that comprise the reader's construal of the poem can also become cognitive resources that function independent of

explicit recall of the poem itself. In the process of consolidating the poem's cascade—wiring its components to a particular node in long-term memory—the component-to-component connections that comprise the larger cascade get strengthened as well; the biochemical processes of reading, absorptively imagining, reflectively interpreting, and remembering a poem thus actually modify the component structures out of which the construal is composed.[84] These modifications to the reader's neurocognitive structure may subsequently influence future thinking, feeling, and behavior, without depending on explicit recall of the poem as a particular memory. These effects are incremental, constituted by changes to the cellular structures of neurons affecting the activation thresholds of synapses. One's ideology is not wholly restructured by a single reading; rather, rereading, reflection, analysis, and interpretive labeling of a poem's ways of happening, by further strengthening both the construal as a whole and its partial composites as objects of focused attention, will enhance the degree of modification and the future availability of component structures as cognitive resources. Reading other poems—and non-literary experiences—can also contribute to (or work against) the entrenchment of particular component structures.

These modifications can have a variety of effects. They might simply strengthen already-existing component associations, reinforcing pre-existing component structures and associations; for example, a reader already disposed to be motivated by the prospect of indignation and guilt to reciprocate offered affections would be further encouraged in that attitude by the This Living Hand frame. They may also build new connections as extensions of existing frames, complicating pre-existing cognitive structure.[85] Thus, "This living hand" might complicate one's Affection frame by adding or strengthening connections to negative emotions that may accompany pleasant feelings. By building multiple connections between multiple components, the example can also motivate entrenchment of a gestalt-circuit, thereby establishing a new frame; reading Keats's poem along with, say, John Donne's holy sonnets, could develop a Pathetic Performance frame representing uses of the imperative that seek to demonstrate devotion amid powerlessness.[86] Finally, by strengthening a pathway that structurally functions as an alternative to some more entrenched structure, a poem can relativistically weaken the dominant structure, constituting the means by which a text might deconstruct the habituated ideology of an audience. The ways that "This living hand" motivates an oscillating, dual absorption in *both* the persona's and addressee's perspectives (which will be discussed in Chapter 5), may contribute to destabilizing theorists' assumptions of the consistency and unity of viewpoint within poetic address.

Thus, my neurocognitive approach clarifies the mechanisms by which we learn from the absorptive experience of composing a poem's meaning in our brains, affording not just a memory of the meaning as a whole, but also the modification of cognitive structure in consolidating the component parts of its "way of happening." While such a theorization falls far short of heroic conceptions of the agency of poetry, it does empirically ground how fictions are significant to real life, and gives us a more accurate acknowledgment of the degree to which poems contribute, micro-incrementally, to the legislation of the world. Admittedly, the effects of "This living hand," divorced from the particular situations that they might influence and absorption in those situations' personal significance, may seem like pretty low stakes. To consider poetic affordances in a more pressing context, the next chapter will analyze how certain ecological poems motivate particular cognitive resources and evaluative viewpoints which can be of value for readers dwelling in the Anthropocene, who must confront and navigate their own personal and cultural contributions to the systemic causation of global warming and other environmental degradations.

Notes

[1] I. A. Richards, *Principles of Literary Criticism*, ed. John Constable (London: Routledge, 2001). Cleanth Brooks and Robert Penn Warren, *Understanding Poetry*, 3rd ed. (New York: Holt, Rinehart and Winston, 1960).
[2] Jonathan Culler, *Theory of the Lyric* (Cambridge: Harvard University Press, 2015), 37-38.
[3] "Various critics have done me the honour to interpret the poem in terms of criticism of the contemporary world, have considered it, indeed, as an important bit of social criticism. To me it was only the relief of a personal and wholly insignificant grouse against life; it is just a piece of rhythmical grumbling." T. S. Eliot, quoted from a lecture at Harvard University and recorded by his brother, Henry Ware Eliot, Jr. *The Waste Land: A Facsimile and Transcript of the Original Drafts*, ed. Valerie Eliot (London: Faber and Faber, 1971), 1.
[4] W. H. Auden, "In Memory of W. B. Yeats," in *Collected Poems*, ed. Edward Mendelson (New York: Vintage International, 1991), 248.
[5] Ibid.
[6] In line five, for the sake of fidelity I follow the holograph MS reading of "would," which Cox (and others) emend to "wouldst" as the standard form for a verb agreeing with "thou." John Keats, *Keats's Poetry and Prose*, ed. Jeffrey N. Cox (New York: W. W. Norton and Company, 2009), 378. These lines appear on the manuscript of Keats's abandoned poem *The Cap and Bells; Or, The Jealousies*, and there is no indication there of the poet's intention regarding them, nor are they mentioned in any of his extant letters; as such, critics differ as to whether the text should be considered a "fragment" or a "poem." The text was not published until 1898, in Forman's sixth edition of Keats's *Poetical Works* (Forman supplied the title "Lines Supposed to Have Been Addressed to Fanny Brawne").
[7] Indeed, Timothy Bahti, "Ambiguity and Indeterminacy: The Juncture," *Comparative Literature* 38.3 (1986): 209-23, takes "This living hand" as a case study in the juncture between New Critical "positive ambiguity" and deconstructionist "privative indeterminacy."
[8] E.g. Jerome A. Feldman, *From Molecule to Metaphor: A Neural Theory of Language* (Cambridge: The MIT Press, 2006); Adele Goldberg, *Constructions: A Construction Grammar Approach to Argument Structure* (Chicago: University of Chicago Press, 1995); Adele E. Goldberg, *Constructions at Work: The Nature of Generalization in Language* (Oxford: Oxford University Press, 2006).
[9] Charles Fillmore, "Frame Semantics," in *Linguistics in the Morning Calm*, ed. Linguistic Society of Korea (Seoul: Hanshin, 1982).
[10] George Lakoff, "Mapping the Brain's Metaphor Circuitry: Metaphorical Thought in Everyday Reason," *Frontiers of Human Neuroscience* 8.958 (2014).
[11] The most specific, and complex, form that frames take would be the cascades that are theorized as constituting episodic memories, "fully embodied" information identified as belonging to a singular event. See Antonio Damasio, *Self Comes to Mind: Constructing the Conscious Brain* (New York: Pantheon Books, 2010).
[12] Cf. Karen Sullivan, *Frames and Constructions in Metaphoric Language* (Amsterdam: John Benjamins Publishing Company, 2013), 17-33.
[13] Barbara Dancygier and Eve Sweetser, *Figurative Language* (New York: Cambridge University Press, 2014), 57.
[14] Eleanor Rosch, "Human Categorization," in *Studies in Cross-Cultural Psychology*, ed. Neil Warren (London: Academic Press, 1977), 1-72; Carolyn Mervis and Eleanor Rosch, "Categorization of Natural Objects," *Annual Review of Psychology* 32 (1981): 89-115; George Lakoff, *Women, Fire, and*

Dangerous Things: What Categories Reveal about the Mind (Chicago: University of Chicago Press, 1987). It is important to note that, while similarities in experiences and activities will mean that most persons in the same cultural context have similar basic-level frames, in some domains the frame which is basic may vary depending on individual experiences; for example, one's most-used frames for plantlife may depend on whether one lives in an urban environment, in the countryside, if one gardens, farms, or is an amateur or professional botanist. The theory of superordinate, basic, and subordinate levels was developed specifically with regard to hierarchies of categories, but I am applying it to the hierarchical structures of frames more generally.

[15] For an analysis of the cognitive structure that gives rise to these models of ideas and categories in everyday reasoning and Western philosophy both, see George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999). The poststructuralist conception of language as a chain of signifiers might at first seem analogous to the structure of cascade-circuits and -networks; but, even though language arises and persists in the context of a system where differences are fundamental to categorization, simulation semantics holds that forms are neurally wired directly to meanings, which are constituted by activation in neural structures not dependent on *différance* but on frame knowledge. That being said, the gestalts of frames do often involve binary opposites as components; some of the distinctions between the theories thus may be more a matter of the difference between taking individual cognitive structure or generalized linguistic structure as the object of analysis.

[16] Dancygier and Sweetser discuss prototype effects in terms of "categorial metonymy," which is in a sense a subcase of frame metonymy, since categories are constituted by cognitive frames. *Figurative Language,* 101. For more on prototype effects, see Rosch, "Human Categorization"; Mervis and Rosch, "Categorization of Natural Objects"; and Lakoff, *Women, Fire, and Dangerous Things*.

[17] Indeed, frame structures within the brain's perceptual systems do the initial work of differentiating elements within the perceptual field.

[18] The sociologist Erving Goffman first developed a theory of frames in seeking to explain how individuals "define a situation," analyzing a variety of types of events including fabricated deceptions, accepted fictions, and the implications that frames govern one's behavior not only in situations that are obviously structure by conventions (e.g. board games, boxing, tennis, dance, high school debate, ceremonies and rituals, the theater) but also in everyday interactions. Goffman identifies the intellectual history of his own approach as beginning with William James' "The Perception of Reality." Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience* (Boston: Northeastern University Press, 1986). Different framings of the 'same' situation have also been found to significantly affect judgment and behavior regarding that situation, as I discuss in greater depth in Chapter 2.

[19] Dancygier and Sweetser, *Figurative Language*. Movement between frames that constitute categories is theorized as "categorical metonymy," and can be understood as movement up or down the levels of the cascade, while other metonymic shifts move in more lateral directions, activating outwardly branching cascades. (These processes are thus instances of the general neural principle of spreading activation.) Rosch, "Human Categorization"; Mervis and Rosch, "Categorization of Natural Objects"; Lakoff, *Women, Fire, and Dangerous Things*.

[20] Compare, for example, the parallel phrase "This walking stick, now smooth and bendable for stable hiking," which has the same syntax but different implicit relations between the adjectives and nouns. For words with multiple meanings, neural activation spreads to all the semantic frames of the word in parallel; the meaning that best fits the context wins out by its activation combining with that from the other active frames; lesser-fitting meanings are then typically inhibited (except in cases like

puns), often before integration into consciousness. Thus, because "living" has evoked the Life frame, there is already activation priming the Body and Hand frames (as networked in what might be called the Organism domain), de-motivating the construal of "hand" according to, say, the Poker frame or Banana frame. Interpretation thus begins with the reading process itself, including unconscious neural processes, not only conscious reflection. As one reads, each frame that gets evoked contributes to the developing online conceptualization, framing how subsequent words are construed.

[21] Cf. Brooke Hopkins, who suggests the context of Keats's surgical training (which had begun to theorize something like neural simulation—see the work of Alan Richardson) for this imagery of bodily sensation and volition: "The language of this poem certainly 'suggests a body,' and a body that is very much alive. And the impression of that body's aliveness will only be rendered more vivid if we recall that warmth in this context (as in the context of 'this warm scribe my hand') carries more than simply metaphorical weight. It denotes the body's physiological condition, the 'heat of the Blood' that keeps it alive. And 'capable / Of earnest grasping' is something more than a figure of speech. It denotes vitality as well, specifically, what Keats called 'Volition,' the body's capacity to carry out orders from the brain (as in the passage from the Note Book cited earlier which describes the man who had lost sensation but still had 'powers of Volition' so that he could grasp and hold an object only as long as he consciously attended to it). 'Earnest grasping' is intentional activity, activity inseparable from the body." Brooke Hopkins, "Keats and the Uncanny: 'This Living Hand.'," *The Kenyon Review* 11.4 (1989): 35. Alan Richardson, *British Romanticism and the Science of the Mind* (Cambridge: Cambridge University Press, 2001).

[22] On deixis, see Charles Fillmore, *Lectures on Deixis* (Chicago: University of Chicago Press, 1997). On access organization, see Steffen Werner, Christina Saade, and Gerd Lüer, "Relations between the Mental Representation of Extrapersonal Space and Spatial Behavior," in *Spatial Cognition: An Interdisciplinary Approach to Representing and Processing Spatial Knowledge*, ed. Christian Freska, Christopher Habel, and Karl. F. Wander (Berlin: Springer, 1998): 107-28.

[23] The distinction between profile and background is based on the figure/ground relation as an established dynamic of perception. See Ronald W. Langacker, *Foundations of Cognitive Grammar*, 2 vols. (Stanford: Stanford University Press, 1987, 1991).

[24] Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 85-88 and *passim*. The phenomenon of "What You See Is All There Is" can be explained as the result of the neurobiological principle of "best-fit."

[25] Conceptual metaphor theory was first formulated in George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980).

[26] A crucial point of conceptual metaphor theory is that linguistic expressions of metaphor are emergent phenomena that reflect the underlying multimodal cognitive mapping. Some expressions are highly conventionalized, while others, such as those in literature, may be novel; these novel formulations may involve extensions of the conventional structure, activating frame elements that are not typically used, or using a frame that is subordinate to the conventional metaphor. See George Lakoff and Mark Turner, *More than Cool Reason: A Field Guide to Poetic Metaphor* (Chicago: The University of Chicago Press, 1989), and Dancygier and Sweetser, *Figurative Language*. Like frames on their own, the metaphors activated by reading a poem are not restricted to the aesthetic experience, but are the same cognitive structures used in general reasoning and judgment. Conceptual metaphors are activated by non-linguistic experience as well, such as gesture and other visual representations. Experimental research has even found that activation of Warmth by having a subject hold a cup of warm coffee increases subjects' evaluation of social 'warmth.' Lawrence E.

Williams and John A. Bargh, "Experiencing Physical Warmth Influences Interpersonal Warmth," *Science* 322 (2008): 606-7. Theorists in conceptual metaphor theory have analyzed how metaphorical mappings are pervasive in human cognition, constituting a fundamental mechanism by which we are able to use intersubjective and concrete experiences to talk and reason about more subjective and abstract domains. Certain mappings, called primary metaphors, arise from conjunctions in experience from early childhood on; primary metaphors have been found to be predominantly cross-cultural, as they are motivated by embodied experiences which are common across cultures. The primary scene for Affection Is Warmth is an infant's concurrent experience of body warmth and affectionate care when being held by caregivers, resulting in the formation of a mapping circuit connecting the neural circuit that registers temperature to the neural circuit that registers social affection; this correlation continues to be reinforced in experiences of affectionate touch throughout life, as well as by linguistic expressions which activate the metaphor. Lakoff, "Mapping the Brain's Metaphor Circuitry. Further conjunctions in experience may combine primary metaphors to produce composite metaphors. On the metaphor systems for time, events and causes, the mind, the self, and morality, see Lakoff and Johnson, *Philosophy in the Flesh*. Because conceptual metaphors arise from experience, some metaphors are culturally specific, either involving frames or frame-structures that are themselves specific to a culture, or culturally-specific selections of aspects of experience for conventionalization. For example, while all cultures appear to include frames involving bodily experience in their metaphors for conceptualizing emotions, they vary as to which bodily experiences are conventionally highlighted, such as those of the heart or of the gut. See: Zoltán Kövecses, *Metaphor and Emotion: Language, Culture, and Body in Human Feeling* (Cambridge: Cambridge University Press, 2000); Zoltán Kövecses, *Language, Mind, and Culture: A Practical Introduction* (Oxford: Oxford University Press, 2006).

[27] See Lakoff and Turner, *More than Cool Reason*.

[28] There are multiple aesthetic effects of these locutions. First and foremost, arguably, is how they fit into the poem's absorptively hypnotic phonemic patterning with regard to assonance and prosodic structures—"in the icy silence" constituting an interweaving of variations of the *i* vowel sounds with the consonants *n* and *s*, while the position of "dreaming" in the eighth and ninth syllables of the line creates an internal rhyme parallel to "stream" in the eighth syllable of line six. Their deviations from standard grammar also evoke a sense of the language being poetic (as is also motivated by the elaborately branching syntax and use of archaic *thou* forms) and also a sense of strangeness, perhaps even otherworldliness, to be associated with their referents. Finally, differences in word order entail different orders of neural simulation, so that moving "icy" forward helps to maintain the salience of the Temperature frame (as evoked by "warm" and "cold"), and hence its activation of the Affection Is Warmth metaphor, while landing on "nights" allows for "dreaming" to be cancelled (e.g. by the haunting/chilling), so that the line-end wrap-up simulation is then of 'undreaming nights', which would not be so motivated if Dreaming had been the last frame activated.

[29] My suggestion of viewpointing within metaphorical construal can be related to the work of Eve Sweetser and Karen Sullivan on degrees of metaphorical specification in poetry, in which they analyze varying types of minimalism—where the target frame and/or some of its roles are not specified, and so depend on convention, cultural knowledge, and/or ad hoc interpretation for construal—in contrast with metaphorical maximalism, where mappings and their inferences are over-determined, often through the use of multiple source domains and meta-commentary. Eve Sweetser and Karen Sullivan, "Minimalist Metaphors," *English Text Construction* 5.2 (2012): 153-73. Sweetser and Sullivan's analysis is itself an expansion on Peter Stockwell's contrast of allegory, as metaphorical figuration where the target frame is not explicitly evoked, with extended metaphor,

where both frames, multiple frame roles, and their mappings are evoked. Peter Stockwell, "The Metaphorics of Literary Reading," *Liverpool Papers in Language and Discourse* 4 (1992): 52-80.
[30] Ibid.
[31] In other words, being biological organisms, human values are fundamentally the values of the organism, its states and needs. This is not to unmask 'higher' values as false, but to frame them in evolutionary terms as exaptations of the homeostatic needs of all organisms. For example, Antonio Damasio has proposed "sociocultural homeostasis" as a concept for the extension of the value of individual homeostasis to human contexts, and George Lakoff and Mark Johnson have analyzed how moral belief systems are composed of metaphors that map bodily forms of well-being to social and conceptual domains. Antonio Damasio, *Self Comes to Mind*, 284-97. Lakoff and Johnson, *Philosophy in the Flesh*, 290-334.
[32] These neural mechanisms have been the focus of research on the limbic system's mediation of emotional appraisals and behaviors; Joseph E. LeDoux has recently been promoting use of the terms like "survival circuit" and "survival behavior" in place of language about emotions in order to credit the cross-species evolutionary functions of these circuits, and to avoid potential confusions about the emotion/feeling distinction and issues regarding consciousness. Joseph E. LeDoux, "Feelings: What Are They & How Does the Brain Make Them?," *Daedalus* 144.1 (2015): 96-111.
[33] Antonio Damasio, *Looking for Spinoza: Joy, Sorrow, and the Feeling Brain* (Orlando: Harcourt, 2003), 45 and *passim*.
[34] Cf. I. A. Richards' concept of "projectile" adjectives, which project emotional responses in the subject as a quality of an object. I. A. Richards, *Practical Criticism: A Study of Literary Judgment* (New York: Harcourt Brace, 1929), 221.
[35] This is how the conceptual metaphor Affection Is Warmth is assumed to arise: from infancy onward, experiences of affection (a feeling of pleasure and well-being resulting from the caring behavior of another person) correlate with experiences of warmth (a feeling of temperature registered in the somatosensory system, typically pleasurable, especially in contrast with other temperatures), particularly in the form of the body heat of an affection-giver holding an infant while feeding and soothing, and continuing in instances of soothing caresses, friendly embraces, and romantic contact. Warmth and affection are thus both valenced, not simply concepts but having meaningfully to do with well-being; when warmth is construed from the viewpoint of the frame of Affection, this positive feeling takes on the meaning of arising from a caring relationship with another person. Activation of the Warmth role within the Temperature frame thus metonymically evokes the affective component of pleasure, while the metaphorical mapping evokes the Affection role within its frame, which not only contributes additional activation to the Pleasure circuit, but also construes that component within the context of a Relationship.
[36] Antonio R. Damasio, "The Somatic Marker Hypothesis and the Possible Functions of the Prefrontal Cortex," *Philosophical Transactions: Biological Sciences* 351 (1996): 1413-20. See also Antonio Damasio, *Descartes' Error: Emotion, Reason and the Human Brain* (New York: Putnam, 1994); Damasio, *Looking for Spinoza*, 147-50. Chapter 5, on vocal and perceptual absorption, will deal with the evocation of affective frames in more depth, especially to clarify the difference between the conceptual recognition of emotions and the absorptive experience of affect.
[37] In fact, these two pathways are integrated as one complex mapping, since both the Warmth and Affection frames comprise affective components of feeling along with their semantic components of knowledge.
[38] I posit that the affective valence of the Capability frame may in part be constituted by interconnections between the frames representing "force dynamics" (which constitute the cognitive

linguistic theory of modality) and affective frames, which are conditioned by, for example, experiences of positive affects as a result of achieving goals thanks to unimpeded movement. Chapter 5 addresses how neo-Jamesian theories of the bodily nature of emotions can be combined with mirror neuron simulation to explain affective absorption resulting from poetic imagery, especially imagery of the body and motion. On force dynamics, see Leonard Talmy, "Force Dynamics in Language and Cognition," in *Toward a Cognitive Semantics*, vol. 1: *Concept Structuring Systems* (Cambridge: MIT Press, 2000).

[39] That being said, interpretation may involve re-analysis of the cascade, such as the partitioning Social Affection from Sexual Desire, if one takes "earnest" as protesting too much, thereby construed as a rhetorical assertion of genuine caring meant to disguise an ends-oriented motivation.

[40] On the compositional structure of the social emotions, see: Damasio, *Looking for Spinoza*, 156 and *passim*; Jonathan Haidt, "The Moral Emotions," in *Handbook of Affective Sciences*, ed. by Richard J. Davidson, Klaus R. Scherer, and H. Hill Goldsmith (Oxford: Oxford University Press, 2009), 852-70; and Richard A. Shweder, Jonathan Haidt, Randall Horton, and Craig Joseph, "The Cultural Psychology of the Emotions: Ancient and Renewed," in *Handbook of Emotions*, 3rd ed., ed. by Michael Lewis, Jeannette M. Haviland-Jones, and Lisa Feldman Barrett (New York: Guilford Press, 2008), 409-27.

[41] For an overview, see Elizabeth Johnston and Leah Olson, "Feelings-as-Information: How Affect Influences Thought and Judgment," in *The Feeling Brain: The Biology and Psychology of Emotions* (New York: W. W. Norton & Company, 2015), 215-43.

[42] H. P. Grice, *Studies in the Way of Words* (Cambridge: Harvard University Press, 1989). It's logically possible that this quality of being not-alive could be fulfilled in various ways—a scenario where the hand belongs to a mannequin, or where it is a hand in a painting, for example. However, Mannequin and Representation are not roles of the Life frame. Rather, the evocation of the Life frame, which contains the Death role as an alternative state, profiles that role as the contrasting implicature that's easiest to access.

[43] Kahneman, *Thinking, Fast and Slow*.

[44] Barbara Herrnstein Smith, *Poetic Closure: A Study of How Poems End* (Chicago: The University of Chicago Press, 1968).

[45] Charles Bernstein, "Absorption," *The Princeton Encyclopedia of Poetry and Poetics*, 4th ed., ed. Roland Greene et al. (Princeton: Princeton University Press, 2012), 1; see also Charles Bernstein, "Artifice of Absorption," in *A Poetics* (Cambridge: Harvard University Press, 1992), 9-89. Pierre Bourdieu, *Distinction: A Social Critique of the Judgment of Taste*, trans. Richard Nice (Cambridge: Harvard University Press, 1984).

[46] Openness is one of the "Big Five" personality traits in the Five Factor Model. See Gerald Matthews, Ian J. Deary, and Martha C. Whiteman, *Personality Traits*, 3rd ed. (New York: Cambridge University Press, 2009).

[47] This effect is by no means assured by the evocation of affective frames by, for example, simply naming emotions—just saying "happy" or "sad" is not absorptive, likely because the amount of activation flowing from the body up through the affective systems is greater than the activation flowing from just one frame at the emotion level of the hierarchy. However, as a text evokes multiple frames, which each may metonymically evoke frames at various levels of the affective network, due to somatic marking, the activation of the components can add up to activation of a full affective cascade, even in some cases to the point of triggering a survival circuit to execute actual bodily emotion.

[48] At the neural level this mechanism is known as "neural integration." Cognitive linguistics has theorized these processes at the cognitive level as "conceptual integration," which theory can be applied not only to semantic frames but also to perceptual and affective frames. Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002).

[49] Folk theories and expert philosophical analyses of thought go astray when conceptualizing meanings as having the combinatorial mobility of words; such conceptualizations are themselves motivated by the conceptual metaphor Thinking Is Object Manipulation, in which Ideas Are Manipulable Objects, Memory Is A Storehouse, Remembering Is Retrieval, The Structure Of An Idea Is The Structure Of An Object, and Analyzing Ideas Is Taking Apart Objects. Lakoff and Johnson, *Philosophy in the Flesh*, 240. See also 244-66.

[50] Neuroscientists aren't yet entirely sure about how this coordination is executed, though evidence is accumulating in support of the hypothesis that neural binding involves synching up the firing of the various neural circuits, so that they oscillate at the same rate and phase. Earl K. Miller and Timothy J. Buschman, "Working Memory Capacity: Limits on the Bandwidth of Cognition," *Daedalus* 144.1 (2015): 112-22. The human brain is estimated to comprise some 100 billion neurons, each of which is connected, on average, to thousands of other neurons, amounting to somewhere in the neighborhood of 100 trillion total connections. Some of these connections are prewired in fetal development; other structure is learned in childhood and adolescent development, and it is now known that such neuroplasticity continues over the course of adulthood. This massive, and massively parallel, interconnection means that, while neurons A and Z may not be directly connected to each other, there is often some pathway, such as via neurons B through Y, by which activation of A will eventually spread to Z. The chain of neurons whose activation flows into each other thus forms a cascade—potentially a pattern of activation that comprises a wholly new thought, or potentially an entrenched pathway like the cascade-circuits of nested frame hierarchies. Cascades aren't just linear, they involve many types of complex circuits, such as the gestalt-circuits of frames, the mapping-circuits of metaphors, and sequential circuits (known as "executing-schemas") that coordinate actions (whether behavior using muscles or thought-sequences of narration or reasoning). Integration is thus a matter of activation flowing in cascades, binding sub-circuits of multiple frames to each other, to yield a coordinated overall online conceptualization. See Feldman, *From Molecule to Metaphor,* and Lakoff, "Mapping the Brain's Metaphor Circuitry."

[51] Nelson Cowan, "The Magical Number 4 in Short-Term Memory: A Reconsideration of Mental Storage Capacity," *Behavioral and Brain Sciences* 24.3 (2001): 8-114. See also Miller and Buschman, "Working Memory Capacity."

[52] Gilles Fauconnier, *Mental Spaces: Aspects of Meaning Construction in Natural Language* (Cambridge: MIT Press, 1994). Gilles Fauconnier, *Mappings in Thought and Language* (Cambridge: Cambridge University Press, 1997). It may be worth explicitly noting that, from the perspective of neural structure, "mental spaces" are not spatial regions in the brain, but rather theoretical representations of integrated cascades of activation.

[53] Ibid.

[54] Cf. the text world theory analysis of "This living hand" in Marcello Giovanelli, *Text World Theory and Keats' Poetry: The Cognitive Poetics of Desire, Dreams and Nightmares* (London: Bloomsbury, 2013), 183-203.

[55] Part of the point here is that this organizational sequence—call it a narrative structure if you'd like—itself can be categorized. The movement from positive frames to negative frames (especially Death) is a component structure of the Loss frame; the counterfactual marking of this Loss might

itself evoke the Anxiety frame, characterized by paranoid patterns of ideation. Likewise, the movement from Loss's negative affects back to positive affects can be recognized as the structure of the Relief frame, perhaps specifically the Mourning frame, given the context of Death. Even if the reader does not experience significant affective absorption, or if she displaces from identifying with the role(s) of the Persona and/or Addressee, she can still *recognize* these affects via such categorization. (The pattern of the Relief frame here could also be identified with Aristotle's catharsis in response to tragedy and Burke's delight as a response to the sublime. However, it should be noted that, in those theories, relief comes through dis-absorption from the unpleasant experience, whereas here absorption can be maintained, shifting from pleasant to unpleasant experience and back again within the poem.) These viewpoint complications will be more fully addressed in Chapter 3's theories of personal and loco-temporal absorption.

[56] This "viewpointing" within cognitive linguistic theory is akin to the narratological concept of "focalization," which aligns with characters and narrators. Because most non-narrative poems remain in a single "voice," it has not been widely recognized that the absorptive experience of poetry exhibits complex viewpoint dynamics. In addition to cognitive viewpoint being aligned with one space or another in a network, semantic frames can be viewpointed in themselves: arguably, with regard to the Sleep frame, "dreaming" profiles the viewpoint of the Sleeper, whereas "sleeping" would profile the viewpoint of an Observer. Charles Fillmore, "Frame Semantics"; Barbara Dancygier and Eve Sweetser, eds., *Viewpoint in Language: A Multimodal Perspective* (Cambridge: Cambridge University Press, 2012).

[57] Fauconnier and Turner, *The Way We Think*.

[58] Lakoff and Johnson, *Philosophy in the Flesh*, 290-98.

[59] Lakoff and Johnson, *Philosophy in the Flesh*, 293.

[60] I suggest that the failure to repay a moral debt is one of the additional components that elaborates Shame and Anger at moral offenses into Guilt and Indignation.

[61] Zoltán Kövecses, *Emotion Concepts* (New York: Springer-Verlag, 1990), 146-48, 172; Lakoff and Turner, *More than Cool Reason*, 19-20.

[62] By mapping the affection at issue to blood, the Value of the credit and debt is rendered at the scale of life and death. The megablend could then also evoke the specific Dying Of A Broken Heart frame, in which a lack of affection is treated as having causal force. Arguably, the Dying Of A Broken Heart frame would likely be more entrenched, and hence more easily evoked, for a nineteenth-century European reader in whose culture that frame was quite current, or for scholars of such a culture, than for a twenty-first century reader. Alternatively, the fluid transfer of the wish and consequence spaces might be understood according to the sexual construal of the Carpe Diem tradition, as a figurative double entendre for a petite mort and/or loss of maidenhead.

[63] Again, as I mentioned above, in cognitive linguistics grammatical constructions are theorized as form-meaning pairings. The meaningfulness of constructions is an abstract instance of frame metonymy, with linguistic form a component that evokes the whole frame of that form's meaning, the roles of which are then filled by the frames for the specific words in the discourse; we understand particular phrasings because the neural circuits that represent their forms are interwired with cascades for meaning. Construction Grammar is thus a component of the Neural Theory of Thought and Language. Goldberg, *Constructions*; Goldberg, *Constructions at Work*.

[64] On the Presentational Deictic construction, see Lakoff, *Women, Fire, and Dangerous Things*, 520-22. Cf. Heather Dubrow's analysis of this feature from a non-absorbed viewpoint in "Neither Here Nor There: Deixis and the Sixteenth-Century Sonnet," in *The Lyric Poem: Formations and Transformations*, ed. Marion Thain (Cambridge: Cambridge University Press, 2013), 40.

[65] See, for example: Suzanne Fleischman, "Verb Tense and Point of View in Narrative," in *Discourse-Pragmatics and the Verb: The Evidence from Romance*, ed. Suzanne Fleischman and Linda R. Waugh (London: Routledge, 1991), 26-54; José Sanders and Gisele Redeker, "Perspective and the Representation of Speech and Thought in Narrative Discourse," in *Spaces, Worlds, and Grammar*, ed. Gilles Fauconnier and Eve Sweetser (Chicago: University of Chicago Press, 1998), 290-317; Barbara Dancygier and Lieven Vandelanotte, "Judging Distances: Mental Spaces, Distance, and Viewpoint in Literary Discourse," in *Cognitive Poetics: Goals, Gains and Gaps*, ed. Geert Brone and Jeroen Vandaele (Berlin: Mouten de Gruyter, 2009), 319-69; Lieven Vandelanotte, "'Wait till *you* get started': How to Submerge Another's Discourse in Your Own," in *Viewpoint in Language: A Multimodal Perspective*, ed. Barbara Dancygier and Eve Sweetser (Cambridge: Cambridge University Press, 2012), 198-218.

[66] The use of the proximal deictic "here" (rather than distal "there") in this phrase profiles a viewpoint where the hand is proximal and accessible. Such a viewpoint would not only be possessed by the persona referring to their own hand, but also by a co-present addressee, able to receive the command and hand both. By implying the addressee's co-presence, "here" thus motivates construal of the discourse as speech, despite its patent existence in front of the reader as a written text. Critics who construe the discourse as text, from the viewpoint of a reader reading, often speak of the surprise of this moment, as an audacious insistence on an impossible perception that makes it seem an actual (absorptive) experience. On deixis, see Fillmore, *Lectures on Deixis*; on access organization, see Werner, Saade, and Lüer, "Relations between the Mental Representation of Extrapersonal Space and Spatial Behavior."

[67] The examples I quote are from Goldberg, *Constructions at Work*, 7, 73. For a full discussion of the Caused-Motion construction, see Goldberg, *Constructions*, 152-79.

[68] The Path frame here—usually analyzed as the Source-Path-Goal image-schema—could potentially blend with the Path of communication within the Communicating Is Exchanging Objects In Containers metaphor, as well as with the Path of sight in the Seeing frame. The Offering frame may also be analyzed as blending here via the Purposes Are Desired Locations (destinations) sub-mapping of the Location Event-Structure metaphor, with "you" as the Desired Location of the hand's motion; similarly, the Purposes Are Desired Objects sub-mapping of the Object Event-Structure metaphor integrates the Desired Object of the hand as a figure for the Purpose of reciprocated affection / repaid guilt. Lakoff and Johnson, *Philosophy in the Flesh*, 195-98.

[69] It should be remembered that textual motivation for a frame does not mean it will necessarily be activated and integrated as the frame governing construal. These motivations for the final gesture of "This living hand" to be construed as an Offer do not preclude the alternative framing, which multiple critics have articulated, of the gesture as a threatening display of aggression. Rather, the analysis above should clarify how, if the mental space representing the final scene is combined with the Hostile Hand blend (rather than the Affectionate Hand blend) as an input, the megablend that results may motivate construal of the imperative's Command as an act of dominance, and of the gesture as an encroachment on the addressee's personal space. And yet, again, the ultimate sense of the absorptive meaning of a blend may vary depending on the reader's viewpoint alignment within the integration network. Absorption in the addressee's viewpoint might motivate using this construal of aggression as the frame that integrates the Disaffection and Fear that have been evoked. In contrast, the persona's viewpoint might entail a thrill evoked by the dominance of the Command, integrated with Indignation, and perhaps still integrating the Offering frame as 'an offer they can't refuse.' Finally, the reader might take the base space, rather than the addressee or persona's subjectivity spaces, as viewpoint, such that they might construe the Offering as a manipulative gesture, integrated with an understanding of the Moral Accounting system being used to guilt-trip

the addressee, instead of accepting that the persona is "earnest" in the way they claim. Which of these alternatives occurs as a reader's initial understanding will depend on the relative weighting of the components and their connections within her cognitive system, as well as any current activation of those components and her intentions going into reading the poem. If she approaches the poem with negative capability, she may also explore the full range of alternatives through spreading activation and/or intentional inhibition of already-experienced options during rereading and reflection.

[70] Cf. Brooke Hopkins, who reads this iconicity as a representation of fragmentation, uncanny dismemberment, and castration. Hopkins, "Keats and the Uncanny," 35-36. The left-to-right motion of the eye reading could also be blended with simulation of the hand's path of motion; literate persons have been found to tend to simulate horizontal motion in the same direction as the script they first learned to read. Benjamin K. Bergen, *Louder Than Words: The New Science of How the Mind Makes Meaning* (New York: Basic Books, 2012), 183-7.

[71] For dialects in which "towards" can be monosyllabic rather than disyllabic, the phrase would be iambic, but feature a weak final half-iamb, and would end like the hypercatalectic anapest not just in the middle of the line but in the middle of the foot, just short of the reanalyzed-pentameter-completing stressed syllable.

[72] This subtlety undercuts the persona's apparent authority, in a manner reminiscent of Donne's failing seductions of lovers and impossible imperatives towards God, perhaps part of the motivation for critics who highlight the poem's pathos of powerlessness, while others privilege the domineering quality of the discourse's rhetorical projections. The uncertainty could also potentially be attributed to the addressee, as unsure themself of how they will respond, through absorption in the addressee's viewpoint, or it could be left as the reader's uncertainty about what happens after the discourse, in a non-absorbed viewpoint. As I will discuss in Chapter 3, construal of the discourse as writing rather than speech foregrounds the sense of the persona's powerlessness, which may seem sym/pathetic and/or the motivation behind the grasping attempts to rhetorically compel the addressee's response. And yet, absorptive experience can also integrate the poem's event with the reader's present, such that the persona/writer does achieve resurrection in the payment of attention in reading.

[73] For more on iconicity, see Lakoff and Johnson, *Metaphors We Live* By, 126-38; Lakoff and Turner, *More than Cool* Reason, 155-58; and Masako K. Hiraga, *Metaphor and Iconicity: A Cognitive Approach to Analyzing Texts* (London: Palgrave Macmillan, 2005). On the relationship between formal structures and the perceived sense of closure, see also Smith, *Poetic Closure*.

[74] The Moral Accounting system also affords the possible construal of this regret and guilt as a phenomenon of compounding interest, where the initial debt of affection may seem slight, but in time it will come to seem as significant as a matter of life and death—especially if/when the persona does die first, as a result of which it becomes impossible for the addressee to repay the debt, in this life, anyway. The scenario of the addressee's death, and the persona's reanimation, in the wish and consequence frames could then even be re-integrated as representing the conditions that would have to be met in order for the addressee to be able to calm their conscience, either ironically by the calming of all feeling in death, or by first dying and then choosing differently, taking the persona's hand in the afterlife. In this way, the poem's core content affords construal and reconstrual across three ontological framings—in the discourse's counterfactual world, in the factual world of the persona's and addressee's lives, and in their afterlives. And this is not even to address the alternative loco-temporal absorptions that come from construing the text as writing instead of speech.

[75] Fauconnier and Turner discuss integration in perception and sensation as "living in the blend" and absorption in a conceptually-informed world as "liv[ing] in the full integration network." "Blending

is not something we do in addition to living in the world; it is our means of living in the world. Living in the human world is 'living in the blend' or, rather, living in many coordinated blends." Fauconnier and Turner, *The Way We Think*, 85, 5, 390. Even the ability to identify one's knowledge as subjective does not mean that subjective imagination does not have confounding effects. For example, subjects typically vastly overestimate the likelihood of others having knowledge or experience which the subject has, even when the subject knows others' access is limited, a cognitive bias known as the "curse of knowledge." Vera Tobin, "Cognitive Bias and the Poetics of Surprise," *Language and Literature* 18.2 (2009): 155-72. Furthermore, it is important to recognize that extended integration can subtract as well as add meaning. By this I don't just mean that, over the course of conscious reflection, possibilities that are temporarily considered may subsequently be dismissed. Rather, 'external' frames and knowledge, once recruited, function as inputs to the overall "best fit" construal the same way core components do, including at levels beneath conscious awareness. In addition to endowing experience with meaning, frames *filter* experience and govern cognitive accessibility, a phenomenon Daniel Kahneman has described as "What You See Is All There Is." *Thinking, Fast and Slow*, 85-88. An 'external' input is thus prone to highlight the components it fits with and de-emphasize or even cancel the components that do not fit its frame(s). The phenomenon of this exclusion will itself be backgrounded, as one's conscious access is dedicated to what has been coherently included, such that one's own cognitive biases are only recognized through reflective vigilance. Thus, while knowledge can make scholars adept at generating interpretations, it can also diminish their negative capability, as habit makes them not only prefer certain methods and theoretical lenses, but potentially overlook the multiplicity of interpretive possibilities. Like "close reading," my neurocognitive method of "deep reading" is meant to serve as a check upon interpretation that depends too much on projection from 'external' inputs, and to trace precisely how literary texts motivate multiple meanings and elaborate meaningfulness, composed by readers' cognitive mechanisms from a single, determinate text.

[76] I have omitted the manuscript-metonymy extension of the megablend from this chapter not from a theoretical conviction that it does not qualify as a dimension of the core meaning, but as a practical matter, because its integration with the 'external' input of a Writing frame and space is better suited to analysis in terms of loco-temporal absorption. It should be noted that, despite some critics' attitudes that construing "hand" as referring to the text is the most rational interpretation of the poem, this construal still involves absorptive compression of mappings in the integration network, eliding that the text one reads is a typographical representation of handwriting, and not the actual handwritten manuscript of the poet.

[77] Peter Stockwell formulates a theory of literary resonance within his non-neural cognitive framework. Peter Stockwell, *Texture: A Cognitive Aesthetics of Reading* (Edinburgh: Edinburgh University Press, 2009), 17-55.

[78] While I discuss resonance here in terms of experiences from one's real life, literary works, historical knowledge, and the practices of criticism are themselves experiences that form memories with integrated associations constituting the degree of one's investments in those experiences. For students, the topics of a specific course function as resonant concerns, while for scholars, specific authors, literary traditions, and historical contexts are invested with entrenched personal significance, endowing poems with resonance not experienced by less-invested readers. Habituated literary tastes can also be theorized in this way, as entrenched associations between particular stylistic and generic features and certain affective responses.

[79] From an evolutionary perspective, this activation of affectively-relevant memories functions to bring past experience to bear on the present situation. However, when the present situation does not

demand immediate action, as in the case of reading poems, extended integration enables comparison and combination between the case at hand and recruited associations; within the integration network, one's viewpoint and the focus of attention can shift back and forth between application of the past to the present, on the one hand, and reconsideration of experiences and knowledges using the new structures currently at hand. Such a process is familiar as the practice of close reading, with its dialectic between the text and 'external' contextual knowledges.

[80] Such resonance may result in a shift away from absorption in the poem to attend instead to one's personal investments, especially if those concerns seem more pressing than the poem, or if the poem does not seem sufficiently relevant to them.

[81] Among the critical readings of "This living hand," see Brooke Hopkins' recruitment of Freudian psychoanalytic theory as an 'external' input, interpreting the poem as an example of the uncanny, and the hand as a figure for the castration of the poet's agency and vitality in the death of writing and literal death. Brooke Hopkins, "Keats and the Uncanny." Alternatively, the poem might be compared to the genre of the *carpe diem*, such that it exemplifies at once a clever literalization of the *carpe* as seizing the hand, and that it inverts convention by making the seducer's death, rather than the addressee's aging and mortality, the motivation for immediate consummation. A text can also be construed as an example of a "way of happening" other than a poem, exemplifying, say, a strategy of seduction through guilt, an emotional complex of affection, fear, hostility, and desperation, a desire to be remembered when confronting one's mortality, or an encouragement to seize opportunities for affection.

[82] Charles Altieri has theorized the phenomenological and conative values of aesthetic experiences, differentiating between the function of an example *of* a rule, and the aesthetic modeling of "an example *as* something we can deploy when we are trying to sort specific options in a particular situation." *Reckoning with Imagination: Wittgenstein and the Aesthetics of Literary Experience* (Ithaca: Cornell University Press, 2015), 127. By attuning to a poem's ways of speaking and making, the reader is able to develop her own capacities for expression, imagination and sensitivity, and to appreciate what new understandings of self and world become possible by attunement to such examples. In the theory I am developing, I would describe this as integration of semantic and affective absorption with both a construction of the event of writing and with the 'external' input of the reader's self-concepts, topics that will be addressed in Chapter 3. However, without an understanding of compositionality, it is unclear to me how the past experience of an "example as" would be evoked in future situations, or how it could be appreciated as a new understanding of any other than poetic possibilities, hence my theorization of examples *for*. See also Charles Altieri, *The Particulars of Rapture: An Aesthetics of the Affects* (Ithaca: Cornell University Press, 2003).

[83] Kenneth Burke, "Literature as Equipment for Living," in *Philosophy of the Literary Form: Studies in Symbolic Action*, 3rd ed. (Berkeley: University of California Press, 1973), 293-304. While it is appropriate for literary criticism to limit 'external' interpretive inputs to intersubjectively available knowledge, in the pursuit of disciplinary 'objectivity,' I believe we should also acknowledge the naturalness and value of interpreting literature for the ways it can enable us to think differently about our own lives and investments. Such a practice, in which personal resonances and extra-literary associations are not only valid contexts but also legitimate targets for interpretation, I call "slow reading," on the model of the "slow food" and general "slow culture" movements and their emphases on experiential and social values in contemporary contexts. In addition to considering a poem in its literary and historical contexts, slow reading also analyzes and interprets through integration with one's own life and concerns, using the text to construct new insights and to identify useful ways of thinking and feeling about events beyond reading. In contrast to conceptions of

literature as expressing moral lessons or promoting represented values that are transferred from the text to the reader, the lessons and values to be found in slow reading can also be experiential, such as the habituation of a particular 'way of happening' as a cognitive resource that becomes a component of the reader's cognitive structure, available for future use.

[84] For an overview of how episodic memories are constituted by convergence-divergence structures composed of semantic, affective, and perceptual frames, see Antonio Damasio, "An Architecture for Memory," in *Self Comes to Mind*, 130-53.

[85] Critique motivates such complicating extensions of existing frames, building antitheses upon a theses. Conceptions of negativity or deconstruction as capable of *erasing* existing ideology are problematic, given our current understanding of how neurocognitive structure actually changes.

[86] When the new frame results from component similarities across multiple poems (and/or non-literary experiences) it is theorized as resulting from a process of schematization, where a generalization across a repeated pattern is automatically neurally habituated.

Chapter 2

To See the Earth Burning: Ecological Poems, Systemic Causation, and Cognitive-Affective Dwelling

Cognitive-Affective Challenges and Ecopoetic Affordances

Over the past half-century, accumulating scientific research identifying the significant consequences of greenhouse gas emissions, fertilizer runoff, habitat fragmentation, and other modern cultural practices has prompted diverse efforts to mitigate environmental deterioration caused by humans. That such efforts, amid increasingly dire observations and predictions, have achieved only limited success is a sociopolitical problem mediated by cognitive, affective, behavioral, social, and institutional aspects of individual and collective attitudes and lifestyles.[1] Among these factors, environmental problems in themselves exhibit qualities that make them difficult for people to recognize, reason about, and feel motivated by. These challenges include: abstractness and cognitive complexity, unintentional action's perceived blamelessness, avoidance of acknowledging guilt, wishful thinking afforded by uncertainty, and low prioritization due to consequences being attributed to long time horizons and faraway places.[2] While poems can't directly intervene in economic systems, government, or other institutions, the ways poems prompt readers to imagine and feel about the world can afford social (as well as aesthetic) values by helping to redress the cognitive-affective challenges that arise from these systemic aspects of environmental problems.

My interest here is in "ecological poems" that afford such pragmatic values (in addition to their aesthetic values) specifically by representations of ecosystemic cause-and-effect interrelationships. In focusing on structures of thought and feeling as well as poetic structures, and on more-than-perceptual and more-than-linguistic human relationships with the nonhuman world, I aim to extend the kinds of systemic and evaluative thinking that we recognize and appreciate as being afforded by ecological poems.[3] To adopt Jonathan Skinner's terms, these poems are both "topological," metonymically referring to parts of ecosystems, and "tropological," relating those parts together through figurative techniques and formal structures.[4] However, theories of referential and formal representation are insufficient for ecological poems dealing with ecosystemic processes, because such poems' effects depend on subjective semantic and affective structures recruited from background knowledge, prompted by the text but exceeding its referent objects and poetic structures. By clarifying how readers' emotional responses and evaluative frames are involved in enacting the poem's meaningfulness, I explain how poetic experiences can influence readers' ecosystemic dwelling. Through analysis of the structures of absorption motivated by the poetic techniques of Brenda Hillman's "Moaning Action at the Gas Pump," Gary Snyder's "Burning the Small Dead," and Ed Roberson's "To See the Earth Before the End of the World," I argue that ecological poems such as these cultivate readers' abilities to cognitively and affectively map their relations to, and evaluate actions within, complex cultural-natural systems.

In part, my argument is that we should appreciate the ecopoetic strategies of meaning-construction and affective habituation, alongside the techniques of critique, deconstruction, and defamiliarization that have more typically been the focus of scholarly accounts of the interactions between poems and ecological knowledge, perception, and judgment. A central crux, in my thinking, is the issue of how the experience of a poem's words transfers to experience of the world. Given that one of the primary practices of ecocriticism has been to diagnose the representation of environmentally-problematic ideologies, we may find ourselves hoping that alternative representations might motivate more environmentally-friendly practices. But it is by no means clear that the disruption or reversal of symptomatic structures treats or cures the targeted ideology or

cultural practices; as Forrest Gander observes in his prose-poem-essay "The Carboniferous and Ecopoetics":

> If language does affect the way we think about being in the world, poetry *can* make something happen. […] But it probably doesn't affect perception nearly as directly as poets might wish. Getting rid of the capital I, eliminating pronouns altogether, deconstructing normative syntax, making the word 'wordy'—these techniques, all more than a century old, impact the reader. But the effects are complex and subtle and may not correspond to a writer's intentions at all.

The task of theorizing the affordances of ecological poetry, then, is to analyze how particular techniques *do* impact the reader, and to make grounded arguments for the values of such vector effects in motivating pro-environmental dispositions and behaviors.

One explanation of ecopoetic efficacy is that poetic structures exemplify ecosystemic structures, such that perception of and reflection on a poem's structures serves as practice for perceiving and interpreting non-linguistic structures in the world. Marcella Durand's essay "The Ecology of Poetry," which has become a touchstone in subsequent discussions of ecopoetics, presents this conception of representation by formal homology:

> Experimental ecological poets are concerned with the links between words *and sentences, stanzas, paragraphs*, and how these systems link with energy and matter—that is, the exterior world. […] Association, juxtaposition, and metaphor are tools that the poet can use to address larger systems. The poet can legitimately juxtapose kelp beds with junkyards, or to get more intricate, she or he can reflect on the water reservoir system for a large city by utilizing the linguistic structure of repetitive water-associated words in a poem. […] And you can do it in a way that journalists can't—you can do it in a way that is concentrated, that alters perception, that permanently alters language or a linguistic structure. Because poets work in a medium that not only is in itself an art, but an art that interacts with the exterior world—with things, events, systems—and through the multidimensional aspect of poetry, poets can be an essential catalyst for increased perception, and increased change.[5]

While I appreciate such poetic practices, I have a number of reservations about this model of pragmatic influence through structural representation. First, readers' abilities to analyze such structures may frequently depend upon familiarity with "experimental" poetics and the specialized reading practices of those traditions and their interpreters, such that the poems' affordances are limited to a subset of the potential public. Second, the ability to interpret such structures as homologies seems to depend upon readers already possessing the knowledge of the systems the poet aims to address, again limiting the poems' affordances and potentially leaving the poet preaching only to the choir.[6] Third, this critical conception risks misunderstanding representation as direct action: a poem does not itself interact "with the exterior world—with things, events, systems" but rather interacts with the neural representations of things and events within readers' cognitive systems. To present altered linguistic structures in a poem is not necessarily to 'permanently alter' the linguistic structures in the reader's brain. Furthermore, as it is unclear how the cognitive recognition of such homologies informs or influences the affective relations that motivate behavior, it remains to be explained how the perception of altered language affects non-linguistic perceptions and evaluations.

This last issue of the relation between perception of words and of the world is the crux of the model of ecopoetic efficacy as defamiliarization, phenomenological calisthenics, and therapy for alienation. Leonard M. Scigaj proposes the term "*référance*" to describe how ecopoetry

> turns the reader's gaze toward an apprehension of the cyclic processes of wild nature after a self-reflexive recognition of the limits (the *sous rature*) of language. After this two-stage process, a third moment often occurs, the moment of atonement with nature, where we confide our trust in (*s'en référer*) nature's rhythms and cycles, where reading nature becomes our text.[7]

That is, language succeeds in representing beyond-linguistic perceptions by representing its failure to represent those perceptions, such that readers look outside the representation and, thanks to it, perceive there a "precognitive suchness" and "nonhierarchical interconnectedness" it failed to represent, "to open poetry toward a biocentric interaction with nature without reducing it to an immanence of humanly crafted voices."[8] Perhaps. But I'm suspicious of this model's claims that particular mediations produce *and inform* supposedly unmediated perception. I also worry that, while the therapeutic experience of "an atonement or at-one-ment with nature," and the attitude of "trust in … nature's rhythms and cycles" may cultivate readers' valuing of nature, those "changes in perception" are inadequate for the evaluation of behaviors, systems, policies, etc. that are needed to inform "changes in social conduct."[9] Again, we need an account of the affective experience of reading a poem influences the affective experience of not only nature but also of non-poetic culture.

To be realistic about how poetry and poetic experiences may motivate changes to readers' structures of thought and feeling (as one value among many), our theories should strive to be precise about the specific structures and systemic processes involved in neurocognitive change. While language is the medium of the poetic text, the reading experience is multimodal, its semantic and affective meanings composed not of words but from cognitive building-blocks known as "frames," which are complex units of knowledge and evaluative attitudes that have words among their components.[10] As I explained in chapter 1, frames are hierarchically organized and interconnected, substantiating the full general-to-specific continuum of knowledge; though they afford categorizing functions, construing objects and actions according to knowledge and attitudes, within cognition there are no independent percepts or ideas that get framed—all cognitive components are composed of frames all the way down.[11] These frames are the site of textual intervention: in composing an experience of a poem, the frames evoked by the text are connected together, integrating their more general-purpose meanings as aspects of one's present, particular understanding.[12] Ecological poems use both figuration and form to connect knowledge that may be abstract or unconnected to practical life with the human-scale cognitive frames that serve to mediate perception, interpretation, and action. These temporary connections between the frames have greater-or-lesser long-term effects, constituting episodic memories and entrenching component structures of thought and feeling; reading compressed poetic representations thus strengthens the neural connections involved, helping to enable readers to recognize and feel responsive to the ecological contexts that extend outwards from their immediate surroundings and actions.[13] At the same time, practice in thinking systemically builds general cognitive structures to represent systemic causation. Through the emotional relations that are also integrated into these representations of natural-cultural ecosystems, some ecological poems raise to consciousness the common miseries of confronting complicity in systemic environmental harms, affording a sense of solidarity that reinforces shared values; others may develop motivations, forms of evaluation, and dispositions that can serve readers in affectively orienting toward what pro-environmental actions are possible from their individual positions.

As I described in my Introduction, reader's neural structures are affected, incrementally and indeterminately, in construing a poem's "way of happening" under the guidance of the text's motivations. If we consider poems ecologically as vectors in the cognitive field, we must recognize that their effects are likely to be weak, making only small contributions to readers' cognitive structures, while more pervasive stimuli, such as actual encounters with the nonhuman world and experiences of non-poetic discourses, have greater influence upon us, overall. And yet, poems may afford imagined experiences that can't be had in other forms, such that their development of novel connections, complications, and cognitive resources may make differences in one's overall cognitive ecosystem that are beyond the contributions of small changes to more common dispositions. I view the poems I analyze in this chapter as vectors that motivate such constructive imagining, compressing complex systemic relations into the frames of human perceptions, evaluations, and actions, cultivating the components of ecological consciousness and pro-environmental dispositions. By recognizing these potential values, and analyzing their motivation by particular poems, we can make grounded claims for ecological poetry's affordance of cognitive resources and affective dispositions that may help orient our dwelling within the interconnected world.

Ecological Evaluation through Figuration and Imagined Participation in Hillman's "Moaning Action at the Gas Pump"

Brenda Hillman's "Moaning Action at the Gas Pump" offers an example of potential poetic efficacy by way of compressing imaginative extensions and evaluative judgments into an affecting concrete experience.[14] The poem presents its titular action as a form of mourning for the violence systemically caused by fossil fuel production, soliciting readers to recognize their complicity and to at least imaginatively join the persona in "a democracy with no false knowledge." As a vector, the poem motivates complication of readers' cognitive frame for the regular activity of pumping gas, a behavioral schema so well habituated for many that they likely go through the motions with little thought about any consequences beyond filling their car's tank. Poetically counteracting the limited scope of the actual experience, unrealistic figuration integrates the Gas Pump frame with imagery representing the real systemic consequences of its use:

> Inside the pump, you can hear a bird, a screech-covered pelican lugged out of the Gulf with 4 million tons of the used booms in non-leakable plastic, 13 million tons of liquid in nonleakable plastic **5** miles up the road […] Squeak, there are other animals inside the pump, the great manatee—*Trichechus manatus*—you've seen it float like a rug that has something wrapped in it among grasses that will not return.

Evoking these images in a direct relation of Containment ("inside the pump") rather than the actual attenuated relations of the full fossil-fuel system, the poem strengthens neural connections in the reader's brain between the Gas Pump frame, frames for Pelicans, Manatees, and Grasses, (which metonymically evoke the general Wildlife frame) and the Oil Spill frame. The more entrenched these connections become, the more likely that activation of any one of these frames will metonymically evoke the others, such that going to the gas station, seeing a sea-bird, watching a program on manatees, or looking at a picture of a coastal marsh can trigger thoughts of the destruction caused by oil spills—and, likewise, that thinking about an oil spill can trigger thoughts of its effects on wildlife and of the connection of those effects to the cause of continued fossil fuel use.

Beyond this integration of knowledge of abstracted causes and effects with specific concrete images, Hillman's poem evokes affective frames that may contribute to motivating pro-environmental choices.[15] The poem affords this value because emotion is a core component of

decision-making: beyond *knowing* the consequences of an action, humans are motivated by *feeling* the meaningfulness of those consequences.[16] The title, epigraph, and first sentence all evoke the Moaning frame, which is repeatedly re-activated throughout the poem. In addition to comprising semantic knowledge about moans, this frame connects to neural circuits in the affective systems that represent bodily states that have previously coincided with or resulted from moans. Depending on the strength of these connections, the thought of moaning will evoke feelings, and can even trigger an actual emotional reaction. On its own, the Moaning frame may feature multiple such affective connections, reflecting experience of moans of pleasure as well as of pain; but, as with semantic polysemy, context motivates the construal of affective implications through converging neural activation. The text's references to "*the tragic world*," "mourning," and "wailing" evoke affective frames for Sadness, Grief, and Distress, which share Pain as a component, determining the negatively-valenced construal of "moaning." At the same time, the Sadness, Grief, and Distress frames each elaborate the core affect of Pain into a complex of felt qualities which are constituted by additional affective components beyond the Pain circuit, and entail semantic implications that this Pain is a response due to some kind of loss (prototypically, for the Mourning frame, a death) rather than due to bodily injury.[17] Alongside these explicit invocations of emotional behaviors, other words and evoked semantic frames (including "cracks," "chasms," and "shred" in the first paragraph, and the death and destruction alluded to in the second paragraph) implicitly motivate negative affects as their felt connotations, contributing to a mood of tragedy regarding the activity of pumping gas.

Whether an individual reader, in a particular reading, either identifies with these activated affective frames as their own feelings, or attributes them as represented emotions belonging to the figure of the poet/persona, is an open contingency, constituting that reader's particular absorptive experience of the poem. Cognitive construal of affect is motivated, at once, by the reader's habits of interpreting poems (according to, say, the model of a script-for-performance, or as an expression of lyric interiority), by the current state of activation in their neural system (such as already oneself feeling, or expecting the speaker to feel, distressed, aggrieved, or sad), and by linguistic features of the text. In the case of "Moaning Action at the Gas Pump," the grammar promotes ambiguity as to the agent experiencing and expressing distress, affording varying degrees of absorptive affective involvement. In the initial sentences, the agent of the moaning is undefined, due to the passive-voice construction ("**S**oon it will be necessary to start a behavior of moaning…") and the subject-less present-progressive verbs ("Pulling up, beginning a low moaning action, pulling a deep choral moan…"). The first pronoun that appears is "we," followed by an "i" referring to a particular diegetic moaner (presumably identified with the poet) who is specifically "able to complete 34 moans by the time i've filled half the tank." And yet, the subsequent shift to an unspecified "you" and a mode of direct address—"you will merely be embarrassed even if you drive a hybrid. Please be embarrassed. Please."—motivates for the reader to imagine herself as at least *a* moaner, if not *the* moaner.

The reader's sense of involvement is further motivated by the text's prompting of neural simulations beyond semantics and affect. Detailed description of the process of moaning prompts the reader to imagine that bodily action, simulated by activation of the motor-control neural circuitry embedded in the Moaning frame.[18]

> Pulling up, beginning a low moaning action, pulling a deep choral moan with cracks up through the body, the crude through the cracks of sea & earth, pulling neurotransmitters glutamate, acetylcholine, & others across chasms in the nervous system, into the larynx until the sound acts by itself.

The integration of this description with imagery of crude oil extraction/leakage, and with neural processes, provides another compressed, concrete figure for the poet's and readers' complicity; to have a body is to be a participant in this upwelling, overwhelming tragedy. Absorptive involvement is also motivated through the sonic dimension. Descriptions of sounds ("we shred the song," "you can hear a bird"), imitative sound-play ("meaning morning moaning mourning"), and typographical representation ("***eeeoooiieeooooouuuuu***") prompt the reader's auditory system to simulate diegetic sounds along with the language of the poem's discourse. Evocations of nonhuman vocalizations ("a screech-covered pelican," "Squeak, there are other animals inside the pump") concretize the semantic framing of the moan as "choral." These pan-mammalian forms of bodily and affective expression implicitly contrast with the specifically human forms of numerical calculation ("13 million tons of liquid in nonleakable plastic **5** miles up the road—their 5 has a leak in it") and semantic reframing ("The broadcaster says the blobs 'look like peanut butter,' wanting to sound lovable so we can begin to feel friendly about them."). The poem thus affords an experience of listening to and harmonizing with, rather than speaking for or being silent about, the suffering of other animals: "this moan won't be the same mammal but is a democracy with no false knowledge."

At the same time that the poem prompts readers to imagine participation in the mourning animal community, the poem guides readers into recognition of their human guilt in ways that aim to work around the cognitive-affective problem of "the blamelessness of unintentional action."[19] In combination with the grammar of request ("Please be embarrassed. Please."), the evocation of the Embarrassment frame softens the blow of this implicit accusation. While Embarrassment overlaps with the negative affective components of Moaning, Sadness, and Distress, its prototypical semantic structure is of unintentional responsibility for a negatively-judged event, with the patient of the emotion being the agent of its cause. Rather than casting blame, which can provoke the "guilty bias" that marshals defensive reasoning and self-justification, the poem thus acknowledges readers' lack of intention to cause harm, meeting them where they are, in the midst of a systemic problem they can't hope to adequately redress.[20] And yet, by integrating the harms of oil spill imagery into the Gas Pump frame, and evoking an affective frame that entails responsibility despite a lack of intent, the poem works to out-maneuver self-defensiveness, provoking the reader to recognize their participation in the systemic problem, as well as to participate in its lament.

Modeling an acknowledgment of complicity in the persona's re/action at the gas pump, the poem solicits the reader's participation in its mourning as well as its moaning. Beyond knowledge-association and grief-expression, Hillman's text does not identify further actions to be taken, other than to continue dwelling in melancholy—"you ask how to get over it […] probably you don't have to get over it—." In this way, it could be categorized as an instance of the "haunted desire to address and confess" that Margaret Ronda describes as ecopoetry's symptomatic expression of the "uncanny […] emergent senses of human causation that accompany the Anthropocene."[21] Yet the purpose of my analysis is to explain how, at the same time that it functions as an expressive and/or symptomatic act, the text can also have environmentalist and/or ecocritical affordances. These effects result from the fundamental neural processes involved in constituting an imaginative simulation of the poem's semantic and affective meaning. Even if the absorptive sense of participation is eschewed, it is still the reader's own affective circuits that are used to neurally simulate the pained feelings ascribed to the diegetic figure. This simulation of represented emotion strengthens connections between the reader's affective circuits and their frames for the poem's semantic content, associating negative feelings with pumping gas. This strengthening may result in the entrenchment of a memory available to recall, or it may result in only an incremental adjustment to synaptic weighting; in either case, the associations remain as structures of implicit memory, frame-to-frame connections that can function on their own in addition to as components of an episodic memory. While the degree to which particular associations are consolidated may correlate with the

memorability of the poem as a whole, a poem does not need to be memorized or remembered to have long-term influence.

I am thus arguing that, in addition to values afforded by the immediate reading experience, and in literary interpretation and discussion as reflective, constructive, and social activities, poems can serve readers as sites for practicing structures of thought and feeling that they may value for non-literary purposes. Neurocognitive analysis can help to ground speculation about the potential consequences of long-term effects. The affective associations motivated by "Moaning Action at the Gas Pump" can influence subsequent behavior through a variety of processes. The core affect of Pain (which was activated to varying degrees by various frames and emergent construals over the course of the poem) typically motivates avoidance behavior.[22] When integrated into the Gas Pump frame, this negative affect could *de*motivate future gas pumping—not necessarily to the point of overriding the goal of filling up one's car, but such that it could introduce a degree of felt dislike, ambivalence, and/or a sense of dissonance. These feelings, with the hesitation they may produce, may provoke reflective self-consciousness about the habitual act, and could contribute, consciously or unconsciously via the "affect heuristic," to the strengthening of dispositions to avoid pumping gas, say by using alternative modes of transportation or by buying more fuel-efficient vehicles.[23] Negative affects also tend to prompt a shift in cognitive processing to a mode of searching to identify the affectively-flagged problem and to formulate a solution.[24] Assisted by metonymic connections between the Pumping Gas and Oil Industry frames, these repeated experiences could contribute to motivations to attempt to decrease society's fossil fuel production and use—perhaps by personal activism, by voting or donation decisions, or by getting involved in the electric car or renewable energy industries.[25]

In addition to motivating antipathy, the poem can also enhance readers' sense of communal sympathy with other mourners, and with nonhuman beings, as a persevering coalition. The emotional behavior of Distress (including its component Moaning) functions in part to solicit help from care-givers and community members, and so the activation of the Distress frame metonymically evokes the Comforting frame as a prototypical response. The Grief and Mourning frames, as elaborations of Distress, likewise entail such a possibility.[26] Furthermore, Grief and Mourning prototypically feature a cared-for community member as the Loss causing the component Sadness. By integrating a pelican, manatee, and grasses into these frames, the poem cultivates an extension of the reader's in-group identification, from (more or less well-known) Humans, to Animals and Plants. (The parallel between the human moans and the animals' "screech" and "squeak" may further motivate a sense of cross-species empathy.) At the same time, the poem also prompts an out-group mapping of certain segments of society: "the other drivers [who] are staring" from their false knowledge, the corporations of the fossil-fuel industry entailed by the Oil Spill frame, and governments that historically may have "outlawed open wailing because it was not good for democracy" but have not so stringently regulated cultural activities that are not good for ecology.[27] This mapping of affinities may afford both a sense of consolation in community, adding some cathartic positivity to the negative affects of the ongoing tragedy, and a sense of solidarity in injustice that could reinforce pro-environmental dispositions.

Finally, the poem also prompts mapping from the particulars of current problems to values beyond the nexus of practical transportation needs, their unintended consequences, and impractical mourning. The catalogue of mythic tragedies in the poem's last sentence affords comparisons with past religious, environmental, political, and social conflicts, situating the present in a long history of human struggle and suffering. The specific myths included allusively resonate with a constellation of environmentalist concerns: about alienation from nature and the consequences of resource exploitation ("Gilgamesh & Enkidu"), on behalf of future generations of self-destructive empire ("Hecuba & her kids"), about denial of knowledge about the future ("Cassandra who did not

drive"), and for one's moral obligation to fellow beings over the law of the state ("Antigone who could barely life the body to bury it"). As a whole, the poem activates, and so reinforces, frames connected to the neurocognitive network for "intrinsic values" such as benevolence and sympathy with the natural community, which tend to motivate pro-environmental action.[28] While it refers to a practical act of resource consumption, the text avoids explicitly evoking "extrinsic values" like wealth and social power, excluding economic and means-end reasoning from its imagining of pumping gas, and potentially shifting one's mapping of the in-group that is the focus of one's values of conformity and security.[29] These broader associative connections motivate further elaboration of the poem's absorptive content in interpretive reflection, while the values evoked as components of these external frames may function as active criteria for affective and reasoned assessment of the poem's network of problems.

In addition to compressing systemic cause-effect relations between fossil fuel use and vivid images of environmental harms into the Gas Pump frame, the text thus also prompts relation of its moaning / mourning action to problems beyond oil spills, with absorptive reading leading to further critical thinking through recruitment of additional background knowledge. The neural activation involved in this reflective activity strengthens the metonymic connections and weighted associations involved, so that the act of interpretation extends the effects more directly motivated by the text. Again, even without the particular event of interpretation being remembered, these effects can inform and influence how readers understand and react to situations. In another poem, Hillman points to the poetic affordance of a capacity to appreciate viewpoints beyond one's immediate experience, and the value of practice in creative thinking for the sake of ethically navigating the world: "[Poetry] makes extra helpful nerves between realities. … Use your imagination, my mother used to say, meaning, you don't have to use it, you are in it."[30]

Understanding Systemic Causation through Snyder's "Burning the Small Dead"

You are in your imagination, experiencing the world as mediated and constructed by your neurocognitive structure. Modifying the structure for a particular type of event—by reading Hillman's poem about pumping gas, for example—can influence behavior in future events of that type, such that poetic imagining can serve as practice for action, in addition to affording non-pragmatic aesthetic values. Besides constituting dispositions regarding specific actions, neurocognitive structure also represents a set of resources available for flexible use in variable contexts. Beyond serving as a vector for specific pro-environmental dispositions, I propose that ecopoetry can be pragmatically valuable by developing abilities to grapple with ecological complexity by building up readers' cognitive frames for systemic causation. Once entrenched, the cognitive resources of Systemic Causation frames can be deployed in a wide range of future contexts, supporting ecological forms of reasoning that work through, rather than simplify, the complex interactions between cultural activities and natural processes.

Systemic thinking does not come naturally to us, because we do not learn Systemic Causation frames from our everyday physical experiences of acting and being acted upon.[31] From early in infancy we learn a Direct Causation frame, derived from experiences manipulating objects, that constitutes an understanding of events as having a single primary cause and a single primary effect. This prototypical case is subsequently extended to form the subframes of the Direct Causation network.[32] Direct Causation frames suffice for most activities, and so are fully entrenched both as abstract cognitive resources and as components structuring frames for basic events and actions. In order to learn to think systemically, instances of the Direct Causation frame must be integrated together, built up into a construal of causal complexities. By being repeatedly re-built, the sets of causal relations in these complexes can become entrenched as their own frames. The new

frames, already connected together because built from shared components, constitute subframes of a Systemic Causation network. These Systemic Causation subframes include: sequences of direct cause-and-effect relations; cyclic structures of such causal chains, including positive and negative feedback loops; special conditions such as catalysts, inflection points, and irregular ratios between degree of cause and degree of effect; networks of multiple causes and multiple effects; and probabilistic causation, in which systemic causes affect probability distributions of events and their effects, causally contributing to a specific event and the degree of its effects without wholly determining whether that event would otherwise have happened or not.[33] When Systemic Causation frames are built, whether through scientific narration or poetic figuration of systemic processes, initially they are integrated with the specific processes being represented. But as the same composite structures are assembled for various cases, they become entrenched as a set of abstract cognitive resources, retaining connections to the contexts in which they were initially learned while also being available for new associations.[34]

It should be noted, however, that the development of Systemic Causation frames does not *replace* the Direct Causation network; rather, the simpler forms of thinking continue to be used regularly, as they are already integrated with, reinforced by, and remain sufficient for, most day-to-day experiences and behavior. Even individuals with entrenched Systemic Causation frames may only evoke and use them in response to particular cues, upon encountering a problem that is not solved by the initial recourse to Direct Causation frames, or by intentionally shifting to a scientific, ecological, or systemic framework. Nonetheless, as with other forms of entrenchment and skill-learning, repeated activation strengthens the neural connections involved in the Systemic Causation frames, and they can become as easily-evoked as Direct Causation frames, despite their greater structural complexity. The more one practices thinking systemically, the more habitual it becomes. Furthermore, the more one practices thinking systemically about this or that particular topic, and/or a network of related topics, the more the Systemic Causation frames will neurally knit together with those topics' frames.

The factors just detailed are consonant with the cognitive challenges of environmental problems described earlier. No only can ecological poems represent and/or reiterate ecology, they feature additional means of affording practice in ecosystemic reasoning. Whereas scientific prose typically constructs an understanding of systemic relationships over the course of many sentences, paragraphs, and pages, poems can use figurative and formal structures to trigger rapid integration of multiple frames into a single systemic construal. Poems also often display greater topical promiscuity and, as discussed above, more human-scale imagery of everyday situations than scientific discourse, integrating theoretical understanding of a range of aspects of the systemic world with one's lived surroundings and actions. Ecological poetry can thus integrate Systemic Causation frames as the webbing between many domains of life and imagination, knitting one's neural networks of natural and cultural knowledges together in an ecological consciousness that can inform practice as well as theory.

Let me illustrate this potential for the cultivation of broadly applicable cognitive resources through analysis of the semantic structures evoked by Gary Snyder's "Burning the Small Dead."[35] The poem has been appreciated as an example of ecological imagination. While its imagery evokes a diegetic scene in the back country, the text's mode of haiku-like, paratactic juxtaposition requires the reader to construct an understanding of the referents' implied relations in her own mind. Robert Kern describes:

> We are given not a completed thought, certainly, and perhaps not even a complete representation of Denise Levertov's "process of thinking / feeling, feeling / thinking," but the ingredients, the basic elements of such a process. Only the syntax is missing, and the

> poem implies that it is available, in a different form, outside the poem—in the actual relations of things. The poem, finally, is about that syntax, a celebration of that external system of relations, though it cannot embody it in its own verbal medium.[36]

From initially describing a campfire, the poem moves to an associative thought of the "hundred summers / snowmelt rock and air" that produced "the small dead / branches" being burned, then identifies the surrounding mountains, alluding to their formation in volcanic activity, and names two stars. The final phrase, "windy fire," can apply at once to the stars and the campfire, and so collapses the poem's expansion from human to cosmic scales into a single image. The projective tracing of natural processes is reframed by this image as a Zen insight into transience, echoing the Buddha's Fire Sermon, 'Everything is burning.'

I want to extend upon this consensus interpretation by analyzing along three dimensions. Through analysis of the poem's content in terms of cognitive frames rather than diegetic referents, I will clarify the complexity of the meaning that the poem evokes, and reveal how its juxtapositions are linked at a deeper semantic level. I will also analyze the complex system of relations in the poem's verbal medium, to demonstrate how this formal weaving-together reinforces the semantic network's layering. Finally, through analysis of the long-term effects of these integrations on readers' neurocognitive structure, I will argue that, in addition to affording a transient vision of ecological processes, the poem also motivates the entrenchment of Systemic Causation frames "in the back country of the mind."[37] While "Burning the Small Dead" may strengthen connections between readers' frames for transience, life, energy, and emptiness, on the one hand, and their frames for campfires, pine trees, mountains, and stars, on the other, generalizations that 'Everything is process' and 'Everything is connected' only entail that one's actions have consequences—they do not enable one to think through the actual complex processes and interconnections one faces in order to assess the systemic effects of one's actions. In addition to an environmentalist sensibility and holistic worldview, an "ecological consciousness" worthy of the term requires cognitive resources for systemic reasoning. By analyzing the semantic structures and causal relations evoked and integrated in the course of understanding Snyder's poem, I mean to praise the full complexity of the poetic experience, against its flattening into interpretations dominated by the framing of the final "windy fire" or its allusion to Buddhist or holistic generalizations.

The poem's semantic movement, when tracked from the viewpoint of the diegetic scene, would appear to be grounded in shifts of the speaker's attention among present objects, including thoughts ("a hundred summers…," "…twice as old") that arise in response to those objects. However, the poem's coherence is not simply a matter of the referents' belonging to the same landscape, but involves integration of the knowledge contained within their frames. This layering is grounded in semantic overlap among the natural processes evoked—specifically, the schematic frame of Heat-Transformation, which is a component of the superordinate Burning, Metabolism, Volcanism, and Nuclear Fusion frames, which are themselves components of the basic-level Campfire, Tree, Mountain, and Star frames. As the text's references evoke those frames with each new object, activation flows into the knowledge-components embedded within them, converging on the shared Heat-Transformation frame. The schematic Heat-Transformation frame thus connects the imagery together in a kind of conceptually-rhyming relation, at a deep semantic level distinct from the metonymic contiguity of the landscape. As neural activation spreads from the explicitly-evoked components to other components, extended knowledge can be mapped between the frames; the multi-component causal processes of Burning, Metabolism, Volcanism, and Fusion thus integrate together into a highly complex causal system, the core structures of which I have diagrammed in figures 1 and 2.[38] Entrenchment of these connections can then function as a memory of the meaning of the poem, as a semantic frame constituting knowledge of the integrated system of

these particular natural processes, and as a source for abstract Systemic Causation subframes. The poem thereby affords development of cognitive resources that can serve future ecological reasoning, even without its example being explicitly recalled.

Compared to a scientific explanation of these systemic processes, which would take many sentences, paragraphs, and pages, the text's poetic techniques motivate 'tighter' integration of the frames, which hypothetically strengthens consolidation of their connections and of the ability to 'hold' the full system in mind as a single complex construal.[39] The poem's formal structures help to guide and motivate associations between the processes by both segmenting and interconnecting the specific images/frames. That is, beyond the aesthetic values of poetic shaping, texture, and musicality, formal structure here functions to reinforce the process of step-by-step integrative layering. The Burning frame (a prototypical case of Heat-Transformation) serves as a surface-level thematic refrain that opens and closes the poem's first half (and is later reprised in the final closure of "windy fire").

Burning the small dead
branches
broke from beneath
thick spreading
whitebark pine.

a hundred summers
snowmelt rock and air

hiss in a twisted bough.

This thematic envelope structure aligns with the poem's phonemic patterning. The *b-r-n* cluster branches thickly from "Burning" through "broke from beneath" to "whitebark pine," bracketing the internal rhyme of "dead" and "spreading," and giving a sense of tight coherence to the opening stanza. The second stanza's shift of viewpoint from the present fire to the past century is marked with a shift in sound to the two stressed-*u*-trochees of "hundred summers" (distantly echoing the first stanza's opening stressed-*u*-trochee "Burning"), while *n*, *r*, *s*, *o*, and *c*/*k* loosely continue earlier threads, as the tree image is elaborated through evocation of its metabolic inputs. Line 8 then tightly weaves the Tree/Metabolism frame of line 7 back into the Campfire/Burning frame, bringing their integration into focus, as the vowel-envelope of "snowmelt"/"bough" bookends "hiss in a twisted" and its chiastic, iconic hissing and twisting condensation of *s, n,* short *i*, and *t*.

This formal iconicity is paralleled by a semantic chiasmus-turned-envelope in the figuration of the "hundred summers snowmelt rock and air" as "in" the fuel/fire in line 8. This preposition evokes the Container frame, using a static spatial relation to integrate the dynamic temporal process of Metabolism into the Campfire frame. But in contrast to the Container-compression in "Moaning Action at the Gas Pump," which left out the chain of processes linking the figuratively unified cause and effect, here the systemic relations have already been evoked by naming the multiple inputs of "snowmelt rock and air" and the temporal scale of the "hundred summers." The white space in these lines also motivates evocation of the full system by affording extra processing time, in which spreading activation can recruit background knowledge to produce inferences in the paratactic absence of grammatical guidance as to the referents' relations.

Thus, whereas Hillman's figuration of the gas pump linked its image to other images and negative affective frames, compressing causal relations to transfer evaluative judgment from distant effects to proximate causes, here the image of the fire is invested with the complex knowledge of the

system of causal processes from which it derives. The apprehension of that complexity may evoke the affective frame for Awe—especially as Awe is often a response to telescopic shifts in scale, as in the shift from the present campfire to the tree's century of metabolism and back again.[40] Beside this Awe, the Campfire and Pine Tree frames will evoke affective associations based on the reader's personal experiences. Provided that these latter feelings do not overwhelm the positive valence that may be entailed by Awe, its association with the poem's semantic frames could contribute to a desire to go hiking or camping; through metonymic connections between the human scale Campfire and Tree frames and superordinate frames such as Mountains, Wilderness, and Nature, this association could more broadly have an effect of increasing one's disposition to value the back country and 'nature' more generally, potentially motivating conservationist activism as well as, more modestly, outdoor recreation.

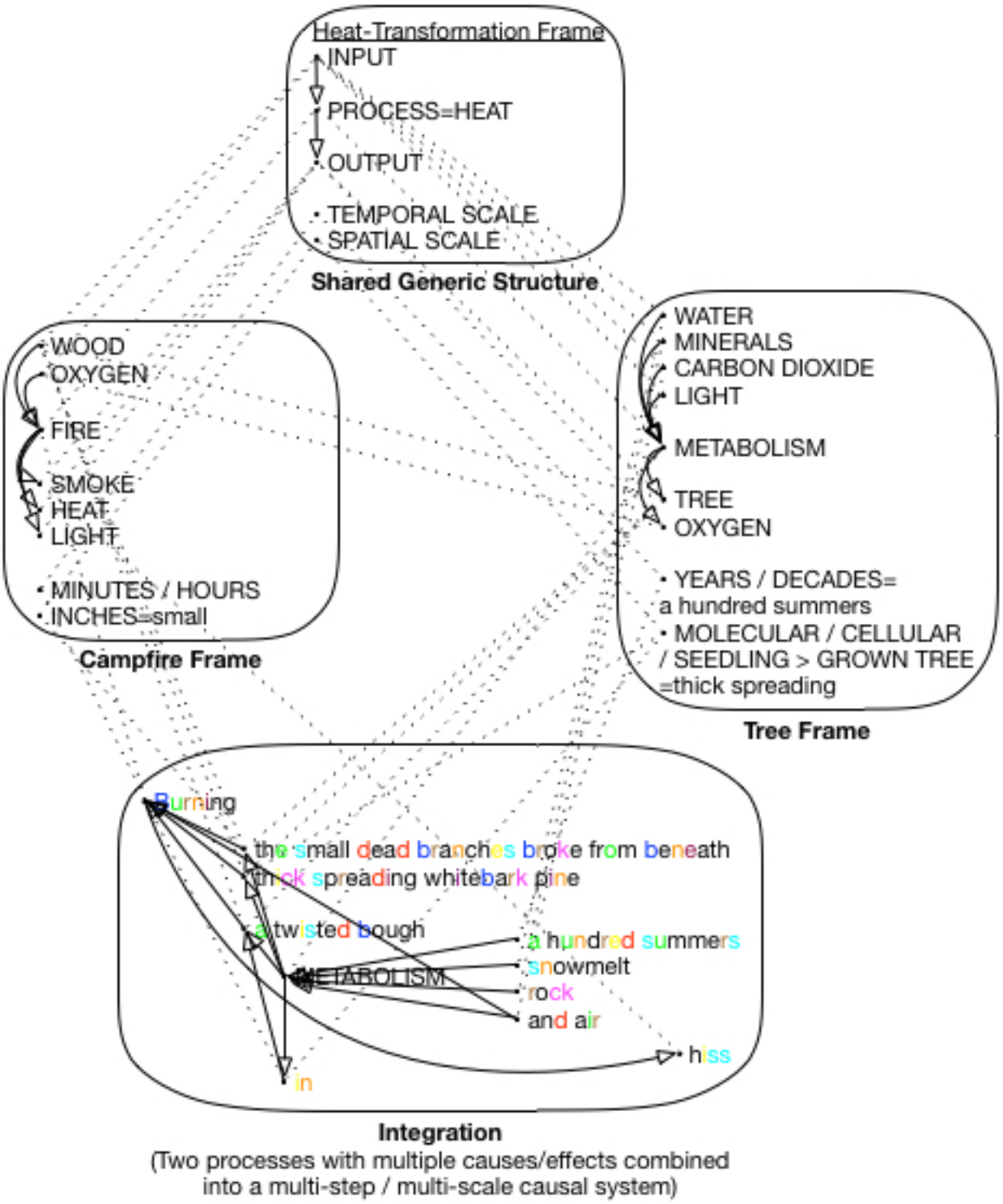

Figure 2.1 An integration diagram of the core semantic structure for lines 1-8 of "Burning the Small Dead." Solid-lines with arrows represent causal relations; dotted lines represent mappings between the generic frame, the two input frames, and the integration; colors highlight phonemic interconnections.

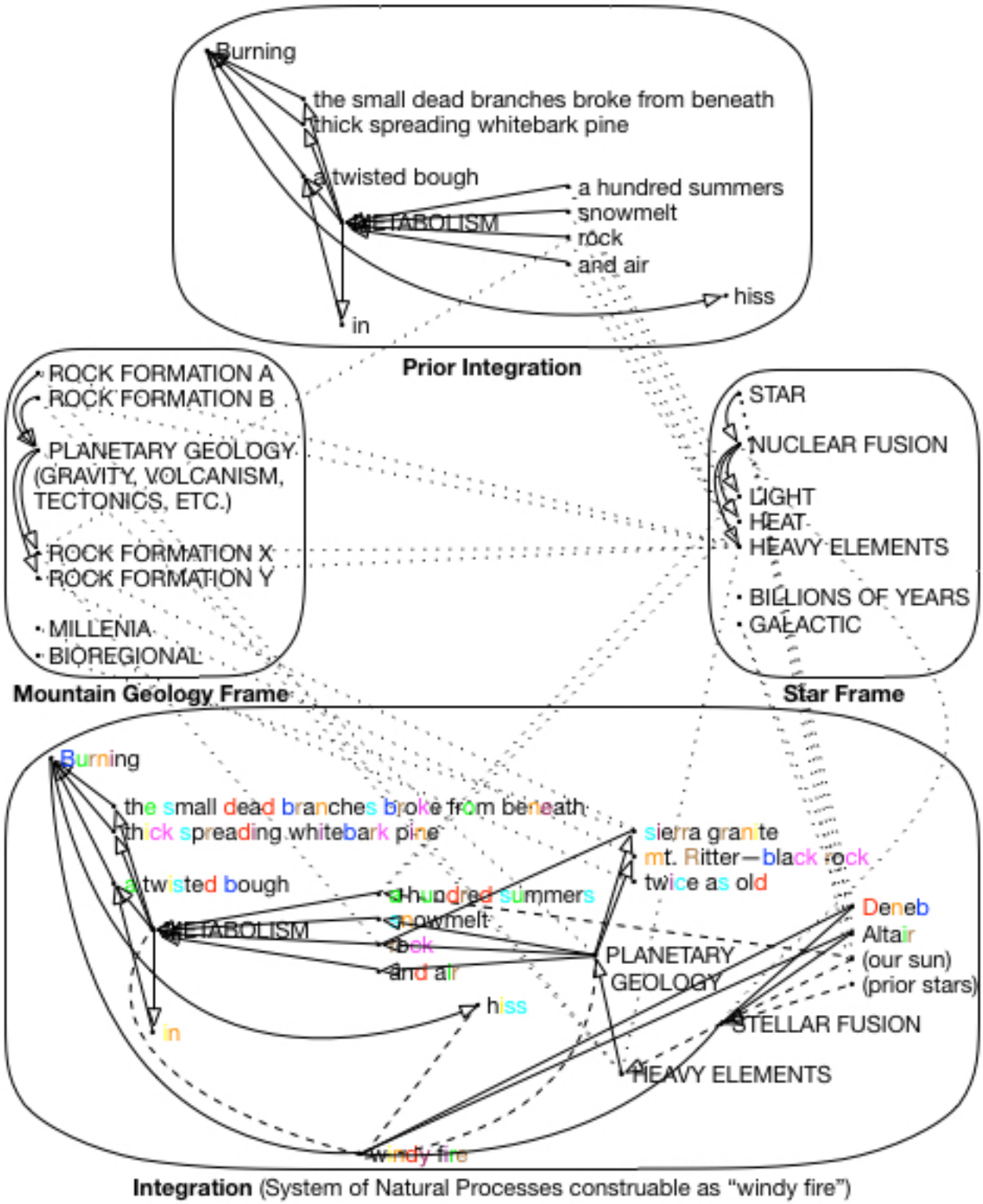

Figure 2.2 An integration diagram showing the additional semantic structure evoked by lines 9-13 of "Burning the Small Dead." Solid lines (without arrows) represent identifications within the integration based upon the Burning frame (shared by the Campfire and Star frames); dashed lines represent further inferred/interpretive identifications based upon the Heat-Transformation frame.

The second half of the poem re-deploys these procedures.

sierra granite:
mt. Ritter —
black rock twice as old.

Deneb, Altair

windy fire

"Sierra granite" re-activates the Rock frame, now the substance of the Mountain frame as well as an input to the tree's Metabolism, and increases the spatial scale, as "a hundred summers" had the temporal scale. "Mt. Ritter — / black rock twice as old" then explicitly invokes temporal contrast again. By referring to the differences in their age and composition, the poem prompts construal of the static massifs as products of extended processes; the already-active Heat-Transformation frame helps evoke the Volcanism process, which helps evoke whatever other elements of the Mountain Geology frame are entrenched in a reader's background knowledge. In parallel with the deep semantic repetitions and the contiguity of the diegetic landscape, sonic repetitions (of *r*, *n*, short *i*, *t*, and *ck*) maintain a formal layer of interconnections with the preceding passages. The *b* and *d* that bookend line 11, linking the Mountain Geology frame back to the Burning and Tree language of the first stanza, reverse and enclose *n* in "Deneb," while *t* and *r* carry forward in "Altair." However, the most salient effect of line 12 is its echo of "air" at the end of line 7, forming a rhyme between the poem's two halves' penultimate positions, both of which give way to closural integration with the refrain of the Burning frame. For those readers who recognize the names, Deneb and Altair also constitute another zoom outward, evoking the Star frame and its component Heat-Transformation process of Nuclear Fusion. The repeated expansions in scale may once again evoke Awe, and perhaps also the frame for Sublimity, which combines Awe's semantic-affective cascade with additional semantic components such as Infinite Scale (evoked by the distance and age of the stars) and/or Incomprehensibility (which might even be evoked by the complexity of the system being represented).[41]

At this point, readers with the relevant scientific knowledge can imagine the full causal system that connects stars to campfires: it was nuclear fusion in since burned-out and exploded stars that produced the heavy elements that compose the Earth's mountains and precipitation and atmosphere, which furnished the ground, minerals, water (melted by the light and heat produced by the nuclear fusion of our sun), and carbon dioxide for the tree (using sunlight for photosynthesis) to grow and produce the stored energy that is released in the campfire's light, heat and smoke. Shifting from nomination to description, the final line's "windy fire" registers as a gloss, applicable not only to Deneb and Altair, but also to each of the previous frames that has been evoked, and to the system of natural processes as a whole. Semantically rhyming, via the Heat-Transformation frame, with the entire poem, this closure affords a feeling of satisfaction and harmony, perhaps even an aesthetic frisson.[42] Indeed, the pattern-completion is formal as well as semantic: "windy fire" is not only an off-rhyme with "air"/"Altair," but a combination of phonemes from significant structural positions throughout the poem, condensing together the *w* and long *i* of "whitebark pine," the *er* of "summers," line 8's "in," and the unstressed long *e* of "Burning," "spreading," and "sierra." I hypothesize that, in addition to its iconic function reinforcing semantic integration, this re-sounding serves to motivate re-activation of the preceding frames through the parallel channel of their auditory interconnections. In this way, it works to try to keep the full set of Systemic Causation

relations active, against the tendency for the cognitively-taxing complexity to decompose and/or compress into nothing more than the summary "windy fire."[43]

Even if the poem's full semantic complexity is not always 'held' actively in mind, the final image can serve as an anchoring human-scale image that is easily consolidated into explicit memory and from which the rest of the connections can be re-activated to re-compose the integration. And yet, though "fire" reprises the Burning and Heat-Transformation frames that are the semantic backbone of the integration, the adjective "windy" prompts a modification of what has come before. Whereas the poem previously attended to determinate material inputs and outputs, the Wind frame motivates re-construal of those substances as Insubstantial and Transient. The Transient Natural Process frame that is thereby evoked is also motivated by knowledge of Snyder's writings more broadly, and/or of his biography, including his Zen Buddhism and anthropological interests. (Nonetheless, it is worth noting that the reader does not *need* such contextual knowledge, or to recognize the allusion to the Buddha's Fire Sermon, in order to make the prompted semantic revision.) This inversion makes the final line register as a novel insight, the expansive gravity of the object-filled universe turned suddenly empty and weightless.[44]

This final (re)construal can be aesthetically stimulating, may be therapeutic in affording reappraisal of negative concerns, and could have pro-environmental influence by contributing to a sensibility of detachment.[45] By negating the particulars of the previously-evoked processes, "windy fire" might also motivate for the previously-assembled causal relations to be consolidated as an abstract set of Systemic Causation frames rather than as this specific system of natural processes, possibly making the poem more efficient at developing those frames as abstract cognitive resources. At the same time, the combination of this negation of earlier content with the image's summarizing position makes it easy for the full semantic complexity of the poem to wind up flattened into a generalization that 'Everything is process."[46] From the perspective of environmentalist politics, to take such a flattened framing as a worldview risks eliding personal and collective agency and responsibility, equating anthropogenic disturbances with nonhuman scales of impermanence, or finding satisfaction in a sense of oneness with the world while it burns.[47] While everything is indeed connected, different things are differently connected to particular inputs and outputs. As Dana Phillips has argued in his criticism of first-wave ecocriticism and of nature writing, the platitudes of pop ecology do little to help with systemic thinking about specific problems.[48] Knowledge of natural processes, such as the carbon cycle and water cycle alluded to in "Burning the Small Dead," is valuable for judgment.[49] In the interest of these values, I prefer to emphasize the ecological complexity represented by the poem, in an attempt to entrench the full integration's connection to the image of "windy fire," so that I can toggle between absorption in consolation and the thinking of the system.

Those qualifications aside, shifting viewpoint from the complex Heat-Transformation system to the more generic Transient Natural Process frame does offer the advantage of affording further extensions of the already-built integration. The paratactic minimalism of the sequence of names—"sierra," "mt. Ritter," "Deneb, Altair"—can evoke not only their referents, but also one's knowledge about the languages and/or cultures that produced them.[50] These contexts—of Spanish colonization of California followed by English-speaking American governance, and of the continuing circulation of Arabic star-names from astronomical texts of the Islamic Golden Age in their Latin translations through to the current dominance of Western taxonomies in global scientific discourse—can then also be integrated into the Transient Natural Process frame, construing human history as another "windy fire." In addition to its integration of systemic processes at atomic, geological, biological, and chemical scales, the poem thus also frames cultural histories of naming, science, colonialism, and imperialism as processes of ecological succession, where the structure of an

ecosystem changes over time, depending upon local and transplanted inputs, and forming a temporary stability that will eventually exhaust itself and yield to subsequent transformations.

This extension of the Transient Natural Process frame to integrate cultural forms also loops back around to the elliptically broken-off title and to the implicit figure of the poet. Paige Tovey points out how the ambiguity of "Dead" without "branches" may bring to mind the genre of elegy (its topic of Life/Death being a Transient Natural Process) as well as cultural practices of cremation (a Heat-Transformation), setting up a tone of solemnity and gravity and a potential reaction of surprise upon the specification that the titular dead are not humans but branches. Mapping the text to one's Elegy frame, and the branches to the human community, by recruiting knowledge about the genre and funeral rites, yields interpretation of the poem as "celebrat[ing] the life and death of the whitebark pine" as a cared-for contributor to the shared natural-cultural lifeworld.[51] The poet himself can then be integrated as the Celebrator/Mourner, expressing Care in the production of this Elegy. After all, the verbs "Burning" and "broke" in the opening stanza, with their entailments of an agent, motivate for the reader to evoke the Human frame as an unrepresented element of the diegetic scene. Inclusion of the Human in the integration affords elaboration of the full causal relations connecting the Natural Transient Process system and the poet/firestarter: the Human is an input to the fire, building and lighting it; the fire is an input to the Human, providing light and warmth, and perhaps affording the Heat-Transformation of cooking the input of food; and all the objects are inputs to the Human's perception, processed in the poet's Mind, producing the output of the Poem.[52] To the extent that these additional semantic components are activated and integrated with the rest of the construal, the text motivates an interweaving of frames connected to both the Nature frame network and the Culture frame network, with Systemic Causation frames as the interface between them.

But my larger point is that the system doesn't end with the poet's writing of the poem. The text circulates in the world, an input for readers, who produce imaginative experiences from it. While these imaginative experiences are transient, they also have effects on readers' neurocognitive systems, effects that have systemic causal influence on readers' future thoughts, feelings, and actions. Readers' behaviors influence the neurocognitive systems and behaviors of other humans, both through direct interactions and through the media of culture. The behaviors of individual humans and their cultures also affect nonhuman natural systems, and nonhuman natural systems affect their human dependents. And so systemic causation continues. Ecological poems contribute to these processes, through techniques that can redress the cognitive-affective difficulties of environmental problems; reading and interpreting them can modify our structures of thought and feeling in ways that may dispose us to, and constitute resources for, navigating the natural-cultural ecosystems of the twenty-first century with enhanced ecological consciousness.

Navigating the Dynamics of Risk in Roberson's "To See the Earth Before the End of the World"

The previous poems have all featured a central, human-scale scene that is imaginatively extended outward into ecological/systemic contexts beyond immediate perception. As a final example, I want to look at a poem by Ed Roberson that marshals disparate images as concrete metaphors for the systemic relations of the present to a future in which humans (along with many other species) will have gone extinct, as well as to the "deep time" of our evolutionary history. Where Hillman's poem motivates re/action, Roberson's poem works through reflective framings to motivate motivation itself. By evoking the evaluative frames of Risk, Loss, Gain, and Responsibility, the poem cultivates a sense of urgency regarding the imminent effects of our cultural practices, even as it construes those practices as natural behaviors.

Multiple ecocritics have recently begun to theorize our contemporary situation as a "world risk society," in which no one is safe from the systemic effects of ecological disturbances (though degrees of risk, and access to mitigating resources, remain unevenly distributed).[53] German sociologist Ulrich Beck deployed the concept as a speculation as to how social structures would develop in postmodernity, arguing for a new cosmopolitanism, combining local and global forms of inhabitation based in the systemic dynamics of both shared and differentially distributed risks.[54] Ursula K. Heise, focusing on a selection of late twentieth-century American and German novels, proposes "that the study of risk perceptions and their sociocultural framing must form an integral part of an ecocritical understanding of culture."[55] She explains how accounts of environmental risks often follow the conventions of established genres (as we saw in Hillman's allusions to tragedy), and argues that apocalyptic narratives, as a subgenre of risk perceptions, often involve a pastoral ideal as the "countermodel to the toxic world. … Unlike biblical apocalypse, in other words, it assumes that the End of the World can in fact be prevented … and the destructive intensity of its scenarios is not so much an attempt at accurate prediction as an indicator of the urgency of its call for social change."[56] Evocations of Risk and its associated frames may thus serve rhetorical as well as representational functions, and so deserve analysis according to research on motivation.

Articulations of environmental risks have by no means been entirely successful in motivating cultural and political changes sufficient to avert them. Research on climate change communication has found that many people respond to fear of environmental risks in ways similar to guilt and other negative affects: they may engage in denial, wishful thinking, avoidance, compensatory behavior, or fatalism.[57] As I discussed above, with regard to rhetorical strategy of solicitation in "Moaning Action at the Gas Pump," a sense of personal (rather than distributed) responsibility is motivational, though evoking responsibility can backfire if it activates defensive reactions rather than a desire to be proactive. These problems appear to be exacerbated by uncertainty and/or a lack of understanding of how one's actions could mitigate the causes and/or effects—that is, due to hypocognition about the systemic causation of risks. Thus, redressing hypocognition and integrating systemic effects with basic-level actions, so that one has a sense of one's own agency, could help avoid alienation, and instead afford, as Frederick Buell proposes in *From Apocalypse to Way of Life*, "a way of dwelling actively within rather than accommodating oneself to environmental crisis."[58]

The dynamics of motivation can be better understood by recognizing the Risk frame as structured in terms of Gains and/or Losses that may or may not be framed as one's Responsibility. Experimental psychology research has found that, in "choices that involve moderate or high probabilities, people tend to be risk averse in the domain of gains and risk seeking in the domain of losses."[59] That is, when people have the chance at gaining something of value, they tend to prefer a the sure thing of a lesser gain to an unsure chance at a greater gain; however, when considering a loss, people tend to prefer an unsure chance of little or no loss, even if that means risking a big loss, rather than a sure loss. In a number of contexts, it has been found that "losses are weighted about twice as much as gains;" in cases of higher stakes, such as with regard to one's health rather than one's money, this "loss-aversion coefficient" becomes even greater. Such assessments also differ depending on whether a risk is the consequence of an intentional action, exposing one's self to the chance of loss, or an inaction, which is more likely to be construed as not one's fault.[60] These decisions have been found to correlate with affective associations, e.g. somatic marking, regarding the possible future outcomes: either way, a gain will be pleasurable, so better to go with the sure thing; however, a loss will be painful, so one chooses the risk as a chance at avoiding pain. The pain of regret is based on whether one's choice deviates from a norm, while the pain of responsibility is based on whether one actively rather than passively accepted increased risk in a "taboo tradeoff."[61] The decisions influenced by these motivations deviate, sometimes quite drastically, from those motivated by mathematical calculations of probabilities according to rational utility maximization.

Because of these entrenched dispositions, framing a situation as one of Gains, Losses, Risks, and/or Responsibility influences decision-making, such that poetic imagining that strengthens particular framings can thereby influence readers' behavior.

While representing systemic processes of global warming, Ed Roberson's poem "To See the Earth Before the End of the World" evokes the Gain, Loss, Risk, and Responsibility frames as ways of (re-)construing our relations to both particular behaviors and larger systems, integrated to cognitively and affectively map how our human nature got us into this mess, even as the poem ultimately suggests that conscious awareness of the delayed consequences of our instincts—the exact awareness the poem develops—might make it possible to break the cycle.[62] Evie Shockley describes Roberson's ecological poetics as representing the integration of ecological and cultural systems:

> Roberson's work dismisses the divide between human and nonhuman ecosystems outright, in at least two ways. First, his poetry keeps an eye trained on the politicization of "the natural." By this I mean two things: on one hand, the way the places we see (or don't) and being we encounter (or don't) are constructed in political terms and, on the other hand, the ways behaviors that have been shaped by custom, culture, expediency, and other politically informed motivations are deemed "natural." Second, his poetry calls attention repeatedly to the ways in which our species is subject to the same "natural laws" as all other beings on the planet. … His political poems typically *are* nature poems (an vice versa), just as human society is a *part* of nature, rather than adjacent to it.[63]

Complexity occurs not only in the systems Roberson's work addresses, but in the syntactical multiplicity and formal arrangements of his texts. Roberson's style is part of what, for Shockley, "differentiates him from those 'ecopoets' whose writing tend to focus their political critique on 'human intervention in and instrumentalization of nature'":

> Roberson uses poetic techniques that frustrate oversimplified analyses of the operation of social and environmental systems, encouraging more nuanced understandings of our relationships with the world around us. His techniques include syntactic stammering and disruption and torrentially unpunctuated phrasing—all of which, paradoxically, require us to read and reread slowly, to consider multiple possible interpretations of lines and phrases. Roberson's poetics enable him to construct complex relationships among human and nonhuman natural entities that are not merely metaphorical.[64]

Such systemic relationships are evoked not only by diction that is at once literal and metaphoric, but by syntactical fragmentation and formal arrangements which afford multiple construals of words and phrases via their recombinations with each other, as well as shifts in viewpoint among the many active frames. That is, particular phrases and images prompt not only construal from the blend space, but can also be considered according to each input frame (i.e. the tenor on its own or vehicle on its own), so that the reader's understanding dynamically foregrounds and backgrounds various parts and wholes. Roberson's ecological poetics thus afford practice in a multi-perspectival negative capability, attending to natural or cultural systems 'on their own,' at the same time that they deconstruct the nature/culture binary, integrating humans within the singular system of nature-culture.

In "To See the Earth Before the End of the World," the frames evoked and integrated include not only natural and cultural images and activities that are metonymies for larger processes, but also evaluative frames that move from the inevitable apocalypse of a system where gains amplify losses, to the possibility of a dwelling in risk informed by both expanded ecological understanding

and the responsibility afforded by conscious choice. Heise describes the general difference between the apocalyptic and risk perspectives as having to do with temporality and agency:

> apocalyptic scenarios differ from risk scenarios in the way they construe the relation between present, future, and crisis. In the apocalyptic perspective, utter destruction lies ahead but can be averted and replaced by an alternative future society; in the risk perspective, crises are already underway all around, and while their consequences can be mitigated, a future without their impact has become impossible to envision.[65]

In Roberson's poem, these alternative scenarios are related to the difference between "the world" of human culture and "the earth" as human-and-nonhuman nature.[66] The poem opens by juxtaposing the human Gain of experiencing natural wonders with the limit of those Gains in the future Loss of culture: "People are grabbing at the chance to see / the earth before the end of the world." This collective human Loss is then differentiated into a contrast between the scales of individual human lives, on the one hand, and of the components and processes of ecosystems, on the other—"the world's death piece by piece each longer than we"—suggesting complex syncopations as well as overlapping spans.

After this evocation of systemic relations in the abstract, the poem moves to various concrete figures. constructing representations of causal dynamics that are far more complex than the "scalar" dimensions that Lynn Keller addresses in her discussion.[67] Performing poetically what is happening climactically, metaphors of human transportation technology evoke the Direct Causation frame for the physics of inertia in order to compress the extended temporality and lag effects of greenhouse gas emissions (which power and are transported by the vehicles that are the metaphors' source domains) into figures that are easy to imagine and that carry affectively-fraught implications.[68]

> Some endings of the world overlap our lived
> time, skidding for generations
> to the crash scene of species extinction
> the five minutes it takes for the plane to fall,
> the mile ago it takes to stop the train,
> the small bay to coast the liner into the ground,

On the one hand, these source domain crash scenes foreground a sense of catastrophe which transfers to the target domain as apocalyptic "extinction." On the other hand, these "endings" can be ambiguous, interpretable as rough landings rather than a "crash" where the loss is total. Indeed, the present-tense verbs focus on the "skidding … it takes," so that the "crash scene" is a prospective future, while the retrospective "ago" correlates with the sense of inertia in these movements already begun, including the force of gravity implicit in the Fall frame. Inferential entailments and verbal aspect thus combine to figure a sense of risk which has already begun, but which might yet be mitigated, in the possibility of coasting to ground rather than crashing.[69] In recognition of the affordance of this alternative construal, I interpret the poem as holding out the possibility that "the end of the world" for humans as a collective might be delayed and/or avoided, though its figuration of systemic causation as inertia knowingly excludes the fantasy of a return to ecological 'balance' without some lagging deterioration.

The completion, after the stanza break, of the examples of "endings" again uses alternative construals to motivate recognition of the distinction between the perspectives of anthropocentric apocalypse and ecological risk in regarding particular events. The legal/national figure, "the line of

title to a nation," blends the preceding trajectories of motion with a duration of exploitation—"until the land dies, / the continent uninhabitable"—a complete loss. However, the gap between "land," which does not die, and the flora and fauna it metonymically represents, prompts reflection. One may expect that at least some nonhuman life will manage to make a habitat, even in landscapes disturbed by human hubris, such that one's viewpoint shifts out of the cultural frame of Entitlement to the frame of natural Inhabitation, from which ecocentric perspective "uninhabitable" is understood as really just about loss of a human nation.[70] One may also notice that the images of imminent crashes of a plane, train, or ship (perhaps the *Exxon Valdez* or *Cosco Busan*) were also centered on humans in the role of affected travelers, such that one realizes how the Risk frame prioritizes human gains and losses, concerned with our homeworld as 'spaceship Earth,' rather than hazards for other inhabitants of the earth. This highlighting of humans' perspective as a default is then foregrounded in the references to media reporting and human perception, according to which what was "speed made invisible" become visible at the scale of "days … a subtle collapse of time between large // and our small human extinction," the stanza break further emphasizing the distinction.

While the collective "our" is used here, the smallness embedded in a larger span implies the existential singularity of one's own life. The evocation of self is then followed by the poem's one use of self-reference: "If I have a table / at this event, mine bears an ice sculpture." This "ice sculpture" recalls the previously-invoked glaciers—the cultural meaning of which has in recent decades transformed from icons of beyond-human-scale natural processes to indexical harbingers of human-caused environmental catastrophe.[71] As a kind of synecdoche for the glaciers, which are themselves indicative of global warming, the "ice sculpture" can also be mapped to the poem itself as a representation of that process, a figurative canary Roberson is holding out to us in the coal mine.[72] The identification of the sculpture with the poem is also motivated by their both being crafted productions for aesthetic consumption, and so figures the poet's own complicity in the destructive event of human culture, using nature as material.

The second half of the poem shifts from indicting encultured desire for the gains of aesthetic 'consumption,' as a systemic cause of environmental harm, to identifying a natural cause in the drive for self-preservation, the aversion to the ultimate loss of death. In appropriately multistranded syntax, Roberson refers to the feedback processes known as "polar amplification," where higher global temperatures result in increased thawing of polar ice and snow, which decreases the reflection of sunlight, which accelerates global warming by the uncovered ocean's and ground's absorption of sunlight, and where the thawing of the arctic permafrost releases methane, which as an especially powerful greenhouse gas further accelerates global warming.

> Of whatever loss it is it lasts as long as ice
> does until it disappears into its polar white
> and melts and the ground beneath it, into vapor,
>
> into air. …

This last phrase, set off by the stanza breaks, also evokes the systemic loops of capitalism as another layer upon nature's feedback networks, evoking *The Communist Manifesto*'s famous critique ("All that is solid melts into air") of how causal relations are *de*naturalized in the "constant revolutionising of production [and] uninterrupted disturbance of all social conditions" in bourgeois capitalism, at the same time that the system expands as "The need of a constantly expanding market … must nestle everywhere, settle everywhere, establish connexions everywhere."[73] The loss of aesthetic goods (the ice sculpture, chances to see natural beauty) and of collective life (in crashes and uninhabitability) are

both thus mapped to the loss of ecosystemic features (polar ice, the "ground" of the earth's productivity) and the Marxist loss of stable social relations and of cultural or natural spaces that have not been absorbed into the capitalist system.[74] The blend of the first three domains motivates an integration of aesthetic and utilitarian values with climatological homeostasis, while the addition of the Marxist framing offers yet another perspective from which the reader may evaluate the systemic relations that have been figured.

The poem thus proceeds through a series of complicating diagnoses, embedding our symptomatic natural-cultural problems in layered systems. The final turns of the poem shift from the natural causal loops of polar amplification and the cultural causal loops of the Marxist perspective to frame human aggression towards nature as a natural defensive reaction rather than an exploitative act. Metonymically elaborating from the glacier and "polar white" imagery, Roberson implicitly evokes the Polar Bear frame. While ironically also the charismatic prey of anthropogenic global warming, the polar bear, as an apex predator, functions as a figure for the risks the natural world has always posed to humans. Evoking the instinct of Self-Preservation, human 'domination' of nature is reframed as a defensive (though still aggressive) act:

> All that once chased us and we
> chased to a balance chasing back, tooth for spear,
> knife for claw,
> locks us in this grip
> we just now see
> our lives taken by
> taking them out. Hunting the bear,
> we hunt the glacier with the changes come
> of that choice.

The drive toward gains, which was represented earlier in the poem as the (over-)consumption of pleasing resources, is here shown to be systematically linked to loss-aversion. These psychological dynamics are rooted in our evolutionary circumstances, pre-dating their expression in the systems of capitalism.[75] But, as "we just now see" at the end of this recap of the deep time of humans' relationships with nature, the "balance" we thought we had obtained, mastering natural risks so that we didn't have to worry about losses but could instead focus on gains, has instead turned out to be a collision-course with uninhabitability.[76] This balance is a temporary, antagonistic equilibrium, a matter of systemic sustainability, rather than a notion of "harmony."[77] Gains and Losses are again integrated together within the broader Risk frame, which is already present in the figure of the chase, its consequences predictable though complex, with unbalanced probability. Or, perhaps more precisely, the poem as a whole is working to reframe our perception of appealing *immediate* gains as *systemic* risks of imminent losses—losses both of our anthropocentric values and of values beyond us.

While the diagnosis of a symptomatic self-destructiveness may seem apocalyptically 'deterministic,' the poem's final word motivates a reconstrual of the agency that had seemed unconsidered instinct.[78] By evoking the frame of Choice, the ending confronts the reader with the evaluative framing of Responsibility, entailing the question of how the reader herself will choose to dwell within a situation of risk. Historically, the pressures of environmental nature, the drives of human nature, economic systems, and a lack of awareness may have left people with what we might view, retrospectively, as an excuse. But this poem makes us conscious of the interrelationships between these systems, leaving us in a more informed place when considering whether to continue in the "Hunting … we," or to choose to change for larger preservation. Such an understanding does

not determine readers' actions, but it does frame their choices differently, having evoked and prompted integration of Responsibility, Loss, Risk, and Gain. Roberson has expressed this open-ended, confrontational awareness in an interview:

> I'd like people to wake up and see, rather than prescribe what to feel or what to do with what they see. I guess it goes back to wanting to make people notice stuff, or wanting to paint the picture. I wonder about what humans are doing and think this is a screwup. But there's so much more to this planet business—the geography, the geology, the physics—there's so much more to it than we know. So what if this is what we're supposed to do? Die out, cull life. What if this is one of those things where there is a beginning in our end, where you're born so that you can die, so maybe there's something to that in this. But that doesn't mean you shut down and close your eyes or don't try to do something. I'd really like people to take a big look. And I don't want a big look to imply helpless, voyeuristic tourism, to sound like backing off, definitely not sounding like backing off from the human responsibility for things, definitely not that.[79]

By the blends it evokes, Roberson's poem not only gives a "big look," mapping the systemic ecological, psychological, and economic processes that have led to our current situation. It thus orients us within that situation, and may also prompt pro-environmental motivation by evoking the entrenched aversive dispositions of the Loss and Risk frames. While this construal itself risks backfiring by provoking negative affects and extrinsic self-concern, it may overbalance defensiveness by inclusion of intrinsic concern for the earth from a larger, environmental scope, and by activating the empowering, context-evoking frames of Responsibility and Choice.

Notes

[1] Irene Lorenzoni, Sophie Nicholson-Cole, and Lorraine Whitmarsh, "Barriers Perceived to Engaging with Climate Change among the UK Public and Their Policy Implications," *Global Environmental Change* 17 (2007): 445-72; Mike Hulme, *Why We Disagree About Climate Change: Understanding Controversy, Inaction and Opportunity* (Cambridge: Cambridge University Press, 2009); Kari Marie Norgaard, *Living in Denial: Climate Change, Emotions, and Everyday Life* (Cambridge: The MIT Press, 2011).

[2] Ezra M. Markowitz and Azim F. Shariff, "Climate Change and Moral Judgement," *Nature Climate Change* 2 (2012): 243-47. See also Anthony Leiserowitz, "Climate Change Risk Perception and Policy Preferences: The Role of Affect, Imagery, and Values," *Climate Change* 77 (2006): 45-72; Matthew C. Nisbet, "Communicating Climate Change: Why Frames Matter for Public Engagement." *Environment: Science and Policy for Sustainable Development* 51.2 (2009): 12-23. The most extensive research on these difficulties has been conducted with respect to climate change. However, such difficulties also obtain for other systemic processes of environmental deterioration, such as species loss and pollution, as well as for the social injustice involved in the uneven distribution of the negative impacts of environmental deterioration. On the latter, see Rob Nixon, *Slow Violence and the Environmentalism of the Poor* (Cambridge: Harvard University Press, 2011).

[3] I write of "ecological poems" rather than, say, "ecopoetics," to reflect this focus on poems that address causal interrelationships of ecosystems, beyond single human-nonhuman relationships or the complexity of human systems (like language, ideology and culture). As such I follow in a tripartite formulation dividing the variously-used term "ecopoetry" into the categories of nature poetry, environmental poetry, and ecological poetry. Cf. Ann Fisher-Wirth and Laura-Gray Street, editors' preface to *The Ecopoetry Anthology* (San Antonio: Trinity University Press, 2013), xxvii-xxxi.

[4] The topological and tropological, with the entropological and ethnological, are the "four species" of Jonathan Skinner's initial "taxonomy of nature writing (or of ecopoetry or ecopoetics)." "Statement for 'New Nature Writing' Panel at 2005 AWP (Vancouver)," *Ecopoetics* 4/5 (2005): 127-29. See also Skinner's later, more expansive mapping of the diversity of environmentally-concerned poetics: Jonathan Skinner, "Conceptualizing the Field: Some Compass Points for Ecopoetics," *Jacket2* (2011), jacket2.org/commentary/conceptualizing-field.

[5] Marcella Durand, "The Ecology of Poetry," in *The Eco Language* Reader, ed. Brenda Iijima (Lebanon, NH, Portable Press at Yo-Yo Labs and Nightboat Books, 2010), 123-24.

[6] Of course, such poems may for the most part only be circulating among such readers anyway, in which case these points are moot. But if we want ecopoetry that has valuable affordances for a wider range of readers, then we might consider to what extent poetic texts themselves guide readers into the valuable ways of reading, without depending upon training in particular reading practices.

[7] Leonard M. Scigaj, *Sustainable Poetry: Four American Ecopoets* (Lexington, The University Press of Kentucky, 1999), 38.

[8] Ibid., 48, 50, 77

[9] Ibid., 38-9.

[10] For an application of frame analysis to narrative fiction and film addressing climate change, see Axel Goodbody, "Frame Analysis and the Literature of Climate Change," in *Literature, Ecology, Ethics: Recent Trends in Ecocriticism*, ed. Timo Müller and Michael Sauter (Heidelberg: Universitätsverlag Winter, 2012), 15-33.

[11] Cf. Karen Sullivan, *Frames and Constructions in Metaphoric Language* (Amsterdam: John Benjamins Publishing Company, 2013), 17-33.

[12] Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002).
[13] Concepts are not abstract objects that can simply be moved around the mind, but rather constituted by neurons arranged in the circuits of frames. Neurons do not move, and so frames depend on intervening circuits to connect with each other. Use of these intervening pathways strengthens their connections, such that the activity of thinking and imagining modifies the neurocognitive structures involved in that activity. Jerome Feldman describes this process as the "Structure-Experience-Adaptation cycle." Jerome A. Feldman, *From Molecule to Metaphor: A Neural Theory of Language* (Cambridge: The MIT Press, 2006).
[14] Brenda Hillman, *Seasonal Works with Letters on Fire* (Middletown, CT: Wesleyan University Press, 2013), 37. This poem is more rhetorically direct than much of Hillman's work; I am interested in it as an object for analysis in developing my theory of poetry's means of affording environmental consciousness, rather than as representative of Hillman's ecopoetics generally.
[15] Like semantic knowledge, affective circuits can be theorized as frames which serve to monitor the internal state of the body, register rewards and punishments, represent proxies for reward / punishment as desired goals and feared threats, motivate behavioral choices through such feelings, and trigger emotional changes in response to learned stimuli. For an overview of the brain's affective systems and their functions, see Elizabeth Johnston and Leah Olson, *The Feeling Brain: The Biology and Psychology of Emotions* (New York: W. W. Norton & Company, 2015).
[16] Feelings function as an input to decision-making, and even as a shortcut for explicit reasoning, offering a summary of the expected consequences of for behaviors, in terms of resultant bodily states, efficiently compensating for the cognitive burdens, and frequent impossibility, of deliberating over all possible factors. See Antonio Damasio, *Descartes' Error: Emotion, Reason and the Human Brain* (New York: Putnam, 1994); Antonio Damasio, "The Somatic Marker Hypothesis and the Possible Functions of the Prefrontal Cortex," *Philosophical Transactions: Biological Sciences* 351 (1996): 1413-20.
[17] Neuroimaging studies have found that the neural structures that represent bodily, emotional, empathetic, and social pain overlap. Johnston and Olson, *The Feeling Brain*, 165-7.
[18] The neural simulation of bodily actions, and of perceptual experience as discussed below, is fully addressed in chapter 5.
[19] Markowitz and Shariff, "Climate Change," 244.
[20] Lorenzoni et al., "Barriers," 452, 453.
[21] "These speakers attempt to adjudicate their responsibility for ecological destruction, confessing to their patterns of consumption, wasteful habits, or detachment from their surroundings and attempting to tally their impossible debt." Margaret Ronda, "Anthropogenic Poetics," *The Minnesota Review* 83 (2014): 107, 102, 107. Whereas in "Moaning Action" Hillman's speaker remains in a human subject-position, addressing other humans, other of the poems in *Seasonal Works* more fully engage in the circuits of prosopopoeia and apostrophe that Ronda analyzes; see especially "Two Summer Aubades, After John Clare," *Seasonal Works*, 27.
[22] That said, the actual effect may be modulated, edited, or reappraised by the context. While prototypical Sadness and Grief are low-arousal states, the Tragedy and Wailing frames arguably entail high-arousal variants, increasing the activation of the component Pain circuit. Increased affective activation would not only increase the degree of disaffection associated with gas pumps, but would also increase the strength this association's consolidation into memory. Johnston and Olson, *The Feeling Brain*.
[23] See Sebastian Bamberg and Peter Schmidt, "Incentives, Morality, or Habit? Predicting Students' Car Use for University Routes with the Models of Ajzen, Schwartz, and Triandis," *Environment and*

Behavior 35.2 (2003): 264-285; Melissa L. Finucane et al., "The Affect Heuristic in Judgments of Risks and Benefits," *Journal of Behavioral Decision Making* 13 (2000): 1-17; and Bas Verplanken, Henk Aarts, and Ad van Knippenberg, "Habit, Information Acquisition, and the Process of Making Travel Mode Choices," *European Journal of Social Psychology* 27 (1997): 539-560.

[24] Johnston and Olson, *The Feeling Brain*, 224-37.

[25] The subjunctive mood that pervades this paragraph, and much of the rest of this argument, respects two contingencies that make my claims necessarily speculative. On the one hand, while my analysis and theorization are based upon extant science, thus far few cognitive and neuroimaging studies have been done using poems as stimuli (and none for these particular texts), so that the degree to which processes observed in response to other stimuli hold true for poetry is largely untested. On the other hand, while my method focuses on clarifying the range of probable effects, individual results will naturally vary, as short-term effects are co-determined by readers' personal cognitive structures, and long-term effects will be co-determined by the future contexts they act within. Nonetheless, I believe such principled speculation, grounded in an empirically-plausible account of how reading poems can influence readers, can contribute to literary study, as a realistic (rather than idealizing) theory for poetry's effects on society, and as a method for evaluative analysis of specific poems and poetic techniques.

[26] Jaak Pankepp and Lucy Biven, "Born to Cry: The PANIC/GRIEF System and the Genesis of Life-Sustaining Social Bonds," in *The Archaeology of Mind: Neuroevolutionary Origins of Human Emotions* (New York: W. W. Norton & Company, 2012), 311-49.

[27] Cultivation of critical suspicion is also served by the moments that prompt the reader to be more aware of the medium of communication, from the second sentence's meta-typographical "That capital **S** is a sort of gas nozzle" to the critique of media framing: "The broadcaster says the globs 'look like peanut butter,' wanting to sound lovable so we can begin to feel friendly about them"

[28] Analyses of surveys across multiple cultures have found consistency in the sets of values respondents generate and in the organizational patterns of these value systems, even as individuals vary in their relative rankings of specific values. Specifically, many (though not all) values correlate into two networks that have oppositional relations to each other. The Intrinsic Values network comprises values grouped under the categories of Self-Direction, Universalism (including specific pro-environmental values such as Unity With Nature, Protecting The Environment, and A World of Beauty), and Benevolence. The Extrinsic Values network comprises values grouped under the categories of Achievement and Power. (Groups of values that did not belong to either network included those grouped under Stimulation, Hedonism, Security, Conformity, and Tradition.) In survey rankings and in behavioral experiments, values within the same network and subcategory exhibit spillover effects, reinforcing each other, while values in the Intrinsic network have a suppression effect on Extrinsic values, and vice-versa. At the level of communication, this has the consequence that activation of value frames in the Intrinsic network helps to motivate pro-environmental behavior, while frames connected to Extrinsic values demotivate such behavior; activation of frames/values connected to both networks causes a conflict of mutual inhibition which dampens the communication's motivational effects. Value frames are subject to habituated entrenchment, such that the more a culture evokes a particular set of values, the more its members will reason and behave according to those values, with the further reflexive effect that their discourse will tend to evoke those values, reinforcing them in others. Common Cause and Public Interest Research Centre, *Common Cause for Nature*. This organization entails that even non-ecological poems can help motivate pro-environmental behavior, due to spillover from other Intrinsic values (including aesthetic values like Wonder and Awe, Adventure and Discovery, and Curiosity and

Creativity) and those values' suppression effects on anti-environmental Extrinsic values. Mission Models Money and Common Cause, *The Art of Life: Understanding How Participation in Arts and Culture Can Affect Our Values* (Mission Models Money and Common Cause, 2013).
[29] Ibid.
[30] Hillman, "Experiments with Poetry are Taken Outdoors," *Seasonal Works*, 67.
[31] The lack, or weak habituation, of a Systemic Causation frame is also at play in controversies about other systemic problems such as white supremacy, patriarchy, class immobility, the structural logic of capitalism, etc. George Lakoff, *The All New Don't Think of an Elephant!*, 36-40.
[32] George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999), 177-8.
[33] Lakoff, *The All New Don't Think of an Elephant!*, 37-8.
[34] I would suggest that this process of abstract concept learning, where the repetition of constituent components across multiple specific frames motivates construction of a generic frame, underlies the strategy of *The Cantos* of Ezra Pound, and generally serves to explain how readers abstract understandings of character, theme, etc., from sets of narrative and/or lyric content. See Benjamin Bergen and Jerome Feldman, "Embodied Concept Learning," in *Handbook of Cognitive Science: An Embodied Approach*, ed. Paco Calvo and Toni Gomila (San Diego: Elsevier, 2008), 313-331.
[35] Gary Snyder, *The Back Country*, (New York: New Directions, 1968), 22. In addition to being recognized as an author of ecological poetry, Snyder may be "more widely known as an ecological activist than as a poet," as Helen Vendler claimed in 1995. Vendler, "American Zen: Gary Snyder's *No Nature*," in *Soul Says: On Recent Poetry* (Cambridge: Harvard University Press, 1995), 117.
[36] Robert Kern, "Silence in Prosody: The Poem as Silent Form," in *Critical Essays on Gary Snyder*, ed. Patrick D. Murphy (Boston: G. K. Hall & Co., 1990),111-12.
[37] Charles Altieri, "Gary Snyder's Lyric Poetry: Dialectic as Ecology," *Critical Essays*, ed. Murphy, 54.
[38] These diagrams leave out more peripheral extensions that are also motivated by the text. The differentiation between the "small dead" branches and the higher-up "thick spreading" living limbs of the pine can evoke knowledge of the photosynthesis-optimizing strategies by which such trees in effect shut off their lower limbs as they grow. Likewise, "summers" can function not only as a reference to a temporal span of years but to the seasons of the year, evoking, with "snowmelt" and "rock," knowledge about seasonal variations in daylight hours and temperature, the snowpack/melt cycle in Alpine climates, erosion, etc.
[39] In discussing iconicity, Lakoff and Johnson give an example of how greater peripeteia conveys an attenuation of direct causality: "John killed Bill. / John caused Bill to die. / John had bill killed. / John brought it about that Bill died." *Philosophy in the Flesh*, 221.
[40] Awe (and/or a more generalized affective pleasure and stimulation) could also be evoked as a response to the artful minimalism and musicality of the poem, while the values of Adventure, Discovery, Curiosity, and Creativity could be evoked by the reader's own imaginative and interpretive responses. Unless we have previously identified a proper cause of our affective state, we tend to process our current feelings as information regarding any object of current attention; this principle of the promiscuity of affect means that, whatever the true source triggering the response, this Awe and other affects can be integrated as feelings toward the semantic content, toward the poem, and/or toward the poet. On the openness of "feelings-as-information" to flexible attribution, see Johnston and Olson, *The Feeling Brain*, 215-29. In this analysis, then, the genre of "nature poetry" could continue to be of value in cultivating progressive dispositions, even if it may reinforce naïve ideological formations rather than habituate ecological consciousness. To the extent that a poem evokes a sense of wonder and awe towards elements of nature or to the abstract idea of Nature, it

also primes and entrenches intrinsic values motivating pro-environmental and pro-social behavior. Melanie Rudd, Kathleen D. Vohs, and Jennifer Aaker, "Awe Expands People's Perception of Time, Alters Decision-Making, and Enhances Well-Being," *Psychological Science* 23.10 (2012): 1130-36.

[41] The poem's sequence of semantic frames can also motivate affective activation by its evocation of mental imagery. Such imagery is constituted by neural simulations in a reader's sensory systems, which are interconnected with the affective systems, and in their motor-control and interoceptive systems, which overlap with the affective systems. As the poem moves between object-references, the implied embodied perspective on the diegetic scene shifts, too, from a proximal and canonically downward view of a campfire, to a proximal horizontal view of the pine, outward to the mountains of the horizon, and finally upward to the distant stars. This progression of implicit postures could constitute, through its somatic simulation, an evocation of Awe, or indeed Sublime Pride, both of which involve an erectness of posture, with chest out, shoulders back, and chin raised, consonant with an outward- and/or upward-facing gaze.

[42] Neuroscientific studies of readers' responses to poetry have found that the "chills" of aesthetic pleasure tend to coincide with line-end, stanza-end, and poem-end closure. Eugen Wassiliwizky, Stefan Koelsch, Valentin Wagner, Thomas Jacobsen, Winfried Menninghaus, "The Emotional Power of Poetry: Neural Circuitry, Psychophysiology and Compositional Principles," *Social Cognitive and Affective Neuroscience* 12.8 (2017): 1229-40.

[43] Peter Stockwell discusses the decomposition of cognitive complexity with regard to viewpoint in *Cognitive Poetics: An Introduction* (London: Routledge, 2002), 49.

[44] I would propose that this sense of visionary levity involves a convergence between semantic knowledge about the apparent weightlessness of wind and fire, sensory simulation of the suspension of stars in the sky, somatic simulation of lightness and freedom in the force-dynamic system, and the conceptual metaphor Important Is Heavy. On force dynamics, see Leonard Talmy, "Force Dynamics in Language and Cognition," in *Toward a Cognitive Semantics*, vol. 1: *Concept Structuring Systems* (Cambridge: MIT Press, 2000). On Important Is Heavy, see Nils B. Jostmann, Daniël Lakens, and Thomas W. Schubert, "Weight as an Embodiment of Importance," *Psychological Science* 20.9 (2009): 1169-74. On conceptual metaphor, see George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980); George Lakoff, "Mapping the Brain's Metaphor Circuitry: Metaphorical Thought in Everyday Reason." *Frontiers of Human Neuroscience* 8.958 (2014).

[45] For an overview of the therapeutic value of "reappraisal," see Johnston and Olson, *The Feeling Brain*, 280 ff. In Buddhist ethics, detachment is combined with compassion; by involving intrinsic values of Universalism and Benevolence, such a worldview could motivate pro-environmental behavior. Common Cause and Public Interest Research Centre, *Common Cause for Nature*.

[46] Interpretations grounded in the Four Natural Elements frame occupy a middle-ground, which preserves a minimal sense of difference amid process but, again, little of the complexity of the systemic interconnections. Cf. Patrick D. Murphy's point: "The branches that hiss in the elemental fire consist of the other three classical elements: water, earth, and air. A universe is contained therein, but it is a universe burning, transferring energy across its vast reaches." Murphy, *Understanding Gary Snyder* (Columbia: University of South Carolina Press, 1992), 79.

[47] Snyder himself has noted how China and Japan have by no means avoided environmental destruction, despite the influence of Buddhism on their cultures. See, for example, *Myths & Texts* (New York: New Directions, 1978), *Earth House Hold* (New York: New Direction, 1969), *The Practice of the Wild* (San Francisco: North Point Press, 1990), and *The Great Clod: Notes and Memoirs on Nature and History in East Asia* (Berkeley: Counterpoint Press, 2016). As Axel Goodbody cautions, "Frame analysis of examples from the literature of climate change should keep an open mind on whether it

merely reinforces dominant, or even residual, structures of feeling, in Raymond Williams's terms, or effectually articulates emergent ones." Goodbody, "Frame Analysis," 23.

[48] Phillips, *The Truth of Ecology*. Phillips specifically points to persisting idealizations of community, harmony, balance, and unity; ecologists today recognize that competition, disturbances, and development are as inherent to ecosystems as stabilizing feedback processes. For a summary of contemporary revisions to earlier models of ecology, see J. Baird Callicott's revision to Aldo Leopold's "land ethic": "From the Balance of Nature to the Flux of Nature: The Land Ethic in a Time of Change," in *Aldo Leopold: An Ecological Conscience*, ed. Richard L. Knight (Washington: Island Press, 2002), 91-105.

[49] Poetry can prompt the integration of such knowledge with a variety of human scale images/frames, helping readers to see the ecosystemic contexts and interrelations of both natural and cultural objects. Affording enhanced abilities to think scientifically could also lower affective resistance to scientific communications about contemporary problems, policy issues, etc., as willingness to engage in science has been found to be affected by subjects' confidence interpreting scientific information. Mike Michael, *Constructing Identities: The Social, the Nonhuman and Change* (London: Sage Publications, 1996).

[50] Readers who do not know the provenance of these names may still experience metonymic evocation of abstract frames for Language/Culture X, Y, and Z.

[51] Paige Tovey, *The Transatlantic Eco-Romanticism of Gary Snyder* (New York: Palgrave Macmillan, 2013), 122.

[52] Snyder elsewhere figures artists as composters or decomposers that process and feed off cultural and natural systems both. See, for example: "Toward Climax," *Turtle Island*, (New York: New Directions, 1974), 84; "On Top," *Axe Handles*, (San Francisco: North Point Press, 1983), 11; *The Real Work: Interviews and Talks: 1964-1979* (New York: New Directions, 1980), 173-4.

[53] Cf. Dipesh Chakrabarty, "The Climate of History: Four Theses," *Critical Inquiry* 35 (Winter 2009): 197-222.

[54] Ulrich Beck, *World Risk Society* (Cambridge: Polity Press, 1999). Beck furthermore points out that such knowledge of systemic risks cannot be experienced directly, but must be learned discursively.

[55] Heise, *Sense of Place and Sense of Planet*, 13. See 124-36 for a more comprehensive summary of research findings on how sociocultural identities, worldviews, contexts, and institutions influence and mediate risk perceptions; as I am speculating about effects on readers in general, in what follows I focus more narrowly on how the frames involved in risk assessment affect decision-making.

[56] "Implicitly or explicitly, accounts of risk tend to invoke different genre models, for example the detective story—in the evaluation of clues and eyewitness accounts, and in the discovery and exposure of the criminal; pastoral—in the portrayal of rural, unspoiled landscapes violated by the advent of technology; the gothic—in the evocation of hellish landscapes or grotesquely deformed bodies as a consequence of pollution; the *Bildungsroman*—in the victim's gradually deepening realization of the danger to which she or he is exposed; tragedy—through the fateful occurrence of events that individuals are only partially able to control; and epic—in the attempt to grasp the planetary implications of some risks." Ibid., 139-41. Cf. Garrard, *Ecocriticism*.

[57] Common Cause and Public Interest Research Centre, *Common Cause for Nature*, 35-36, 77-78; Nisbet, "Communicating Climate Change," 19. Furthermore, Leiserowitz's analysis of his data found that "holistic negative affect was the strongest predictor of global warming risk perception. These results suggest that risk perception is greatly influenced by affective and emotional factors, including connotative meaning, and provides convergent evidence that public risk assessments are strongly influenced by experiential processes, contrary to most rational choice models (Epstein, 1994;

Loewenstein et al., 2001; Slovic, 1997). Policy preferences, however, were most strongly influenced by value commitments. Support for national and international climate policies was strongly associated with pro-egalitarian values, while opposition was associated with anti-egalitarian, pro-individualist and pro-hierarchist values. Interestingly, these value commitments were stronger predictors than either political party identification or ideology. […] Global warming and the policies proposed to mitigate or adapt to it occur within a rich and complex socio-political context, in which groups of individuals are socio-politically predisposed to select, ignore and interpret risk information in different ways. Risk perceptions are thus socially constructed, with different groups predisposed to attend to, fear and socially amplify some risks, while ignoring, discounting or attenuating others." Leiserowitz, "Climate Change," 63-64.

[58] Frederick Buell, *From Apocalypse to Way of Life: Environmental Crisis in the American Century* (New York: Routledge, 2003), 206.

[59] Kahneman, *Thinking, Fast and Slow*, 334 and passim.

[60] Ibid. 349-52.

[61] Ibid., 336.

[62] Ed Roberson, *To See the Earth Before the End of the World* (Middletown, CT: Wesleyan University Press, 2010), 3.

[63] Evie Shockley, "Black and Green: On the Nature of Ed Roberson's Poetics," in *Renegade Poetics: Black Aesthetics and Formal Innovation in African American Poetry*, Evie Shockley (Iowa City: University of Iowa Press, 2011), 153, 159. See also John Yau, "The Earth Before the End of the World: Ed Roberson's Radical Departure from Romantic Tradition," *Poetry Foundation* (July 13 2011), https://www.poetryfoundation.org/features/articles/detail/69719.

[64] Ibid., 160-61.

[65] Heise, *Sense of Place and Sense of Planet*, 142.

[66] "Today's ecologically conscious poet sees the world of human existence resting in, on, or arising, precipitating out of the Earth: out of all life, out of Nature. The nature poem occurs when an individual's sense of the larger Earth enters into the world of human knowledge. The main understanding that results from this encounter is *the* Ecopoetic: that the world's desires do *not* run the Earth, but the Earth *does* run the world." Ed Roberson, "We Must Be Careful," in *Black Nature: Four Centuries of African American Nature Poetry*, ed. Camille T. Dungy (Athens: University of Georgia Press, 2009), 4.

[67] Lynn Keller, "Twenty-First-Century Ecopoetry and the Scalar Challenges of the Anthropocene," in *The News from Poems: Essays on the 21st-Century American Poetry of Engagement*, ed. Jeffrey Gray and Ann Keniston, (Ann Arbor: University of Michigan Press, 2016), 60-1.

[68] There is a risk to this Systemic Inertia framing in that, though it is an accurate construal of climate science, readers may "translate these appeals to fear into a sense of fatalism, especially if this information is not accompanied by specific recommendations about how they can respond to the threats." Nisbet, "Communicating Climate Change," 19.

[69] Cf. Keller, "Twenty-First-Century Ecopoetry," 58.

[70] Other poems in this section of the book explicitly make this point, that the span of an individual's world is embedded within the "deep time" of the planet's and cosmos's processes. Of note, too, is how Roberson's repeated references to cicadas, in contrast to the crickets of Snyder's "Little Songs for Gaia," evoke the Lifespan frame, and function to prompt comparison between differing intervals for the lives of different natural entities, as well as the spans, intervals, and perspectives of the subjective perceptual experience that comprises one's world. Roberson, *To See the Earth*, 4-22. See

Lynn Keller's discussion of the scalar shifts of perception in these poems. "Twenty-First-Century," 56-62.

[71] A study that investigated "affective images associated with global warming" found that "Associations of melting glaciers and polar ice were the single largest category of responses, indicating that this current and projected impact of climate change was the most salient among the American public." Leiserowitz, "Climate Change," 54.

[72] On the image of the ice sculpture, Keller comments: "While others may be 'grabbing' at last chances and 'chasing' after glaciers, he imagines himself sitting still before a segment of one of the pieces 'longer than we' that is small enough for him to contemplate. … There is no obvious anxiety here; rather than focusing on mourning loss, he focuses on present duration. There is an attitude of acceptance; the time he has is the time he has, what he has to observe is what he has to observe, and, seen as ice sculpture, his bit of the earth is not only fascinating in its constant change but also implicitly beautiful." "Twenty-First-Century Ecopoetry," 60.

[73] Karl Marx, *The Communist Manifesto*, 2nd ed., ed. Frederic L. Bender (New York: W. W. Norton & Company, 2013), 64.

[74] Roberson follows Jonathan Bate in holding that "our technology … is more likely to conserve, regenerate, and nourish the limiting and exclusive resource base of capitalism than our larger human [nature] or Earth/Nature." "We Must Be Careful," 5.

[75] "Roberson here imagines the endangered present through the deep past. According to one theory, the paleo-American Clovis people, known for their fluted spear points, hunted the megafauna (including the short-faced bear) through North America, driving them, and themselves, into extinction. And do we choose to follow them? The 'we' in Roberson's cautionary tale includes not only curious ecotourists (and greedy petroleum deposit hunters) but the rest of us who choose (or not) to do what we can to preserve the environmental balance." Shoptaw, "Why Ecopoetry?," 407.

[76] This moment is echoed and elaborated in the poem "Topoi," eight pages later in the book:

> … Like trained bear
> dancing on a circus ball, we look down, our feet in a step
> from which there is no step off,
>
> this footprint all of step ever taken.
> The hunted step, kept far and fast enough
> away from the hunter to keep the distance of its life,
> shortens to none between them or is that
>
> shit outcome stepped in, become their one,
> in perspective, step from which there is no step out of.

Roberson, *To See the Earth*, 11-12.

[77] "Ever since Alaska [where Roberson worked as "an undergraduate research assistant in limnology, freshwater chemistry"] I've been 'doing nature'; taking down the data in my writing, not only of the present natural world but the data on myself in that world, on myself as just another one of nature' innumerable components. This self-conscious attention to being in balance—careful, to being a prt of nature, not separate as its mater or its crown—was to become one of the basic positions of my ecopoetics. My orderly handling of the nature poem came from my feel for basic scientific observation and technique, not the order of a metaphysical imperative. Not even a green peace." "We Must Be Careful," 4.

[78] Cf. Keller, "Twenty-First-Century Ecopoetry," 61.

[79] Ed Roberson, "An Interview with Ed Roberson," Keller and Wagstaff, 419.

Chapter 3

"This Living Hand, Now": Personal and Loco-Temporal Absorption

Personal and Loco-Temporal Absorption: Deixis and Beyond

In chapter 1 I presented a compositional account of poetic content, showing how complex and multiple meanings are constructed from a text through the integration of its language with semantic and affective knowledge. I concluded by explaining how content meanings become meaningful to a particular reader through resonance and extended integration with that reader's individual cognitive-affective investments. Chapter 2 then explored how particular ways of happening evoked by ecological poems can produce vector effects upon readers' cognitive models of, and affective relations to, components, processes, and actions within ecosystems. This chapter will shift from analyzing the composition of content to the construal of context, explaining how cognition relates the poetic text to imagined and/or actual persons, places, and times. By explaining the multiple possibilities of contextual construal in neurocognitive terms, I provide a unified theory of lyric address and temporality that clarifies the overlapping commonalities and the differences between different modes of lyric reading. This perspective then enables analysis of the difference made by different construals with regard to absorptive effects, including experiences of personal involvement, expression of interiority, and intimacy, as well as interpretative alternatives, degrees of resonance, and potential vector modifications of structures of thought and feeling. Such integration of imagined experience with the reader's self and life should not be excluded from the study of what literature makes happen for being subjective—rather, these phenomena should be understood as one of the multiple ways that literary works can function, in Kenneth Burke's phrase, as "equipment for living."[1]

Keats's "This living hand" serves as an exemplary case of lyric multiplicity regarding address and temporality, and yet it is also a text that plays upon the ambiguity between alternative construals, complicating the generic models and motivating what I call a "metalyric" interpretation. In describing how the text's meaning and effects depend on the construal of context, Lawrence Lipking declares that "the fragment constitutes one of the best examples in literature of a radical ambiguity or 'rabbit-duck'—an artifact that can be read in two fully coherent yet mutually exclusive ways."[2] At least one of these ways involves an experience of absorptive address, which William Waters calls "The view most neglected by scholarship … in which we, as readers, recognize ourselves as present and fundamentally implicated in the speech-event that the poem is trying to be."[3] One can experience the difference that the poem's present-tense second-person address makes by comparing it to a version in which the deictics determinately position the reader as an audience:

> This living hand, now warm and capable
> Of earnest grasping, would, if it were cold
> And in the icy silence of the tomb,
> So haunt thy days and chill thy dreaming nights
> That thou wouldst wish thine own heart dry of blood
> so in my veins red life might stream again,
> And thou be conscience-calm'd—see here it is—
> I hold it towards you.[4]
>
> His living hand, at the time warm and capable
> Of earnest grasping, would, if it were cold

> And in the icy silence of the tomb,
> So haunt her days and chill her dreaming nights
> That she would wish her own heart dry of blood,
> So in his veins red life might stream again,
> And she be conscience-calm'd[—b]ut it was near—
> He held it towards her.[5]

And yet, critics do also interpret the poem from an audience perspective, construing the "you" historically as Keats's expressive reference to his fiancée Fanny Brawne, or taking the lines to be a fictional representation, such as a scrap of dialogue intended for a play.[6] It is also possible to identify with the first-person speaker while reading the poem, especially if one imagines some specific person from one's own life as the addressee.

By analyzing the neurocognitive grounding of these various interpretations in extended integration, we come to recognize how the poem prompts us to negative capability by motivating such multiplicity. The text is not a problem to be solved but an engine of experiential and reflective exploration. The possibilities afforded can then be appreciated and complicated by further neurocognitive analysis. Once we understand that the reader's viewpoint in absorption can displace from the perspective of her self, we can see how the poem leverages a multiplicity of perspectives, despite being a single-voiced discourse, to afford 'impossible' experiences of interiority, empathy, and intimacy with someone whom the reader does not know. At the same time, its complex layering of factual and counterfactual worlds, and its motivations for the reader to construe its discourse as both speech and writing, disrupt the unity of the lyric as a singular event, evoking 'impossible' relations of presence or transport across space and time. And yet, even if the poem's contents are construed as happening in past times and/or fictional spaces, their imagining in fact occurs in the brain of the reader, with the consequence that the different structures of extended integration will affect the poem's resonance and vector effects. Rather than attempt to adjudicate between the interpretive options, I will clarify the differences that the different construals make for readers' experiences of the poem's meaning and meaningfulness.

Lyric Address, Fictionality, and Temporality as Personal and Loco-Temporal Absorption

Whether one is motivated by a New Critical rejection of authorial intention, a poststructuralist understanding the death of the author, or simply a lack of knowledge, one can read a text as an object that stands apart from the person who wrote it. Indeed, much of the written language we encounter in our everyday lives—e.g., the labels on products or street signs or rooms and buildings, the menus and informational text in the apps and websites we navigate—is processed without any imagination of that language as a communication from some person. Depending on the style of narration, a novel's narrator may recede from attention as one is absorbed in the diegetic world being narrated. However, when encountering a letter or email from someone specific, especially when it is addressed to one's self specifically, the text is experienced not simply as text, but as an act of address: one construes its meaning according to the mental model for person-to-person communication (abstracted from co-present speech), integrating one's knowledge of the writer and concept(s) of one's self as the participants in the communicative situation. I call this integration of the writer and reader as persons into the experience of a text "personal absorption." Whereas theories of focalization have clarified personal absorption in narrative, lyric poems are more problematic. The use of "I" and/or "you" without further individuation of the discourse participants, and the evocation of relatively generic, stand-alone situations rather than particular

inter-character events, leave the construal of person underspecified. A lyric poem's discourse may be determinate, but who participates in it is often open-ended.

Extended integration relates a text not only to persons, but also to place(s) and time(s). While a drama is a script for re-presentation in performance, and narrative refers to events in the past and/or fictional worlds, non-narrative poetry typically underspecifies its places and times. Objectively, a poem is experienced by the reader in the present place and time of her reading; this can create a sense of lyric presence, that the act of address, despite arising from an inscribed and/or printed artifact, is happening here and now. And yet, knowing that the poem was written somewhere else, sometime in the past, the reader may experience, instead of presence, a sense of transport to that other place and time, the same way we may experience remembering not as the present imagined experience that it is but as a reliving of the remembered event.[7] The other place and time that the reader finds herself imaginatively transported to could be that of the poem's composition; or, she might construe the poem as an event located in a space of fiction outside of the real world's temporality, such that it is one and the same lyric event that occurs each time the poem is read. I call this experiential relation of the place(s) and time(s) of the poem to those of some more-or-less specific context "loco-temporal absorption."

As Virginia Jackson and Yopie Prins's *Lyric Theory Reader* documents, modern critical discourse has typically taken one or another of these modes of address and loco-temporal construal as a normative model of lyric poetry.[8] However, such intellectual history does not explain how it is that texts called lyric are regularly read in these divergent ways, when texts called plays, novels, essays, etc. typically are not. While I acknowledge that expert theories have been historically constituted, I propose that lyric poems' affordance of multiple construals within personal and loco-temporal absorption depends, at its root, upon the interaction between, in the text, the underspecification of person, place, and time typical of lyric poems, and, in the reader, the cognitive integration of written and spoken communication that is a result of basic literacy apart from literary-critical discourse and training.[9] Exposure to expert theories, institutional training, culturally disseminated practices, and/or past experience reading certain lyrics more than others will of course influence readers, disposing them towards certain habits of construal. But alternative construals remain available to those who engage in negative capability, and—what's more important for an understanding and appreciation of poetics—texts themselves dynamically push readers towards certain construals over others through particular features. When we recognize that lyric poems *can* be read in any of the canonical ways, we may turn from adjudicating between the possible interpretations to assessing the values that may be derived from the various imagined experiences that a specific poem affords.

Canonical Models of Lyric Address as Variations on a Blend

Personal and loco-temporal construals are key dimensions of reading lyric poetry, but their experiential dynamics have not yet been adequately theorized. Though accounts of address have been central to theories of lyric, this inquiry historically has taken a partisan form, with individual critics explicitly positing or implicitly assuming one or another construal as normative. Taking a neurocognitive perspective enables us to recognize that these different expert theories are grounded in a core conceptual integration that 'blends' together written communication and spoken communication, such that the lyric text is understood as a speech act. This integration network is not learned from training in literary theory, but rather is a general cognitive resource of literate persons, constructed and entrenched in the process of learning to read and write, where verbal competence is extended to textual competence.

> A proficient reader ends up with a general competence for constructing integration networks for writing and reading. One input has someone talking, the other has some medium with marks, and in the blend, the marks and the speech are fused in impressive ways. The emergent integrated activities of 'expressing oneself through writing' and 'understanding others through reading' are strikingly different from speech in nearly all aspects. … Once we have learned it, the writing and reading blending network seems simple and inevitable. But it includes complex projections and social conventions that we take for granted.[10]

The different concepts of lyric address are constituted by different mappings between the roles of the writer and reader in the written communication input frame, the speaker, hearer, and optional overhearer(s) in the spoken communication input frame, and the persona, addressee, and audience in the lyric blend.[11]

Using this blend, the canonical models of lyric address may be analyzed as follows. The direct address model construes the poem as the poet's address to the reader; hence, it maps the writer to the speaker as the persona, and the reader to the hearer as the addressee.[12] The overheard self-expression/self-address model construes the poem as the poet's solitary speech, either as non-addressing emotive expression (on the model of an emotive cry or expressive singing) or as internal association / self-addressing meditation, in both cases construing the reader as privy to this private speech (or thought) in the position of an overhearing audience rather than as an addressee.[13] (In the Hegelian variant of the self-expression model, the writer role is split into the speaking subjectivity and the hearing consciousness that comes to know its self by the making of the poem, which exteriorization of interiority is observed by the reader.)[14] The apostrophic address model likewise construes the reader as an audience, but one that overhears the poet addressing some other person or entity, rather than the poet's self or no one.[15] These writer=speaker=persona variants of the lyric blend are represented in figure 3.1.

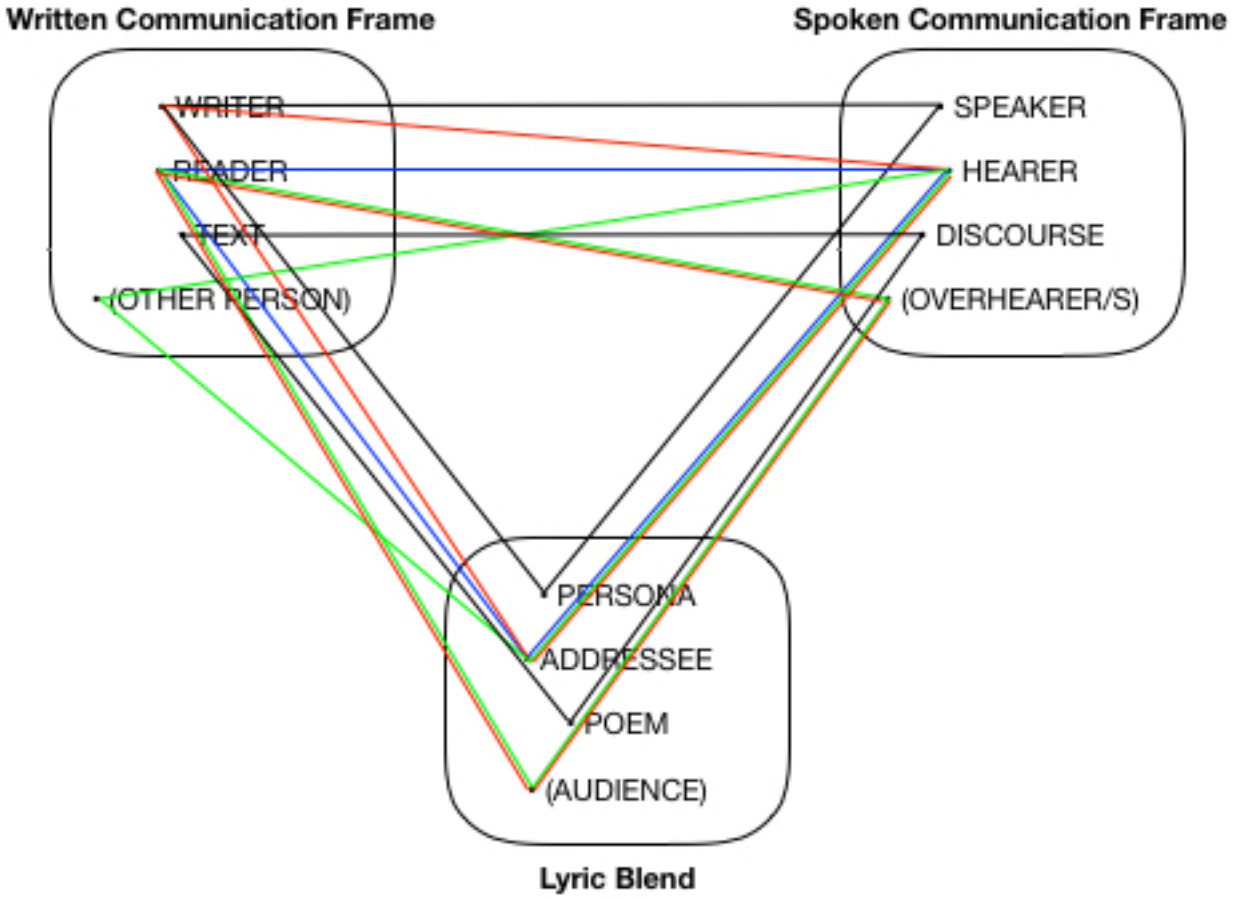

Figure 3.1 Writer=speaker=persona variants of the lyric blend; constant mappings are in black, direct address in blue, overheard apostrophic address in green, and overheard self-expression in red.[16]

Then there are the performative models, which do not map the writer to the speaker, but instead embed the spoken communication frame on its own into the lyric blend space as the content of the written communication frame. Initially ascendant in conjunction with the New Criticism's disavowal of inquiry into authorial intention, the performative models construe the persona as a fictional speaker rather than the poet (even though she may resemble the poet). The dramatic monologue and dramatic address models follow the self-expression and apostrophic address models in positioning the reader as an audience overhearing the speech act as a soliloquy or as an address to a second fictional character. In practice, however, especially when the fictional addressee is not individuated as a specific character, the reader may alternatively identify as the one addressed by the non-authorial speaker.[17] In the script for performance model, in contrast, the reader takes up the persona's position as a role for performance.[18] This reader=speaker=persona mapping then entails either that the addressee be construed as some figure other than the reader, or that the reader is the addressee/audience as well as the persona, in a case of participatory rather than overheard fictional soliloquy. (Except for the inhibition of the link between the persona and the writer, this last construal begins to approximate the reader's relation to the subjectivity-coming-to-consciousness in the Hegelian self-expression model.)

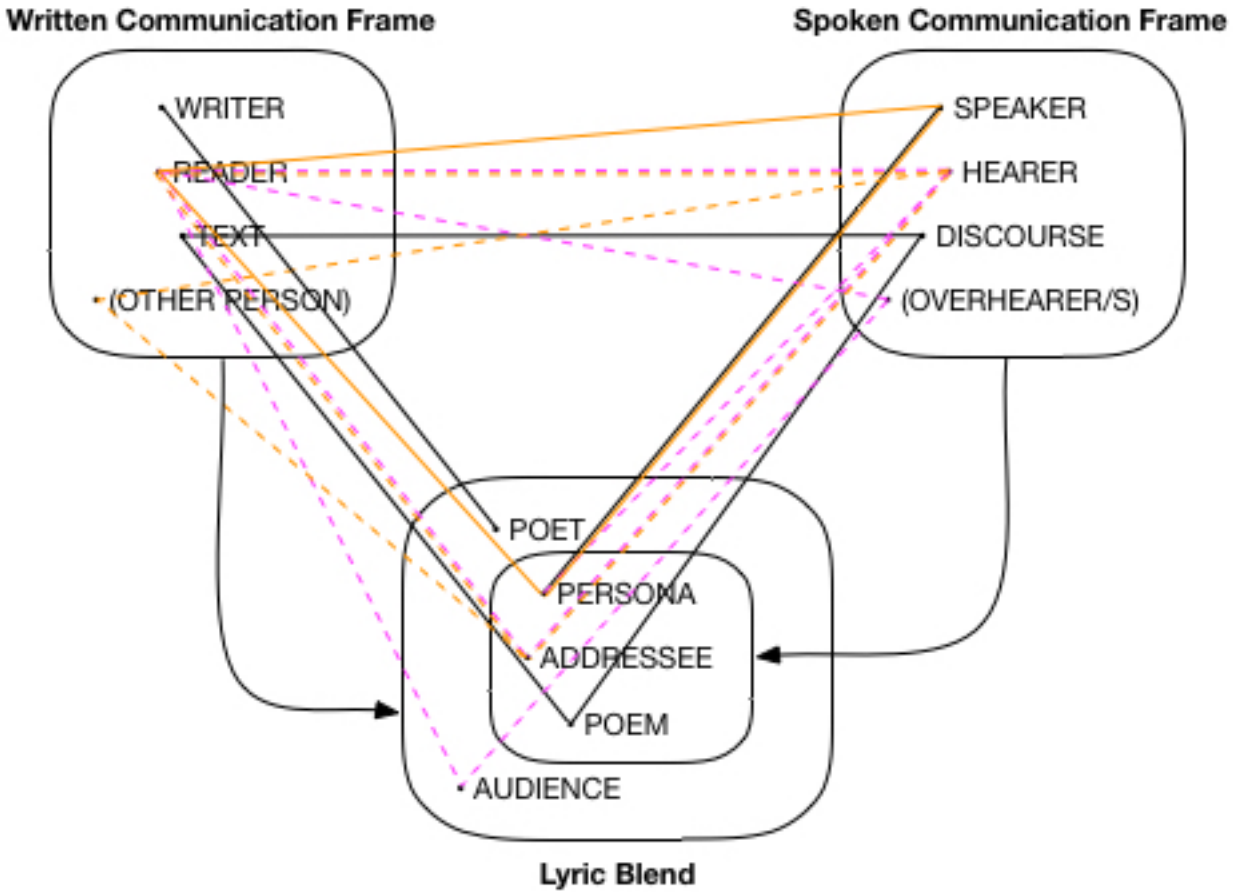

Figure 3.2 Performative variants of the lyric blend; dramatic monologue is in magenta, with dashed lines for the options of overheard soliloquy vs. overheard apostrophe vs. character direct address to the reader; script-for-performance is in orange, with dashed lines for the options of script-for-self-expression and script-for-use.

Finally, the triangulated address, or epideictic, model takes up the differentiation between an addressee and the "target" of a speech act, where a speaker might address one person but intend a rhetorical effect on a non-addressed, overhearing third person. For example, saying "Aren't you a stinky baby? Don't you want your daddy to change you?" addresses the infant but informationally and pragmatically targets at the overhearing father. Though the reader may not be mapped to the addressee of a poem, she may still be understood as an intended audience indirectly addressed by the poet through the (real or fictional) apostrophe or self-expression.[19] The triangulated address / epideictic model can thus be understood as an elaborated version of any of the models where the reader is mapped to the audience, adding the role of indirect target mapped to the reader=overhearer=audience.

Features typical of lyric texts afford this multiplicity of alternative construals by underspecifying address. The use of first- and second-person pronouns, rather than names for the persona and addressee, leave reference indeterminate, as "I" and "you" mean either you or me depending on which of us is the speaker. Psycholinguistic experiments suggest that, when either only first-person or only second-person pronouns are used, readers are prone to align with the perspective of that pronoun, unless the discourse includes information that individuates the figure.[20] To the extent that a lyric poem invokes relatively generic persons and situations, and/or ones that have equivalents in the reader's own life, it is likely to afford such open-ended absorption. Similarly,

whereas dialogue in a play or a novel typically relates to events of the broader narrative which are set within the particulars of its world, lyric poems often constitute events of thought, feeling, or address unto themselves. In this way, they can be indeterminate as to loco-temporal construal, as well as affording all the variants of personal absorption. While particular features of individual lyrics may motivate one or another of the canonical models as its best-fitting construal, I propose that the open-endedness of address construal is a prototypical quality of lyric poetry that structures its dynamic absorptive experiences.

Address Construal in "This Living Hand"

By turning from this synthesis of the canonical models of lyric address to the construal of Keats's "This living hand," we can consider the differences the different mappings make in personal absorption. When reading a particular poem rather than theorizing about lyric in general, one's concepts for the writer, addressee(s), and/or reader are not abstract roles but involve knowledge about the specific poet and about one's self. Alternative construals of address thus alter the extended integration that occurs in constituting the poem's meaning. Prior ideas about Keats as a person may guide one's interpretation, and even motivate or demotivate one or another address construal; Lipking, for example, dismisses reading "This living hand" as an apostrophic address by the poet to Brawne because he finds the tone that results "bullying and painful, its mixture of horror and pathos … too selfish to carry a message of love."[21] However, such conflict can also be the site of change or complication: reading with negative capability enables one to imagine, and perhaps come to believe, that the love Keats felt for Brawne may have been fraught in exactly the ways Lipking rejects. As personal absorption integrates external person-concepts into the experience of the poem, the resulting simulations may in turn become absorbed into those component person-concepts. At stake in address construal is not only the composition of the reader's imagined experience of the poem but also its resonance with her investments and vector effects on structures of thinking and feeling.

As a first example, let us consider the direct address construal of "This living hand." Several features of the text motivate this construal: the second-person address explicitly evokes the role of an addressee; that the second-person pronouns appear before the first-person pronoun may foreground that role over the role of the speaker; the semantic situation of the persona's hand haunting the addressee demotivates the model of self-address; and, finally, by way of the hand-manuscript-text metonymy enables, the reader herself is able to answer to the imperative-to-perceive of "see here it is." That the second-person pronouns are in an archaic form may weaken this motivation for modern readers (unless their experience with these forms is such that, beyond *knowing* that 'thou' was the 'familiar' counterpart to 'ye' in Early Modern English, they *feel* intimately hailed by such an address); if so, the relative strength of the final "you" might create the dynamic sense of a climax of absorption in the construal of being addressed.[22] Identifying with the addressee role in this way should influence the reader's experience of the poem's meaning and affects, foregrounding the feelings attributed to the addressee (e.g. grief, fear, and guilt rather than affection) and biasing interpretation towards an addressee perspective, such that the poem's claims might be more likely to be taken as aggressive rather than earnest.

The degree of personal absorption in this address construal will vary depending on whether the addressee role is filled by a generic concept of 'any reader,' or whether it is mapped to the specific reader's own personal self-concept(s). When the latter occurs, the poem's claims on its "you" are experienced as claims on the reader herself, its situation become an obligation asserted of and opportunity offered to her, integrated into her life as a real relationship with John Keats. The personally absorbed experience of lyric intimacy thus goes beyond what's factually true. The reader knows that Keats did not know or intend the poem for her individually—and yet, by mapping her

self to the addressee, she experiences the poem as just such an impossible direct address, yielding a sense of having a personal relationship not only with Keats's writings, but with the poet himself. This sense of "answerability," as Waters calls it, recruits structures of feeling for the reader's relations to her actual intimate friends and loved ones, especially regarding those who have died, transferring the relations from their external contexts into the poem to constitute a relation to Keats. As her person is absorbed into the lyric event, the event is likewise integrated into her life, such that its way of happening can subsequently inform reflection on, feelings about, and interactions with actual friends and lovers.[23] Thus, in addition to the value of the lyric experience where "I … come to the text as if my presence mattered to it," personal absorption also enables one to come to the text in such a way that it matters to one's self.[24]

If one instead construes the poem according to the apostrophic address model, then it is more likely to resonate with and inform thinking about relationships between persons other than one's self. Motivated by background knowledge about Keats's relationship with Fanny Brawne, which may naturally be evoked by the poem's evocation of affection and desire, some interpreters have construed Brawne as the addressee.[25] Note that, in a cognitive analysis, such an interpretation does not so much establish a connection between the text's pronouns and the *actual* historical persons, as in theories of extensional reference. Rather, the reader's neural simulation of the text's meaning integrates her *concepts of* Keats and Brawne. Based on this mapping of the discourse roles to specific person-concepts, the poem will recruit whatever the reader knows about the relationship between the two, most especially evoking the elements of that knowledge that fit the poem's content—its romantic nature, devotion, and tortured desperation—and hence motivating interpretation of the situation as an exchange between more-or-less-unrequited lovers rather than as a communion in literary immortality. With regard to the reading experience, such contextualization may also elaborate the pathos of the situation, extending beyond a generic uncertainty of reciprocation to the specific tragedy of the dissolution of their engagement in the face of Keats's imminent death. That the reader is absorbed as an audience to, rather than a participant in, this drama will inflect her interpretation and resonance in a variety of ways: non-involvement could license a greater indulgence of negative affects that one would avoid feeling about one's own life, or it might result in the dampening of affective response due to a sense of detachment regarding the situation. The reader's understanding of the poem may feed back into a modification of her ideas about Keats, Brawne, and their relationship, and could be abstracted as an example that complicates her sense of the love's fragility and preciousness, but it would be less likely to evoke the specifics of her own personal life unless they are directly resonant, e.g. she had been in love with someone who was deathly ill.

Ironically, rather than evoking categorization as lyric, the underspecification of person and context in the text (combined with the emphasis on proximity and perception that I address in Chapter 5) has prompted some critics to interpret the lines as intended for a play. This dramatic interpretation is equivalent to the dramatic monologue lyric model. That is, in the way that a scriptwriter, actor, or audience member are understood as occupying a world distinct from the world of a drama's characters, there is inhibition of identity mappings between the poet and reader in the written communication input and the speaker and addressee in the spoken communication input; the latter are projected into the lyric blend as embedded within the diegetic content space of the written poem.[26] (The performative construals thus inherently involve loco-temporal absorption, construing a disjunction between the world of the poem and the real world, as part of their construal in personal absorption.) If one has an idea of the characters that the play might contain (Lipking cites the suggestion that it was meant for the Earl of Leicester addressing Queen Elizabeth), then concepts of those characters and their relationship would be integrated into one's interpretation of the poem, the same way that the direct address and apostrophic models integrate knowledge about

the poet.[27] If one does not venture such a supposition, then the roles of persona and addressee go unfilled, such that the figures are mere ciphers whose qualities and relations are elaborated from the semantic and affective simulations evoked by the text itself; that is, in effect, the discourse roles are reified into persons, characters contained within the fictional world of the presumed play. (The same construal could also be motivated by habituation of lyric reading practices modeled on the dramatic monologue, or by a lack of knowledge about the poem's author.) Even though there is, in a sense, *no* personal absorption—no connections made between the text's figures and the reader's concepts for persons of the real world—that does not mean that the poem is truly separated off in fictionality. Rather, its resonance will depend on the degree to which the situation itself activates an individual reader's particular memories and investments, as described above.[28] Where integration with historical characters will motivate integration focused on the characters represented, a nonce fictional world of reified figures will motivate vector effects at the level of thematic and generic schemas, such as contributing to the complex meaningfulness of future experiences of hand-offering and -holding.

The dramatic script-for-performance construal is composed in the same way as the dramatic monologue construal. In the same way that the reader can project herself into the role of the addressee, even though Keats cannot have actually intended the poem for her specifically, she can also project her self into the role of the persona. As I explain in detail in Chapter 5, the experience of the text as one's own imagined speaking, rather than imagined hearing, and the availability of one's own hand as the proximally present referent of the discourse, function as motivations in vocal and perceptual absorption for taking up the persona's perspective in personal absorption. That the reader maps to the speaker rather than to the audience role, however, motivates extended integration beyond the poem's represented world. In addition to the canonical dramatic script-for-(imagined)-performance model, one can construe the poem as a personal script-for-(imagined)-use: though the reader did not write the words, she can integrate them as an expression of her own thoughts and feelings—or she might actually read the poem to a friend or (potential) lover who thereby becomes the actual addressee. As in the direct address construal's involvement of the reader as addressee, when the reader identifies as the persona, the poem is integrated with her self-concept(s) and life, affecting structures of thought and feeling not just as the ideas of others or as thematic abstractions, but as they pertain to her personal experiences and actions. Again, there is a dynamic interaction between the vector of the poem and the motivations of the reader's self-concepts: a reader who thinks of herself, or her intentions regarding a specific addressee, as earnest may inhibit the desperate or domineering aspects that the poem evokes; alternatively, these evocations may make her experiences of desire in real life more complex and/or raise its complexity to her awareness. A reader who is manipulative may find in the poem a lesson in the art of the guilt trip, while a reader who is herself a writer may take it as an example of poetic creativity she might participate in, appreciating how the persona re-deploys the tropes of the carpe diem tradition in novel ways. Literary criticism, in its interest in authors and its pursuit of interpretation grounded in intersubjectively-available evidence, typically sidelines such personal absorption where the reader appropriates the role of the persona.[29] And yet, if we are interested in the values that poems afford, this function as "equipment for living" should not be excluded.

Recognition that integration could include the reader but exclude the poet reveals the possibility of another non-canonical address construal: the suspension of literary history in imagining the poem as a direct address to the reader by someone other than Keats. We might think of such personal absorption as involving a suspension of belief, where the reader inhibits her knowledge of the poem's provenance, imagining it as a speech act delivered by some individual from her own life—perhaps a silver-tongued manipulator or someone who she wishes would proffer their hand in earnest. These integrations of the poem's situation into one's personal life may not be the institutionalized methods of literary criticism, but they are inherent affordances of the minimal

specification of the lyric blend. Indeed, provided one can effectively suspend one's knowledge, integrating the poem into one's own life rather than a historicized construal may make for richer simulations and affective responses, and may elicit greater resonance and reflective utility due to the blend being directly related to topics of current concern and/or personal investment. Thus, while they may not make for 'objective' criticism, the script-for-(imagined)-personal-use and transferred-direct-address construals can have significant personal value and, potentially, social value by way of the increased personal absorption's enhanced vector effects.

Viewpoint Displacement as a Dimension of Personal Absorption in "This Living Hand"

The analysis given above reflects a conventional assumption of the canonical theories of lyric address: that the reader's cognitive viewpoint on the lyric event is given by the determination of which discourse role (persona, addressee, or overhearer) the reader fills. This approach follows the logic of spoken communication: if the poet is identified as the persona, the reader must take the position of the addressee or overhearer; if someone else is then identified as the apostrophic addressee, the reader must be an overhearing audience. Extended integration of the text into some particular historical context might therefore seem to decrease personal absorption, as the relegation of the reader to the non-participant audience position leaves her self no longer implicated in the poem's situation. However, personal absorption can involve not only integration of the reader's self into the lyric address, but also the absorption of her subjectivity as a cognitive viewpoint within the simulation of the poem's situation, including its non-speaking roles.

In viewpoint-displacement, the fundamental cognitive capability of partitioning is applied to disarticulate one's subjectivity from one's self. The distinction between subjective viewpoint and self-concept is evident in expressions such as 'I [subject] couldn't control myself [self],' 'If I [subject] were you [other's self], I'd [other's subject] hate me [self],' and 'If I were you, I'd hate myself [other's self].'[30] More broadly, linguistic markings (including spatial and temporal terms, determiners, pronouns and other nominal forms, connectives and evidential markers, verbal aspect, and more) functionally motivate viewpoint construal in the process of meaning construction.[31] Based on his study of neuroanatomy and the behavior of patients with brain damage, Antonio Damasio has argued for a similar distinction between the "core self" which is the "transient protagonist of consciousness" and the "autobiographical self" constructed from "memories which describe identity and person."[32] Research in interpersonal and social psychology likewise theorizes a contingent relation between individual dispositions and the influence of contextually-activated social identities on one's experience and behavior.[33] These insights matter for poetry because they help us to recognize that the identification of a poem's figures is only one aspect of personal absorption.

Because the lyric event is imagined rather than actual, the constraints that govern actual speech acts need not apply. One's cognitive viewpoint can displace from one's own person to instead align with another person's perspective.[34] Such displacement is implicit in the canonical script-for-performance model, in which the reader takes on the persona's self and leaves her own behind. Narratological theories of focalization, and their extension in text world theory, recognize the possibility of such viewpoint absorption in the perspective of a character or the deictic field of a discourse—but previous theories have not recognized that viewpoint can also align with perspectives that are merely implicit in the evoked simulation.[35]A reader of "This living hand," for example, while construing the poem as an apostrophic address, may displace from her audience position to experience the address from the perspective of Brawne, as well as from the perspective of Keats. Like address construal, viewpoint-alignment influences the imagined experience of the poem, depending on which perspective the reader takes.

Viewpoint displacement into the poet's perspective can occur in any of the canonical address construals. Displacing from the reader's self as addressee to the poet as persona in the direct address construal of "This living hand" biases to reader to sympathize with aspects of his situation, such as the earnestness of his offer of affection, while it backgrounds the aggression and menace that are more salient when aligned with the addressee's perspective. To take the viewpoint of the act of expression also foregrounds the poet's situation facing death, and so resonates with the reader's concern for her own mortality, instead of evoking the anticipated or retrospective grief of the survivor position. The vector effects of this alignment on the reader's self-concepts are not as strong as her full identification as the poem's persona in the script-for-performance/-for-use construals, but they are in the same direction. What's more, the integration of background knowledge about Keats's perspective, foreseeing his impending early death from tuberculosis, would likely make the immediate affective amplitude of the situation greater than it would be if a generally healthy reader casts herself as the persona. Through personal absorption in the poet's perspective, one imaginatively experiences Keats's desperation in calling to future readers for posthumous life, sure that he is soon to die yet unsure whether his work will actually later be read.

In contrast to this direct address perspective-taking, to take the poet's perspective within the apostrophic address construal is to experience a will-to-power rather than powerlessness. The poem's rhetoric shifts from being dependent to being imposing, as alignment with the persona's acts of assertion biases the reader to give authority to their predictions and implications of a grievance. The implicit validity of these claims is reinforced by the identification of the addressee as Brawne, someone the poet knows well, and hence would presumably be able to predict the reactions of, rather than an unknown reader. Thus, where taking the audience (or Brawne's) perspective leaves room for the reader to feel unconvinced, displacing one's viewpoint into the persona's perspective absorbs the reader in his conviction.

If the poem is construed as targetless self-expression, then displacement into the persona's perspective constitutes an experience of the poem as affording access to the poet's interiority. Besides the vocal model of lyric as self-consoling song addressed to no one (as in J. S. Mill and T. S. Eliot), the discourse may be construed as the "inner speech" of the poet's thinking.[36] The Hegelian understanding of lyric as subjectivity coming to consciousness of itself is composed by conceiving of the poet's person as a subjectivity and a self, with his subjectivity mapping to the persona and his self as the addressee/audience.[37] While "This living hand," in using both first- and second-person pronouns, clashes with the mappings of self-address, the poem can still be construed in alignment with the expressive model by embedding its discourse within the poet's subjectivity space as a potential speech act that he is imagining.[38] The reader's self-concept is then not activated, but she instead experiences a sense of unguarded access to the poet's subjectivity through absorption in the closed circuit of his expression as an "unconsciousness of a listener," as Mill described poetry's "nature of soliloquy," in contrast to other-directed address.[39]

The performance construals separate the poet's perspective off from the persona, and likewise integrate the reader as a targeted literary audience rather than the addressed "you."[40] Interpretation may then integrate the poem-as-fictional-representation into knowledge of Keats's body of work and his relation to the poetic tradition, perhaps even taking its production as illustrative of Keats's aesthetics and/or symptomatic of his psychology, without taking the poem as making reference to the poet's actual body. Brooke Hopkins, for example, cites Keats's surgical training as the source for the detached images of hands in *The Fall of Hyperion* as well as "This living hand," and reads them, after Freud, as uncanny figures for the castrational 'cutting off' of (authorial) agency/vitality in inscription and/or the 'ends' of death and/or reading.[41] If the reader displaces into the poet's perspective on the poem as such a fictional representation, she is positioned to imagine his artistic intentions and creative decision-making in the process of composition. Though such

perspective-taking violates Wimsatt and Beardsley's prohibition against the intentional fallacy, it is a natural line of inference deriving from this particular perspective-taking.[42] Furthermore, in regarding the poem's situation as a representation rather than as an event, the content affects of its persona and addressee may be backgrounded relative to the aesthetic affects that are experienced by the reader in response to the poem's artfulness.

In the apostrophic address construal, as an alternative to aligning with the poet as the persona, the reader can displace her viewpoint into Brawne's perspective as the addressee. In comparison to the direct address construal, the experience of receiving the address through Brawne's eyes, as it were, foregrounds the implications of grievance and obligation. And yet, aligning with Brawne brings into view the distinction between that addressee perspective as a figure within the base space of the lyric blend and the hypothetical experiences that are predicated of the addressee by the persona. While the semantic and affective simulations the poem prompts the reader to run may populate this imagination of Brawne's experience, one might alternatively imagine her rejecting Keats's projections. In the latter case, absorption in Brawne's perspective motivates a suspicious interpretation of "This living hand" as attempting a manipulative interpellation. Absorption in the same apostrophic address integration thus yields divergent experiences, depending on whether one aligns with Keats's or Brawne's perspective.

Subjectivity Embedding and Dynamic Viewpoint/Focus Shifting as Sources of Intimacy in "This Living Hand"

Beyond identification within address construal, viewpoint alignment provides an experience of absorption in the perspective of one of a poem's persons. A still more elaborate sense of *inter*personal lyric intimacy arises as a result of simulating those persons' perspectives on each other. We can appreciate this empathetic structure within personal absorption by analyzing the poem's content as a network of mental spaces, including subjectivity spaces, that afford multiple options for cognitive focus as well as viewpoint. Where text world theory tracks the modal status of deictic fields as they are built by a discourse, analysis in terms of subjectivities and their viewpoint/focus relations more fully captures the complexity of experiencing literary works as involving (imagined) persons.[43] Even though "This living hand" is a univocal lyric, only giving us the persona's discourse, its predications of capability, being haunted, wishing, conscience, and seeing prompt the construction of multiple subjectivity spaces. These additional subjectivity spaces are variously embedded in the factual base space, the counterfactual space, and as a chain of hypothetical consequences.

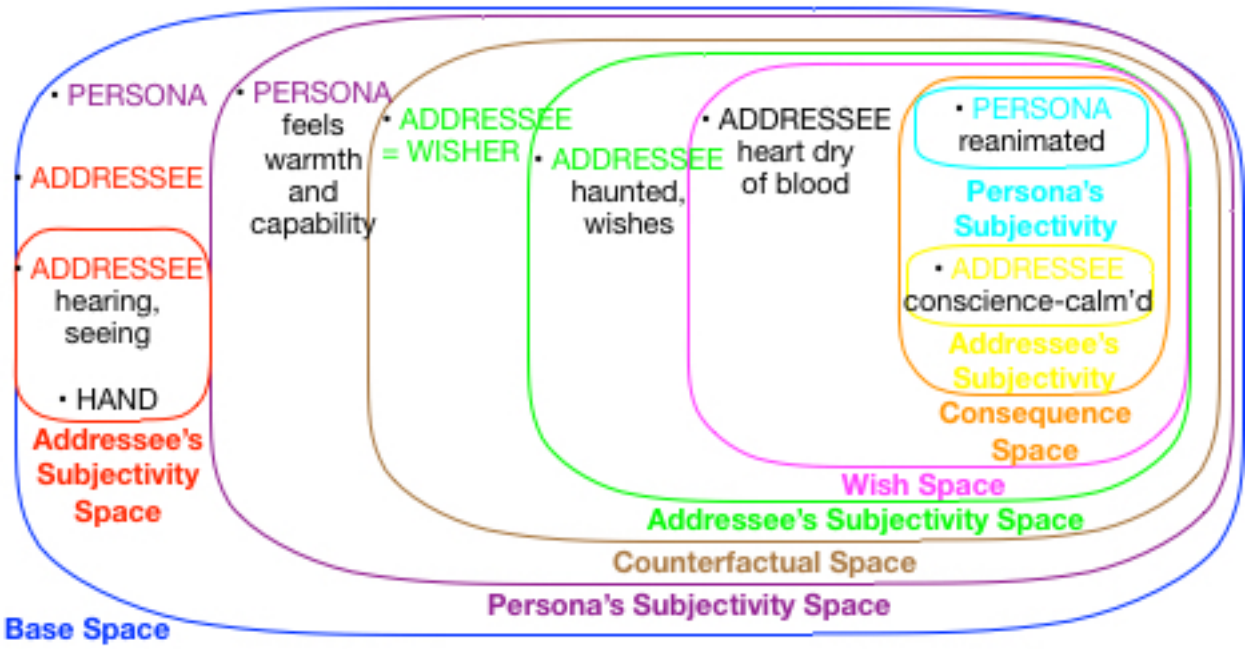

Figure 3.3

In imagining a capability of earnest grasping, the reader may initially align with the persona's subjectivity within the base space as the viewpoint from which that capability is known. However, when the poem describes the addressee's feeling of being haunted, the cognitive act of wishing, and the sense of being "conscience-calm'd" in lines 4-6, it motivates taking that addressee subjectivity (within the counterfactual space) as the viewpoint in which those affective and intentional simulations are active. To the extent that the reader feels hailed by the imperative of the penultimate phrase, "see here it is," she would likewise be drawn into alignment with the addressee as the person thus commanded to subjectively perceive. This phrase's anaphoric return to the proximal present embeds this last addressee subjectivity in the base space rather than the counterfactual spaces. The multiple subjectivity spaces evoked can thus function as a series of focalizations, motivating dynamic shifts in the reader's viewpoint even as the poem's univocality and address construal remain constant.

In the same way that the reader's cognitive viewpoint can displace from her own person and align with other perspectives within the space network, mental spaces theory also holds that her cognitive focus can diverge from her viewpoint space to foreground some other space as focus.[44] The conditional "if it were cold," for example, prompts focus on the counterfactual space from the viewpoint of the factual base space, or the persona's subjectivity within that base space, while the predication of this condition's consequences in turn shifts the focus to each subsequent effect. It is therefore possible that, rather than entailing viewpoint-shifts, the embedded subjectivities evoked by the poem are experienced as focus spaces while the viewpoint remains stable in one of the perspective-taking options enumerated above. This structure—the embedding of another's subjectivity as a focus space within one's own viewpoint—is the viewpoint structure of "theory of mind" and empathy.[45] To take the persona's perspective in "This living hand" is therefore to engage in empathetic imagination regarding the addressee. In turn, the addressee's hypothetical experiences of grief, being haunted, other-benefiting-wishing, and resurrection-caused-calm themselves involve an empathetic focus on the counterfactually-dead persona's subjectivity. Furthermore, to take the

addressee's perspective within the base space is to engage in empathetic imagination of the persona's empathetic imagination of the addressee empathetically imagining the dead persona. Beyond the semantic evocation of an affectionate relationship and intense, mutual emotional investment, these mutually-embedded subjectivity spaces create an experience of intimacy, in which affects resonate as the reader's absorbed viewpoint and/or focus oscillates between both persons' subjectivities.

The lack of any explicit cues to the contrary enables readers to assume that the persona's empathetic imagination is an accurate representation of what the addressee would experience in the hypothetical scenario. However, that the separate addressee subjectivity space is built within the base space affords comparison between the persona's articulated imagination and the silent addressee's own. By taking this last addressee perspective, the reader can engage in negative capability, variously construing the persona's claims as accurate if she too focuses on the hypothetical situation, as a hopeful (though not necessarily accurate) projection if she focuses on the articulated earnest affection, or as a manipulative imposition if she focuses on the final expectation of reciprocation. Again, different absorptive experiences and different interpretations arise depending on which spaces function as viewpoint and focus.

That the poem prompts construction of such a complex network does not necessarily mean that a reader's experience maintains this full complexity. To keep track of all these spaces, and their embedded relationships, is a significant cognitive load. The brain is a physical system that uses up energy in the chemical processes of thinking, which resources are finite. Even though it is a short poem, the multiple embeddings in "This living hand" go beyond the 4-5 'slots' that appear to be the typical limit of working memory.[46] In such a network of multiple embedded spaces, higher-level frames will often "decompose" as one spends more time and devotes more cognitive resources within an embedded viewpoint.[47] Information may also partially decay, and/or spaces and their contents may be combined together into compressed construals that optimize for relevant inferences.

Motivated by the cognitive drive to efficient integration and the explicit cross-space links—especially the hand and the persona/addressee as anaphors across the factual/counterfactual divide—readers' cognitive systems are likely to compress the various spaces together, producing simplified interpretations. The subjectivity space of the addressee in the hypothetical scenario is prone to collapse into the subjectivity of the real addressee; the grief, fear, and guilt projected into that scenario then get understood as actual responses to the persona's implications of mortality, threat, and blame. Likewise, the cause-effect sequence of suffering ending in relief may be transferred from the hypothetical into the real situation as the potential effect, for both the persona and addressee, to come if the final act of offering is reciprocated. With external integration, knowledge that Keats is now dead functions as a bridge for collapsing together the persona's hypothetical death, the non-hypothetical space of the persona's act of communication, and the real world in which the reader reads that communication.[48] (It is this compressed blend that grounds interpretation of the poem's counterfactual scenario as referring to a factual future that has become the actual past, as I explain in my discussion of loco-temporal absorption below.) As social beings, our concerns focus on persons and their relationships, and so it is cognitively optimal to compress overabundant details into an interpretation that foregrounds the situation's interpersonal stakes. Rereading the poem can return us to the fully elaborated simulation, but its "way of happening" is prone to get consolidated as one or another instance of lyric address involving some set of the persons of Keats, Brawne, and/or the reader, as singular perspectives in place of the multiple subjectivities those persons contain. My aim, however, has been to articulate the full experiential richness and dynamism possible in personal absorption, beyond its natural consolidation in reflective interpretation.

Presence, Transport, and Fictionality as Loco-Temporal Absorption

Like personal absorption, loco-temporal absorption involves extended integration that relates the poetic text to some external context(s). Rather than the discourse's participants, its roles comprise the place(s) and time(s) of the poem's event(s), which are construed in relation to the here and now of the reader's situation of reading, other places and/or times in the real world, or an imagined fictional world. Susan Wolfson articulates some dimensions of these dynamics with regard to "This living hand": "The reader has to imagine the present as past, … the actual as spectral, and the spectral as actual."[49] Literally, all simulation occurs in the brain of the reader, who is embedded in her particular time and place of reading; but, in the same way that a reader may displace her cognitive viewpoint from her own self, she can likewise displace from identification with her present place and time of reading, her attention absorbed instead in the cognitive location of some other place and time.[50] While this other place and time could, in imagination, be anywhere and at any time, its identification is motivated by the text itself; for example, linguists refer to the "coding time" and "decoding time" of a discourse as inherent deictic dimensions, and it is as natural to construe a text as referring from the deictic center of its time of writing as from the time of reading.[51] Furthermore, in the same way that grammatical person motivates specific discourse relationships, which for example might be identified with the poet and members of his or her historical milieu, features like verbal tense and the imagery of a diegetic scene may prompt construal of text at a (more or less) specific time and place, whether a real experience of the writer, or some other actual or fictional situation.

The lyric blend described above clarifies how these variant absorptive experiences can arise from the same text. Typical lyric poems, in using the present tense, proximal spatial deixis, and address that suggests the persona and addressee are present to each other, motivate projection of a singular loco-temporal context from the spoken communication input frame into the lyric blend. Thus, in contrast to narration, which conventionally uses the past tense to mark a distinction between the context of the discourse and the context of the diegetic events embedded as the content of that discourse, lyric poetry typically embeds its speech act within a diegetic world.[52] Beyond the minimal specification that the persona and addressee are co-located, however, where and when the speech act is understood as happening is typically left open to construal. The various mappings between the lyric blend and the places and times of the written communication frame, then, constitute the variant experiences of loco-temporal absorption as presence, transport, and/or fictionality.

An experience of presence results from the integration of the lyric event into the reader's place and time of reading. From a dis-absorbed perspective, of course, the poetic text is indeed actually present; but through absorption in the lyric blend, the visual experience of the text is backgrounded out of attention, and its discourse is construed as a speech act occurring in the reader's current situation, rather than as writing on the page. (Such construal of the text as present speech is further motivated by the vocal and perceptual dimensions of absorption, as I explain in Chapter 5.) Keats's "This living hand," in using the proximal deictics "This," "now," and "here," refers to a loco-temporal context present to the persona; it also implicates that the addressee, in having the ability to resolve those references, as well as to perceive the hand and to be its spatial target ("see here it is— / I hold it towards you"), is present in the same context.[53] These features therefore motivate experiencing the poem as if Keats were in the room speaking to you right now. In seeming to refer to the reader's here and now, the poem construed as present motivates integration of the reader herself as either the persona or addressee. Furthermore, because the reader's here and now is part of the real world, a sense of presence also motivates construal of the reader's interlocutor as someone real. From the addressee perspective, then, the reader is prone to

experience the poem as Keats presently addressing her—or, alternatively, she might substitute someone from her own life as the persona, perhaps someone she is presently in a relationship with or whom she wishes would offer a declaration of affection. From the persona perspective, she may imagine herself speaking the discourse as an expression of her own feelings towards some target of her current emotional investments. Whatever the address construal, by integrating the poem's way of happening into the context of the reader's present life, loco-temporal presence should increase the strength of its vector effects in modifying the structures of thought and feeling that she applies to her life.

By instead embedding the lyric event in some distant place and/or time, an experience of transport may diminish the degree of resonance, and hence relevance, of the poem to the reader's present life. That is, the vector effects will primarily apply to her conceptions of that other place and time. In "This living hand," the archaic *thou* forms, together with any knowledge about the text's provenance, motivate for modern readers to construe the time of its speech act as occurring in the past. One might integrate external frames, such as a memory of England or of the Keats-Shelley Memorial House in Rome, to imagine a specific place for that speech act's (and/or act of composition's) location; or, alternatively, the reader's current location may simply be inhibited without anywhere specific filling the place role. With her viewpoint displaced to this past situation, the reader can experience "overhearing" the discourse as Keats's self-expression, actually spoken aloud or, by being located within his subjectivity, silently thought. This outward or inner speech may then be imagined as a soliloquy accompanying the act of writing the poem (mapping the writing scene in the written communication input with the spoken communication input), or as a (presumably counterfactual) address to Brawne. Thus, through loco-temporal absorption, the reader can not only interpret the poem as referring to historical persons, but may have an imagined experience of being transported to a historical event—even if, in the case of imagining the discourse as an actual speech by Keats to Brawne, that event likely never happened.

In imagining the lyric event as fictional rather than historical, the reader construes its place and/or time as being partitioned from her cognitive representations of the real world. As in the case of reading "This living hand" as a counterfactual speech by Keats to Brawne, or as lines for a play about the Earl of Leicester and Queen Elizabeth, the fictional event may still be construed as involving real persons and as occurring in some past time, and so may still involve a sense of loco-temporal transport. Alternatively, the poem-as-fiction may be reified as an event unto itself, its place and time present and the same in each instance of reading. It is this blend that grounds theoretical concepts of a "lyric present" that is "timeless" or in a space "outside" of historical time.[54] The poem then becomes either a reification of Keats's voice, like a recording's singular performance replayed with each reading, or its persona, too, may be reified into an agency unto itself, as in Jonathan Culler's theory of the "lyric I" as the "subject of enunciation" and of lyric temporality as "a *now* of discourse, of writing … a fictional time in which nothing happens but which is the essence of happening."[55] Though the fictional world is experienced as if in a place and/or time outside the real world, the experience itself remains constituted in the reader's brain, and so can still have vector effects. On the one hand, a construal of timeless presence may enhance one's sense of a poem as always-available "equipment for living." On the other hand, however, conceptual integration into a fictional world, rather than the real world, means that vector effects would primarily integrate into the reader's concepts about literature (as the world of fictional worlds). Component schemas would still be modified by the process of simulating the fictional world, but application of this thematic way of happening to the real world will depend on intentional recall and interpretation. While fictionality is a matter of construal within the brain rather than a truly separate ontological space, that cognitive distinction does inflect a literary experience's transferability.

Elaboration of Loco-Temporal Absorption through Blending and Viewpoint/Focus Dynamics

While a lyric poem may only comprise a single discursive event, the internal structure of its discourse may comprise multiple spaces, which multiplicity affords further complication of loco-temporal construal through internal and external integration as well as through dynamic viewpoint/focus variations. As I've diagrammed above, the middle lines of "This living hand" describe a hypothetical scenario that entails the construction of a sequence of counterfactual spaces. Though this hypothetical scenario is articulated as a present alternative to the factual situation, its evocation of the death frame motivates an integration with the life frame that structures the factual space, such that the hypothetical may naturally be re-construed as an expected future within the factual world, rather than as a counterfactual world. The lyric blend is then constituted as containing multiple temporal spaces, one of which contains the persona in the act of articulation, while in the other, relatively future spaces, the persona is dead and then (counterfactually) resurrected. Though the present declarative mood of "see here it is— / I hold it towards you" implicates a return from the subjunctive/future scenario to the factual present, it's also possible to blend this final space with other earlier spaces, such that the act of presentation is construed as occurring either after the persona's death or after his resurrection, experienced as a gesture of the (un)dead rather than living hand. The final space can then also blend with the first space of the hypothetical scenario in which the dead hand "so haunt[s]" the addressee. Through such temporal re-construal and blending, the poem's factual/counterfactual comparison can turn into a causal loop with a slippery slope, in which the ending's present becomes the first step in the already-narrated chain of future events.

The poem's internal elaboration is complicated still further by extended integration with external time-frames. Whereas the discourse as a singular speech act is either absorbed as present to the reader or absorbs the reader as her target of transport, the subdivision of the poem's temporality affords the possibility of an experiential disjunction between the loco-temporal viewpoint and focus. If the poem's present is integrated with the reader's past, and its future with her present, then the poem constitutes an experience of the persona impossibly speaking across time.[56] Within this blend, the reader's viewpoint may remain in the context of her reading while she takes the past as her focus, such that she construes the lyric event as her present hearing of the once living Keats.[57] Alternatively, if she displaces her viewpoint, the reader can take Keats's perspective as he proleptically speaks into the future—whether to her present as the focus, or to Brawne within an intermediate time-frame that is future to the poem but past to the reader. Such displacement from a situation where the poet is dead to a time when he was alive, imagining his future death, is "touching and pathetic," as Lipking describes, its loco-temporal distribution of affects akin to the present=sad / past=happy structure of nostalgia. The poem's speech act can also be re-integrated into a time *after* Keats's death, such that loco-temporal absorption constitutes an uncanny experience of the poet speaking from the grave, as Brooke Hopkins has suggested, or from some posthumous world beyond it.[58] Whatever the viewpointing, the blending of the poem's counterfactual spaces with a space representing the reader's factual world motivates taking the persona's claims about the addressee as valid.[59] That is, the consequences of the "if" in "if it were cold…" end up being construed as actualized events rather than hypothetical propositions, such that the haunting and wish to self-sacrificially resurrect experientially come true in the same way that the death of the poet has historically come true.[60]

These construals of lyric speech across time can also blend with the written communication frame, which of course is available for integration as an input to the lyric blend and is specifically evoked by the metonymic implication of "hand" as handwriting. The simplest option in this case is an epistolary, rather than lyric, construal, where the full structure of the written communication

frame, including separate loco-temporal spaces for the event of writing and the event of reading, is projected into the lyric blend.[61] An epistolary construal is highly appropriate for a poet who was also a frequent letter-writer; Keats even expressed a particular interest in imagining the perspective of writers in the act of writing—both regarding his epistolary interlocutors and his literary forebears.[62] Though there might seem to be *no* absorption when one treats the text as writing, the identification of the writer and reader with the discourse roles and extra-textual person-concepts still depends on extended integration, and multiple options remain for viewpoint/focus alignment within the epistolary blend. The reader may maintain the viewpoint of her present situation of reading, and yet absorptively focus on the imagined event of Keats's living hand writing a manuscript, rather than the printed text before her eyes. She may displace her viewpoint into taking Keats's loco-temporal perspective, focusing on the manuscript before him, on his imagination the hypothetical situations that the poem describes, or on the addressed future reader of his poem.[63] Or she may connect the loco-temporal space of reading to Brawne as the addressee, forming a blend that represents the event (presumably counterfactual, given that the fragment was not published until 1898, after Brawne's death) of Brawne's past reading of the poem. Within this Brawne-as-reader construal, one may focus on Brawne from the reader's present, take Keats's viewpoint writing and imagining Brawne's future reading of the poem, or take Brawne's viewpoint sometime between 1821 and 1865 focusing on imagining Keats writing in the past relative to her.[64] Finally, the epistolary construal's inclusion of the written text enables a mapping of that text to the persona in place of Keats=writer, such that it is the handwriting rather than the hand-as-Keats that is experienced as exerting agency. It is this integration that grounds theoretical conceptions of the "lyric I" as a reified "subject of enunciation" as articulated by Jonathan Culler, (after Käte Hamburger) in his *Theory of the Lyric*.[65] But as "This living hand" demonstrates, while a poem can be understood as an epideictic discursive performance, acting through its being read, treating a lyric as writing rather than speech still involves multiple options for loco-temporal as well as personal absorption.

Indeed, Keats's poem is remarkable in including features and evoking structures that variably motivate the lyric blend's full range of address and loco-temporal construals of the text as speech, while paradoxically also implicating its status as writing. It thus prompts a further blend of the speech act construals with the epistolary construals, creating a metalyric megablend. Which version of the discourse, as speech or text, is foregrounded in the course of the reading experience then depends on the movement of the reader's viewpoint and focus through the spaces of this megablend. Susan Wolfson describes this negative capability in brief:

> The hand is both somatic and scriptive. How can we know the hand writing from the handwriting? A warm living hand becomes a cold dead hand, then handwriting coolly handed to us. … Keats's lines conjure the present of writing into the future of reading…. Twice-told, this *it* grabs all the referents in the poetic field: living hand, cold hand, writing hand, handwriting.[66]

That is, as I have shown in the individual analyses above, the polysemy of "hand" and ambiguous referentiality of "it" afford a polytemporality, mapping the loco-temporal spaces of writing, speech act, hypothetical death, actual death, and reading to one another. This network of available perspectives can then host a dynamic reading experience, as Timothy Bahti narrates in analyzing the poem's ambiguities and indeterminacies as a series of referential contradictions, which I re-describe below as shifts of viewpoint and focus:

> The poem insists … that "hand" be read initially [IN THE LYRIC SPEECH BLEND] as "living," "warm and capable / Of earnest grasping," against which sense the lines then pose

> an opposite instance that the reader is invited to imagine: the cold, dead hand, "in the icy silence of the tomb." But then it closes with "See here it is— / I hold it towards you." Is "it" the living hand, or the dead one? It is the living hand [IN THE PLACE/TIME OF WRITING] turned dead [IN THE TIME OF READING], written as dead in the poem's proleptic narrative, and "it"—the two letters of the neuter pronoun—is the *handwriting*, or "hand," of the "living hand": "it," and the whole text of "This living hand…." This dead or written hand, then, comes before us [FOCUSING ON THE PLACE/TIME OF READING] declaring itself "living" in the first line, and from our necessity of reading it as living it enacts its proleptic wish: that the reader(s) pour life into the "entombed" tomb of text so that it might live "again," as meaningful representation. The "living hand" thus *appears* as living, writes itself into death or script, to reemerge as the *handwriting* it already was, only reanimated now as the *figure* of the hand: not a real hand, but a representation of a hand via handwriting.
>
> But now, if one reads the poem through "again" [WITH VIEWPOINT AND FOCUS IN THE PLACE/TIME OF READING] … the opening "living hand" is understood as an entombed script or text that is "living" only to the extent that it is animated by the reader's understanding, in accordance with the poem's narrative. But from this "second" perspective, the poem yields a "See here it is—I hold it towards you" in which the problem is not the "it" (we know it is the written hand) but the "I." The first time through, the "I" could be thought to be Keats or at least some persona writing, to whom the "living hand" is connected even as it writes itself into its disconnected or dead mode: handwriting. But this time around, however, "This living hand" is handwriting alive and warm only [THAT IS, METAPHORICALLY, IN THE PLACE/TIME OF READING] because it is read—it is "capable / Of earnest grasping" only because the reading seeks to "grasp" or com-prehend it. So too "*my* veins" are already [MAPPED FROM THE LYRIC SPEECH BLEND AND/OR THE PLACE/TIME OF WRITING TO] the text's lines, reanimated with the blood of meaningfulness. The "I" is therefore also arrived upon as dead, as script, and yet the text "speaks" here [IN THE LYRIC SPEECH BLEND, PRESENT TO THE PLACE/TIME OF READING]: "I." From this dead hand and its vamping [BLEND-CONSTRUED] "speech," precisely because it is still being read, the reader is enjoined to read still, and this time he "gives blood"—meaning—to the textually productive persona ("I") through a necessary misreading: the "I" is revived as living, as capable of writing the beginning, "This living hand," in the "first" place [THAT IS, IN THE PLACE/TIME OF WRITING, RETURNED TO AT LEAST AS FOCUS, PERHAPS ALSO AS VIEWPOINT]. Thus the reader returns to the beginning of the "first" reading, to the *living* hand "living" (again) to write itself into death (handwriting), to be read as such, and then to be misread back into life.[67]

However, while, as Bahti illustrates, the poem certainly prompts us to take its scenario as a figure for the relationship between writer and reader as mediated by the text, we should be careful of uncritically absorbing that figuration. Yes, personal absorption can take the form of an imagined reanimation given by the reader unto the writer in reaction to the haunting written trace. But the reader can also bring the poem to life in multiple other ways, including by bringing it into her own life, for there is no one right way to read a lyric. The text is an offer rather than a demand or threat; the negative capability the reader experiences is the limit of the projective agency of the poet/persona, as well as its effect.

Furthermore, though absorption can involve "losing our empirical lives" in the sense of displacing from one's self, place, and/or time, that imagined animation is a *gain* of experience, not its

death. It enables one to have meaningful relationships with the dead and the fictional, and to bridge gaps of space and history to enter vicariously into others' lives.[68] The reader is filled, not drained, by giving her subjectivity to the persons and events of literature, as those persons and events populate her brain with models of being and ways of happening. Beyond absorption in one or another specific experience, the reader's exploration of the multiple alternatives constitutes a metalyric network, where the various spoken and written construals are integrated together without being compressed into any one blend or interpretation. Through this metalyric experience, readers can come to recognize the intricacies of personal and loco-temporal absorption and appreciate that there is no one right way to read a lyric poem. More specifically, by taking up a series of different construals and different perspectives within those construals, readers can enrich their interpretation of the core situation, such that the components that are integrated into those simulations—affection, love, desire, grief, guilt, mortality, hand-holding, speech, writing, Keats, Brawne, Romantic poetry, the carpe diem genre, the lyric, one's own present life—become more strongly interconnected with each other, complicating each other and making the poem's ways of happening into rich cognitive resources available for future use in diverse evoking contexts. The practice of exploring such poems may also develop negative capability itself as a skill and/or habit that can be applied to happenings in one's life that do not evoke a specific poem's components. Beyond claims that reading literature may cultivate "theory of mind" as a general capability, navigating the options of personal and loco-temporal absorption in lyric poems may develop one's habits of considering events' features, meanings, and resonances from multiple perspectives and contexts, to see both what immediate values, and what resources for future thinking, feeling, and acting, the varying construals of those events might afford.

Notes

[1] Kenneth Burke, "Literature as Equipment for Living," in *Philosophy of the Literary Form: Studies in Symbolic Action*, 3rd ed. (Berkeley: University of California Press, 1973), 293-304.
[2] Lawrence Lipking, *The Life of the Poet: Beginning and Ending Poetic Careers* (Chicago: University of Chicago Press, 1981), 181. While acknowledging absorption, Lipking positions his criticism from a non-absorbed perspective, seeking to determine a 'best' interpretation rather than accept the multiplicity of experience and indeterminacy of construal; see also Andrew Bennett's description of readers' negotiations and shifts between the "literal" and "figurative" "logic[s]" of the poem's statements as truth-claims, in which absorption in the poem would seem to be equated with the reader's death ("'This living hand' lives through the death of its audience."). Andrew Bennett, *Keats, Narrative and Audience: The Posthumous Life of Writing* (Cambridge: Cambridge University Press, 1994), 11-12, 151.
[3] William Waters, *Poetry's Touch: On Lyric Address* (Ithaca: Cornell University Press, 2003), 118.
[4] John Keats, *Keats's Poetry and Prose*, ed. Jeffrey N. Cox (New York: W. W. Norton and Company, 2009), 378.
[5] Mark J. Bruhn, "Place Deixis and the Schematics of Imagined Space: From Milton to Keats," *Poetics Today* 26.3 (2005): 388-9.
[6] Walter Jackson Bate, *John Keats* (Cambridge: Harvard University Press, 1963), 626.
[7] Memories are not stored, self-contained objects that get retrieved—they are cascades of neural activation that get partially consolidated together such that a similar cascade can be reactivated later, its structure an interaction between the consolidation network and the structures of its components, which may have been modified in the interval between consolidation and reactivation. For a brief overview, see Larry R. Squire and John T. Wixted, "Remembering," *Daedalus* 144.1 (2015): 53-66.
[8] Virginia Jackson and Yopie Prins, eds., *The Lyric Theory Reader: A Critical Anthology* (Baltimore: Johns Hopkins University Press, 2014).
[9] Construal of text as speech is also motivated, at the semantic level, by explicit or implicit evocation within lyric poems of speech or song as a medium, at the neural level by the articulatory and auditory simulations that accompany reading (as I explain in my theory of vocal absorption in Chapter 5), and/or by features functioning as markers of genre, evoking the reader's expectations and reading habits for poetry, lyric poems, and/or other (sub-)genres. At the same time, of course, a poem's existence as text, and other features such as being titled, lineated, and (potentially) rhyming, may de-motivate its construal as speech. Attention to such artifice is then disabsorptive with regard construal of the lyric event as a speech act, though it may encourage absorption instead in the lyric event as the writer's act of composition, where textual devices are an appropriate focus of attention. See Charles Bernstein, "The Artifice of Absorption" in *A Poetics* (Cambridge: Harvard University Press, 1992), 9-89.
[10] Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002), 211.
[11] I am simplifying the contents of these inputs for the sake of focusing on just those components that are involved in personal absorption. A more complete analysis of the spoken communication frame is represented by the Basic Communicative Spaces Network in José Sanders, Ted Sanders, and Eve Sweetser, "Causality, Cognition and Communication: A Mental Space Analysis of Subjectivity in Causal Connectives," in *Causal Categories in Discourse and Cognition*, ed. Ted Sanders and eve Sweetser (Berlin: Mouton de Gruyter, 2009).

[12] This is T. S. Eliot's "second voice" of poetry, "the poet addressing an audience, whether large or small"—though Eliot clarifies that a love poem, for example, "though it may be addressed to one person, is always meant to be overheard by other people." T. S. Eliot, "The Three Voices of Poetry," in *On Poetry and Poets* (London: Faber and Faber, 1957), 89-90. See also Rene Wellek and Austin Warren, *Theory of Literature* (New York: Harcourt, Brace and Company, 1948), and W. R. Johnson, *The Idea of Lyric: Lyric Modes in Ancient and Modern Poetry* (Berkeley: University of California Press, 1982).

[13] See, for example: John Stuart Mill, "What Is Poetry?" in *Essays on Poetry*, ed. F. Parvin Sharpless (Columbia: University of South Carolina Press, 1976), 3-22.

[14] G. W. F. Hegel, *Hegel's Aesthetics*, trans. T. M. Knox (Oxford: Oxford University Press, 1975).

[15] See, for example: Eliot, "The Three Voices of Poetry"; Northrop Frye, *Anatomy of Criticism* (Princeton: Princeton University Press, 1957).

[16] The generic space omitted from this diagram would comprise either an abstract frame of linguistic production and reception or the "conduit metaphor" specifically, in which communication is understood as the transfer of contents (ideas) via the transfer of their containers (words). See Michael J. Reddy, "The Conduit Metaphor: A Case of Frame Conflict in our Thoughts about Language," in *Metaphor and Thought*, edited by Andrew Ortony (Cambridge: Cambridge University Press, 1979), 284-324; George Lakoff and Mark Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980), 10-13; Joe Grady, "The 'Conduit Metaphor' Revisited: A Reassessment of Metaphors for Communication," in *Discourse and Cognition: Bridging the Gap*, ed. Jean-Pierre Koenig (Stanford: CSLI Publications, 1998), 205-18.

[17] See, for example: Cleanth Brooks and Robert Penn Warren, introduction to *Understanding Poetry: An Anthology for College Students* (New York: Henry Holt and Co., 1938), 1-25; Reuben A. Brower, "The Speaking Voice," in *The Fields of Light: An Experiment in Critical Reading* (Oxford: Oxford University Press, 1951), 3-16; W. K. Wimsatt and Monroe C. Beardsley.,"The Intentional Fallacy," in *The Verbal Icon: Studies in the Meaning of Poetry* (Lexington: University of Kentucky Press, 1954), 3-18; Barbara Herrnstein Smith, *Poetic Closure: A Study of How Poems End* (Chicago: University of Chicago Press, 1968), 14-20; Barbara Herrnstein Smith, *On the Margins of Discourse: The Relation of Literature to Language* (Chicago: University of Chicago Press, 1978).

[18] See, for example: Helen Vendler, "*Tintern Abbey*: Two Assaults," *Bucknell Review* 36.1 (1992): 173-90; Helen Vendler, introduction to *The Art of Shakespeare's Sonnets* (Cambridge: Harvard University Press, 1997).

[19] See, for example: Jonathan Culler, *Theory of the Lyric* (Cambridge: Harvard University Press, 2015). On the role of "target," see Stephen C. Levinson, *Pragmatics* (Cambridge: Cambridge University Press, 1983), 61-73. Within linguistics, even more roles are differentiated in the pragmatics of speech: speaker, source, recipient, target, hearer, and addressee; see Peter Stockwell, *Cognitive Poetics: An Introduction* (London: Routledge, 2002), 49. Waters, *Poetry's Touch*, likewise notes the importance of being able to differentiate between addressee and target, while Culler's theorization of the lyric as *epideixis*, expanding on his earlier work on apostrophe, is centered on identifying readers as targets rather than addressees.

[20] Tad T. Brunyé, Tali Ditman, Caroline R. Mahoney, Jason S. Augustyn, and Holly A. Taylor, "When You and I Share Perspectives: Pronouns Modulate Perspective Taking During Narrative Comprehension," *Psychological Science* 20.1 (2009): 27-32.

[21] Lipking, *The Life of the Poet*, 182.

[22] Compare Waters' disabsorbed interpretation of this shift: "The change from 'thou' to 'you' has baffled critics. But it is another element of the poem's gradual revelation that the living reader is

implicated: where *thou* is poetical, *you* was for Keats the address to a contemporary, 'outside' of literature—as a glance at his letters makes clear." Waters, *Poetry's Touch*, 148.

[23] Such reflection is also be possible in the non-absorbed construal of the poem as a fictional representation, but it requires mapping from the simulation of the text to the reader's life as an additional interpretive step.

[24] Waters, *Poetry's Touch*, 163.

[25] "Though it can never finally be said when these lines were written, their tone is like his letters to Fanny Brawne before his second haemorrhage." Robert Gittings, *John Keats* (London: Henemann Educational Books Ltd, 1968), 403.

[26] Human cultures include many instances of representation, whether in the form of objects, performative imitation, or simple quotative utterances; whether the concept of representation is innate, learned as a cognitive primitive, or as a frame, the ability to differentiate representations from identities is evident from childhood (perhaps cognitively achieved by partitioning / decompressing one activation-cascade from earlier, similar cascades). Typically, when we watch a play or movie, the cross-space representation link between the actor (in the performance space) and character (in the diegetic space) gets compressed to uniqueness in the drama blend. When we are absorbed, taking the blend as viewpoint and focus, the actor's speech *is* the character's speech, her actions *are* the character's actions, etc. Of course, we can also disabsorb from the blend—for example, evaluating the skill of the actor's portrayal in focus in the blend from the viewpoint of the performance space, or discussing the sense one gets of the character in focus in the diegetic space as a result of some mannerism from the viewpoint of the blend, etc. Fauconnier and Turner provide the following example: "The spectator can decompress the blend to recognize outer-space relations between these input spaces, as when we notice that the actor has not quite got the accent right or Hamlet trips over the stage lights. But the power of drama does not come from these outer-space connections…. The power comes from the integration in the blend. The spectator is able to live in the blend, looking directly on its reality." *The Way We Think*, 97-98, 266, and *passim*. For an extended discussion of the conventions of dramatic performance, see Erving Goffman, "The Theatrical Frame," in *Frame Analysis: An Essay on the Organization of Experience* (Boston: Northeastern University Press, 1986).

[27] Lipking, *The Life of the Poet*, 181.

[28] Such "situational empathy" may the theoretically differentiated from "categorical empathy" motivated by a shared categorical social identity. Patrick Colm Hogan, "The Psychology of Colonialism and Postcolonialism: Cognitive Approaches to Identity and Empathy," in *The Oxford Handbook of Cognitive Literary Studies*, ed. Lisa Zunshine (Oxford: Oxford University Press, 2015), 329-46; Suzanne Keen, *Empathy and the Novel* (Oxford: Oxford University Press, 2007); Patrick Colm Hogan, *Cognitive Science, Literature, and the Arts: A Guide for Humanists* (New York: Routledge, 2003); Patrick Colm Cogan, "The Epilogue of Suffering: Heroism, Empathy, Ethics," *SubStance* 30 (2001): 119-43. Cf. Adam Smith's *The Theory of Moral Sentiments*, originally published in 1759.

[29] Helen Vendler's articulations of script-for-performance models of lyric reading are an exception, though Vendler is more interested in absorption in the speaker role as a way of imagining the subjectivity of the persona and/or poet than as an integration into one's personal life. Vendler, introduction to *The Art of Shakespeare's Sonnets*. Relating a text to one's own life is very natural, a valuable affordance of cognitive integration as a mechanism for relating present experiences to non-present ones; expert critics in fact likewise engage with texts in terms of "relatability"—or, in my theorization, integratability—they just tend to relate texts to a literary tradition, historical context, or other domain of sanctioned scholarly knowledge, rather than to their personal life.

[30] See George Lakoff and Mark Johnson, "The Self," *Philosophy in the Flesh: The Embodied Mind and Its Challenge to Western Thought* (New York: Basic Books, 1999), 267-89.
[31] Eve Sweetser, "Introduction: Viewpoint and Perspective in Language and Gesture, from the Ground Down," in *Viewpoint in Language: A Multimodal Perspective*, ed. Barbara Dancygier and Eve Sweetser (Cambridge: Cambridge University Press, 2012).
[32] Antonio Damasio, *The Feeling of What Happens: Body and Emotion in the Making of Consciousness* (San Diego: Harvest, 1999), 171-6 and passim. Cf. Fauconnier and Turner's discussion of the production via blending of a sense of the character/identity/essence of other persons. Fauconnier and Turner, *The Way We* Think, 249-55.
[33] For more on social identity and self-categorization theories, see: Eliot R. Smith and Gün R. Smith, "Situated Social Cognition," *Current Directions in Psychological Science* 16.3 (2007): 132-5; Rina S. Onorato and John C. Turner, "Fluidity in the Self-Concept: The Shift from Personal to Social Identity," *European Journal of Social Psychology* 34.3 (2004): 257-78; Craig McGarty, "Stereotype Formation as Category Formation," in *Stereotypes as Explanations: The Formation of Meaningful Beliefs about Social Groups*, ed. Craig McGarty, Vincent Y. Yzerbyt, and Russell Spears (Cambridge: Cambridge University Press, 2002), 16-37; Craig McGarty, *Categorization in Social Psychology* (London: Sage, 1999); John C. Turner and Rina S. Onorato, "Social Identity, Personality, and the Self-Concept: A Self-Categorization Perspective," in *The Psychology of the Social Self*, ed. Tom R. Tyler, Roderick M. Kramer, and Oliver P. John (Mahwah, NJ: Lawrence Erlbaum, 1999), 11-46; Eliot R. Smith, "What do Connectionism and Social Psychology Offer Each Other?" *Journal of Personality and Social Psychology* 70.5 (1996): 893-912; John C. Turner, Penelope J. Oakes, S. Alexander Haslam, and Craig McGarty, "Self and Collective: Cognition and Social Context," *Personality and Social Psychology Bulletin* 20.5 (1994): 454-63; Rupert J. Brown and John C. Turner, "Interpersonal and Intergroup Behavior," in *Intergroup Behavior*, ed. John C. Turner and Howard Giles (Chicago: University of Chicago Press, 1981), 33-65.
[34] Waters' *Poetry's Touch* is illustrative of the restriction that results from reifying the analogue of address, as when one does not have the ability to analyze in terms of neurocognitive construal. Waters' book is an excellent exploration of the dynamics of absorption, clarifying multiple ways that reader viewpoint is affected, but not wholly determined, by complexities of imagery as well as pronominal address; yet his investment in a figure of address as "touch" and "contact" necessitates that writer/speaker and reader remain distinct entities (even while collapsing the distinctions of time and mortality to allow for touch), so that his account, while compelling and generally committed to the multiplicity of construal, forecloses possibilities of experiential alignment, resonance, and vector effects of extended integration, that occur via viewpoint displacement.
[35] Cognitive linguistic theories of irony, for example, posit the displacement of the reader's viewpoint from the discourse's perspective and the construction of a new, "higher" viewpoint as the for the construal of implied ironic meaning. Vera Tobin and Michael Israel, "Irony as a Viewpoint Phenomenon," in *Viewpoint in Language*, ed. Dancygier and Sweetser, 25-46.
[36] See Mill, "The Two Kinds of Poetry" in *Essays on Poetry*, ed. Sharpless, 28-43, as well as Mill, "What Is Poetry?"; Eliot, "The Three Voices of Poetry."
[37] Hegel, *Hegel's Aesthetics*; Lakoff and Johnson, *Philosophy in the Flesh*, 267-89; Fauconnier and Turner, *The Way We Think*, 255-8.
[38] See Kendall Walton, "Thoughtwriting—in Poetry and Music," *New Literary History* 42 (2011): 462-66.
[39] Mill, "What is Poetry?," 12. Experiences of expressivity and access to interiority may also comprise "compression of vital relations" in blending the written communication and spoken communication

frames, both within and across the input spaces. In Mill's and Hegel's overheard self-expression models, feeling (the contents of the poet-speaker's subjectivity space) has a cause-effect link to the poem's imagery (the contents of the discourse and diegetic spaces). The lyric blend then compresses this cause-effect link, so that the discourse and content imagery are not only effects of the poet's feelings, but *represent* those feelings. This relation of representation may compress further to become contiguity—that a poem contains feelings—or identity—that it *expresses* feelings and the poet's subjectivity—and even a uniqueness link, in the conception of a lyric poem's "substance" as subjectivity/feeling. The analyses here and in the preceding paragraphs exemplify the neurocognitive grounding of the "subjectivity effect." See Joel Fineman, *The Subjectivity Effect in Western Literary Tradition: Essays toward the Release of Shakespeare's Will* (Cambridge: MIT Press, 1991). Cf. Fauconnier and Turner's discussion of the "Eliza effect," and of "intentionality" as a protypical cause-effect relation which often gets recruited and compressed in blending. *The Way We Think*, 5, 100-1, and *passim*.

[40] See the discussion by Anne Ferry (and by Waters, of Ferry) of the performative split between an apostrophized/dramatic "you" and the target literary audience in Marvell's "To His Coy Mistress." Anne Ferry, *The Title to the Poem* (Stanford: Stanford University Press, 1996), 123-4; Waters, *Poetry's Touch*, 28.

[41] Brooke Hopkins, "Keats and the Uncanny: 'This Living Hand,'" *The Kenyon Review* 11.4 (1989): 28-40.

[42] Wimsatt and Beardsley,"The Intentional Fallacy."

[43] Cf. Marcello Giovanelli, *Text World Theory and Keats' Poetry: The Cognitive Poetics of Desire, Dreams and Nightmares* (London: Bloomsbury, 2013), 186-202.

[44] Mental spaces theory defines the focus space as the space in which new information is being added, while the viewpoint space is the space from which the focus space is being accessed. Predication in the past tense, for example, builds information in a past space as focus, separate from the viewpoint of the present space. Gilles Fauconnier, *Mappings in Thought and Language* (Cambridge: Cambridge University Press, 1997), 49.

[45] I consider the intricacies of empathic relations between textual figures in Chapter 4. For introductions to social neuroscience accounts of mentalizing and empathizing, see: Jamil Zaki and Kevin Ochsner, "You, Me, and My Brain: Self and Other Representations in Social Cognitive Neuroscience," in *Social Neuroscience: Toward Understanding the Underpinnings of the Social Mind*, ed. Alexander Todorov, Susan Fiske, and Deborah Prentice (New York: Oxford University Press, 2011), 14-39; Olga Klimecki and Tania Singer, "Empathy from the Perspective of Social Neuroscience," in Jorge Armony and Patrik Vuilleumier, eds., *The Cambridge Handbook of Human Affective Neuroscience* (Cambridge: Cambridge University Press, 2013), 533-49; Jamil Zaki and Kevin Ochsner, "Empathy," in *The Handbook of Emotions*, 4th ed., ed. Lisa Feldman-Barrett, Michael Lewis, and Jeannette M. Haviland-Jones (New York: Guilford Press, 2016), 871-84; Katrin Preckel, Philipp Kanske, and Tania Singer, "On the Interaction of Social Affect and Cognition: Empathy, Compassion and Theory of Mind," *Current Opinion in Behavioral Sciences* 19 (2018): 1-6; Abigail A. Marsh, "The Neuroscience of Empathy," *Current Opinion in Behavioral Sciences* 19 (2018): 110-15.

[46] Nelson Cowan, "The Magical Number 4 in Short-Term Memory: A Reconsideration of Mental Storage Capacity," *Behavioral and Brain Sciences* 24.3 (2001): 8-114; Earl K. Miller and Timothy J. Buschman, "Working Memory Capacity: Limits on the Bandwidth of Cognition," *Daedalus* 144.1 (2015): 112-22.

[47] Stockwell, *Cognitive Poetics*, 49. See also Norman A. Holland, "*Don Quixote* and the Neuroscience of Metafiction," in *Cognitive Literary Studies: Current Themes and New Directions*, ed. Isabel Jaén and Julien Jacques Simon (Austin: University of Texas Press, 2012), 73-88.
[48] The metonymic ambiguity of "hand" as potentially referring to the handwritten version of the text further motivates this blend.
[49] Susan J. Wolfson, "Late Lyrics: Form and Discontent," in *The Cambridge Companion to Keats*, ed. Wolfson (Cambridge: Cambridge University Press, 2001), 116.
[50] Present simulation construed as being a past event is in fact the process of remembering; memories are not stored, self-contained objects that get retrieved—they are cascades that get partially encoded and then reconstructed in an interaction between the stored, partial code, and current cascades.
[51] Charles Fillmore, *Lectures on Deixis* (Chicago: University of Chicago Press, 1997). See also Levinson (who refers to "receiving time" rather than "decoding time"), *Pragmatics*, 73-79.
[52] "Lyric discourses … prototypically [collapse] represented and discourse situations into a single level. In this case, there is no compulsion to explicitly render (e.g., through stage directions or 'objective' description) the represented situation, because it is (assumed to be) immediately available as the situation-of-discourse." Bruhn, "Place Deixis," 398. Bruhn further argues that this absorptive technique of deictically evoking the place-of-utterance *as present* was a shift in practice that occurred over the romantic period (with Gray's "Elegy Written in a Country Churchyard" as a revolutionary turning point, and Keats's "material sublime" of embodied sensations as an end-point)—away from "boundlessness, greatness, and (ultimately) sublimity" (404) of the visionary, propositional, and/or narrative modes of pre-romantic lyric, where place is embedded *as described* by a mediating speaker. (Compare Heather Dubrow, who theorizes such diegetic absorption as an "amalgam" of narrative and lyric, considering prototypical lyric as involving "a mimesis of mental space" rather than being "located in a mimesis of physical space." "The Interplay of Narrative and Lyric: Competition, Cooperation, and the Case of the Anticipatory Amalgam," *Narrative* 14.3 (2006): 268.) Bruhn's observation regarding literary history could be contextualized as coinciding with the rise of empiricism, the turn from reason, received truth, and/or visionary revelation (as in the neo-Platonic Shelley, on the side of a universal ideal) to experience (the medically-trained Keats). I would then propose that the increasing indeterminacy of deixis in post-romantic lyric poetry can be related to the shifts in understandings of epistemology in modernity and postmodernity.
[53] "The uncanny collapse of space-time that seems about to be realized in the handshake on offer at the poem's conclusion is structurally reduplicated in the very sequence of the discourse, in which the future (from the speaker's point of view) and the past (from the reader's point of view) are literally contained within the framing 'now' and 'here' of the (impossible) [read: blend-constructed] discourse event." Bruhn, "Place Deixis," 389-90.
[54] "Like G.E. Moore's dramatic empirical proof, 'here is a hand', the poem replays its gesture of imaginary presentation ('This living hand') with every reading and attests each time to the presence of this variously reaching, writing, living and dying hand." Shahidha K. Bari, *Keats and Philosophy: The Life of Sensations*, (New York: Routledge, 2012), 7.
[55] "Apostrophe [which Culler is analyzing as definitive of lyric] resists narrative because its *now* is not a moment in a temporal sequence but a *now* of discourse, of writing. This temporality of writing is scarcely understood, difficult to think, but it seems to be that towards which the lyric strives. Proverbial definition calls the lyric a monument to immediacy, which presumably means a detemporalized immediacy, an immediacy of fiction, or in Keats's phrase from 'To J.R.,' 'one eternal pant.' This is, of course, the condition which Keats describes in 'Ode on a Grecian Urn': a fictional

time in which nothing happens but which is the essence of happening. … Apostrophe is not the representation of an event; if it works it produces a fictive, discursive event." Jonathan Culler, "Apostrophe," *Diacritics* 7.4 (1977): 68. See also L. M. Findlay's critique, "Culler and Byron on Apostrophe and Lyric Time," *Studies in Romanticism* 24.3 (1985).

[56] Walt Whitman evokes just this structure of address across a gulf of time in "Crossing Brooklyn Ferry," though the addressee there is specified as located in the same place as the speaker; the poem motivates shifts of viewpoint and/or focus back and forth between the speaker's time and the addressee's time. See Chapter 3 of Waters' *Poetry's Touch* for a discussion of multiple cases of Whitman's (as well as Emily Dickinson's epistolary-construed) "double deixis," evoking the alternate viewpoints of the place/time of writing and the place/time of reading, anchored in reflexive reference to the text itself, rather than in imagery of the East River.

[57] "Now we cannot see the hand. Yet knowing that Keats is dead—for any reader, of course, he would always have been absent—we nevertheless respond to his gesture; he induces us to imagine a living hand rather than an icy corpse. The event is touching and pathetic." Lipking, *The Life of the Poet*, 181.

[58] Hopkins, "Keats and the Uncanny," 35.

[59] See the principle of "presupposition float." Gilles Fauconnier, *Mappings in Thought and Language* (Cambridge: Cambridge University Press, 1997), 60-4. Gilles Fauconnier, *Mental Spaces: Aspects of Meaning Construction in Natural Language* (Cambridge: MIT Press, 1985), 82-108.

[60] "At this time of later reading, the grammar of Keats's poem will be at odds with fact: the living hand will be dead and the imagined one (the one in the tomb) true. … The truth of the living hand gave way to the truth of the cold, dead one upon Keats's death in 1821. It is, in other words, history that makes the indicative into a falsehood and the subjunctive true." Waters, *Poetry's Touch*, 147.

[61] Text world theory makes a parallel distinction between the prototypical discourse world of face-to-face conversation, and a "split discourse world" where the discourse producer and recipient are separated. Paul Werth, *Text Worlds: Representing Conceptual Space in Discourse* (London: Longman, 1999). Though the epistolary construal might seem more logical or plausible than the construal of the text as speech, the lyric blend is motivated by optimality principles of conceptual integration, including to achieve human scale, compress what is diffuse, and strengthen vital relations; a speech act in a singular place and time is thus more optimal than loco-temporally disjunctive writing. Fauconnier and Turner, *The Way We Think*.

[62] In a letter to George and Georgiana Keats, the poet wrote: "… the fire is at its last click—I am sitting with my back to it with one foot rather askew upon the rug and the other with the heel a little elevated from the carpet—I am writing this on the Maid's tragedy which I have read since tea with Great pleasure—Besides this volume of Beaumont & Fletcher—there are on the table two volumes of chaucer and a new work of Tom Moores call'd 'Tom Cribb's memorial to Congress'—nothing in it—These are trifles—but I require nothing so much of you as that you will give me a like description of yourselves, however it may be when you are writing to me—Could I see the same thing done of any great Man long since dead it would be a great delight: as to know in what position Shakspeare sat when he began 'To be or not to be'—such things become interesting from distance of time or place." *Keats's Poetry and Prose*, 318.

[63] "It is the *now* of *reading*—and in equal measure the 'here'—that Keats exploits by yoking them to the time and scene of writing. … the hand *was* warm and capable while writing—line 1 is no fiction—and the final lines appeal more emphatically to the time of reading, which is not fictional either. … Remarkably, then, the sense of unimaginable distance in the intervening oceans of time

and space is at the same time, without losing any of that distance, a feeling of unexpected nearness." Waters, *Poetry's Touch*, 149-151.

[64] For an example of interpretation of the poem as "read through Fanny's eyes," see Lipking, *The Life of the Poet*, 182. Lipking describes this construal as a blend of the lines-for-a-play and direct address interpretations.

[65] Culler, *Theory of the Lyric*, 105-31.

[66] Susan J. Wolfson, *Reading John Keats* (Cambridge: Cambridge University Press, 2015), 142.

[67] Timothy Bahti, "Ambiguity and Indeterminacy: The Juncture," *Comparative Literature* 38.3 (1986): 220-21.

[68] Culler, "Apostrophe," 69.

Chapter 4

Aesthetic Education, Difficult Empathy, and Prismatic Consciousness in African-American Lyrics of Second Sight

The Racial Imaginary as a Represented Structure and Site of Intervention

How can poetry make more than a spectacle happen? In the contemporary moment of #BlackLivesMatter, is poetry just one medium among many for representing anti-black racism? Or do poetic techniques and the flexibility of imaginative reading offer special affordances in addressing these problems? In their introduction to the anthology *The Racial Imaginary: Writers on Race in the Life of the Mind,* Claudia Rankine and Beth Loffreda argue that structures of thought and feeling that we might primarily think of as literary also mediate how race operates in non-literary life.

> What we mean by a racial imaginary is something we all recognize quite easily: the way our culture has imagined over and over again the narrative opportunities, the feelings and attributes and situations, the subjects and metaphors and forms and voices, available both to characters of different races and their authors. The racial imaginary changes over time, in part because artists get into tension with it, challenge it, alter its availabilities. … Pretending it is not there—not there in imagined time and space, in lived time and space, in legislative time and space—will not hurry it out of existence. Instead our imaginings might test our inheritances, to make way for a time when such inheritances no longer ensnare us.[1]

A task for literary criticism, then, is to identify sub-structures of the racial imaginary instantiated in particular texts, and to explicate the ways in which texts not only reproduce these structures, but also alter them. In this chapter, I analyze lyric poems by Claudia Rankine, Robert Hayden, and Langston Hughes that use multiple voices to represent differing racially-marked viewpoints. I argue that such poems offer an aesthetic education through imagined experiences in Du Boisian "second sight."[2] By moving readers through both black and white forms of double consciousness, these poems constitute lessons in a critical perspective that knows the racial imaginary and has strategies for 'altering its availabilities.'

Because the poems' voices are read, not heard, the reader is not limited to the position of a spectator—instead, she may become absorbed in the viewpoints of the poem's personae, imagining the structures of thought and feeling of others who may not match the reader's own racial identification. In the act of 'imagining with' the diegetic figures, readers suspend belief in internalized racial expectations, and test alternative ways of thinking of, feeling with, and behaving towards others. At the same time, these poems do not let anyone pretend that they have transcended race; rather, they prompt one to recognize how readers of other identities must move through the same text differently. Though both black and white readers* inherit from the broader cultural racial imaginary, their differing relations to the poetic experience of second sight means that their overlapping imaginings of the poems have divergent values. These lessons are both representational,

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* Readers who do not identify as black or white, and/or who identify as multiracial, may have still other experiences, sometimes aligning with one or another of the viewpoints I analyze, at other times constructing alternative viewpoints not identified with the text's figures. To keep the variables of my analysis from compounding indefinitely, I restrict my discussion to the two categorical identities that are the foci of these poems of anti-black racism and white false consciousness.

exemplifying anti-black and anti-racist thoughts and feelings, and also experiential, affording practice in perspective-taking, empathizing, affiliation / disaffiliation, and reappraisal.

Drawing on empirical research on the psychology of race, I analyze the specific sub-structures of the racial imaginary that are modified by the particular forms of imagining involved in reading and relating each poem. Rankine's *Citizen: An American Lyric* offers a course of aesthetic experiences that teach awareness, responsiveness, coping strategies, and anti-racist dispositions.[3] Whereas Hayden's "Night, Death, Mississippi" differs from Rankine's poem in representing the consciousness of lynchers rather than the everyday racism of a micro-aggression, it prompts us to consider to what degree such a white sadistic psychology is or is not exceptional. Tracing a circuit of absorption in the viewpoints of the lynchers, their victim(s), and the poet, I detail how the poem motivates both anti-racist antipathy and the radical inclusion of "difficult empathy" with anti-black sadists. Finally, I unpack how the indeterminacy of the speakers in Langston Hughes' "Christ in Alabama" affords practice of what I call "prismatic consciousness," in which the reader navigates a refraction of racial identities into a spectrum of attitudes, recognizing how different viewpoints can cast contradictory insights from the same statements. Through these analyses, I demonstrate some of the ways the medium of poetry, through the imaginative experiences it prompts, can address structures of thought and feeling that result from, and reproduce, anti-black racism.

The Problems of Black and White Double Consciousness and the Prophetic Possibility of Second Sight

Rankine and Loffreda are not the first to argue that race is a psychological as well as sociocultural structure. W. E. B. Du Bois made an influential version of this claim, articulating his concept of African American "double consciousness" in "Of Our Spiritual Strivings," the seminal opening chapter of his 1903 *The Souls of Black Folk*.[4] According to Du Bois, black people in America do not experience unified self-consciousness, but rather find their selves defined by stereotypes projected onto them by white folk and the dominant American culture.

> After the Egyptian and Indian, the Greek and Roman, the Teuton and Mongolian, the Negro is a sort of seventh son, born with a veil, and gifted with second-sight in this American world,—a world which yields him no true self-consciousness, but only lets him see himself through the revelation of the other world. It is a peculiar sensation, this double-consciousness, this sense of always looking at one's self through the eyes of others, of measuring one's soul by the tape of a world that looks on in amused contempt and pity.[5]

In other words, black Americans' imaginations inherit a prejudiced white racial imaginary, learned through their social and cultural experiences; because that white perspective is socially and culturally dominant, the black person's own viewpoint displaces into it, even when focusing on the self.[6] This analysis helpfully foregrounds a complex feature of the racial imaginary: even when the same structures (e.g. stereotypes) are embedded in the psychologies of persons of different races, the operations of those structures on and through those persons will differ due to the way race positions each within the structures. Involuntarily stereotyping one's self differs from involuntarily stereotyping others. Viewpoint, as well as content, must be taken into account.

For Du Bois, the issue of viewpoint is determined by social position. His essay quickly moves on from the phenomenological account of the experience of "being a problem" to analyze the twoness of black folks' identities as "Negro" and "American," and the historical, political, and cultural particulars of African Americans' strivings for freedom, full citizenship, and recognition, from slavery through Reconstruction to the turn of the twentieth century.[7] These contexts of social

identity and cultural conflict have been the most prominent in the reception of Du Bois's work.[8] But I want to use Du Bois's concept to clarify how readers relate to textual figures' perspectives in the imagined experience of reading poems. For the purpose of considering the possibility of literary intervention in the racial imaginary, it is the psychological meaning of double consciousness that is useful: Du Bois's concept limns a particular sub-structure of habituated imagining, in which black subjects are dominated by a white perspective embedded within their subjectivity and privileged over their own perspective. I will use the construction "black\{white} double consciousness" to refer to this formation. (This can be read as "black-under-white," with the first term signifying the identity of the subject, the second signifying the identity of the embedded subjectivity, curly brackets signifying its embeddedness, and the direction of the slash signifying which subjectivity is the dominant viewpoint and which the subordinated focus of projections.[9]) This formulation serves analysis of both what is represented in a literary text and how that representation is imagined by a reader. It also helps us to remember that the racial imaginary at the level of a culture is not a totality of texts but an ecosystem of particular citizens' racial imaginaries, each of which includes nested imaginations of others' subjectivities.

While *The Souls of Black Folk* posits a white perspective internalized in black subjects' psychologies, it does not explicitly address white subjects' psychologies. However, the way that Du Bois ironically ventriloquizes white folks' imagination of his "Negro" experience as the question "How does it feel to be a problem?" prompts us to ask: is it not white folk who are the "problem," seeing black persons as problems rather than themselves?[10] In his 1920 essay, "The Souls of White Folk," Du Bois analyzes whiteness as involving its own form of double consciousness (though he does not re-use the term):

> I know their thoughts and they know that I know. This knowledge makes them now embarrassed, now furious! They deny my right to live and be and call me misbirth! My word is to them mere bitterness and my soul, pessimism.[11]

The essay goes on to describe European-American culture as imagining non-white consciousness to be other to its own consciousness (even as it universalizes its own values and forgets its debts to other cultures); into that othered consciousness it projects attitudes of subservience, gratitude, hostility, etc., in order to reflect presumed superiority back to itself and thereby justify assumed ownership and domination as benevolence and defense. White ideology thus involves a double consciousness that is a false consciousness that becomes true by its dominance, structuring the social and cultural world in ways that (re)produce its expectations, with defensive narratives at the ready to construe in its favor any challenges to those expectations.[12] I will use the construction "white/{black} [white-over-black] double consciousness" to refer to this false consciousness of white subjects, where they project stereotypes into imagined black viewpoints. The cultural dominance of white/{black} imaginings helps to produce black\{white} double consciousness, and the two formations function as inverse yet mutually reinforcing perspectives within American society and culture.

Given the entrenchment of black\{white} and white/{black} formations in their respective subjects' racial imaginaries (as well as in non-psychological structures of culture), how can literary imaginings test these inheritances? Du Bois himself provides an example: while the internalization of "the tape of a world that looks on in amused contempt and pity" blocks independent black self-consciousness, it simultaneously affords other-consciousness, which can be used critically to see through the white world's false self-conceptions and stereotyping projections. Thus, even with its pathological content, double consciousness contains the possibility for a prophetic perspective: when a subject displaces from the dominant white perspective, and focuses instead on white

ideology from the critical distance of a black viewpoint, the black\{white} hierarchical projection is reversed, becoming black/{white} "second sight."[13] As Du Bois articulated in his original formulation, the "veil" that mediates perception is also a gift of knowledge, a gift possessed by black folk even though it is knowledge of white folks' consciousness. As it suspends the dominance of internalized white beliefs, second sight's viewpoint-shift makes it possible to construct a black self-consciousness that might choose among these inheritances. Furthermore, though Du Bois focuses on the value of African American music, spirituality, and sensibility as contributions to the general American and world culture, his analyses constitute an implicit claim that the act of articulating such critical insights can give the gift of second sight to white (and other) readers, as well as to black readers.[14] When a white person replaces her own projections with black\{white} and/or black/{white} perspectives, white/{black} false consciousness can become white\{black} second sight. In this way, black second sight gives white subjects the gift of self-consciousness, too, revealing their assumptions of superiority, benevolence, threat, etc. to be self-serving fantasies involving habitual projections.[15] While imagining a black perspective can help reduce whites' implicit racial biases, the revealed knowledge of bias does not in itself erase those internalized expectations; it remains for such self-conscious white subjects to develop habits of self-control and of alternative forms of relating to black others, as well as to actually act upon their new understandings in pursuit of egalitarian values.[16] Second sight is the start, not the end, of altering the racial imaginary's availabilities.

Double Consciousness and Lyric Experience

Like the experience of race, literary experience is both imagined and interpersonal. Rankine points to the relation between the literary construction of subjectivity and the cultural mediation of social relations in (re-)using the subtitle *An American Lyric* for her book *Citizen*; like "Of Our Spiritual Strivings," the book interrogates the effects of others' perceptions on the self. Rankine's previous book, *Don't Let Me Be Lonely*, which is also subtitled *An American Lyric*, ends by explicitly figuring poetic representation as an act that makes the self present and calls upon the reader for recognition:

> Or Paul Celan said that the poem was no different from a handshake. … The handshake is our decided ritual of both asserting (I am here) and handing over (here) a self to another. Hence the poem is that—Here. I am here. … It also means to hand something to somebody—Here you are. Here, he said to her. Here both recognizes and demands recognition. I see you, or here, he said to her. In order for something to be handed over a hand must extend and a hand must receive. We must both be here in this world in this life in this place indicating the presence of.[17]

I will use the analysis of double consciousness presented above in order to analyze the relations between persona and reader in the lyric, where the determinate text ("Here") affords variable experiences of (inter)personal presence.

Though a lyric poem may represent a single subjectivity, that subjectivity must be imagined by the reader, and so is embedded within her subjectivity. As in racial double consciousness, the relation of the subject's viewpoint (the reader) to the embedded perspective (the persona) is a variable of experiential construal, distinct from the represented content. By prompting the reader to mentalize (imagine the thoughts of) and empathize ('feel with' the feelings of) the persona, poems evoke what can be understood as reader|{persona} double consciousness.[18] To the extent that these imaginings become experienced as the reader's own thoughts and feelings, as well as attributed to the persona, reader|{persona} mentalizing and empathizing become reader\{persona} cognitive-

affective contagion (akin to the infection of black consciousness by white perceptions, though not necessarily negative). The reader's consciousness may also suspend attention to her self and become fully absorbed in taking the persona's perspective, such that the double structure collapses into a single viewpoint during reading. Returning from absorption to the self's perspective after the end of the poem, the reader focuses on the persona's subjectivity from her own viewpoint, constituting reader/{persona} double consciousness as the structure of reflection and interpretation.[19]

These lyric relations are further complicated when the persona's subjectivity is represented as itself divided, such as when poems prompt the reader to imagine a black persona's experience of being dominated by an internalized white perspective. In this case, there are *three* options as to which perspective the reader will take for her viewpoint: she may remain disabsorbed in her reader|{black\{white}} perspective; she may experience a shift into absorption in the black persona's black\{white} perspective, or she may follow the persona's own viewpoint shift into the dominating white/{black} perspective. In the polyvocal lyrics I analyze in this chapter, the white/{black} perspective is evoked along with black\{white} double consciousness through the inclusion of white figures / speakers / attitudes, doubling the double consciousnesses and creating a prismatic array of perspectives and embedded subjectivities among which the reader's viewpoint may shift. The structure of double consciousness thus helps us to recognize that the effects of representing the racial imaginary are complicated by the aesthetic (that is, perspectival and experiential) aspects of literature. Poems don't just represent content, they evoke imagining. It is through this imagining that reading modifies the reader's racial imaginary, though the pre-existing structure of that imaginary will also itself inflect the reading experience. In particular, the relation of the reader's viewpoint to the text's perspective(s) is a core aspect of the imagined experience, which viewpointing influences the nature and degree of the reader's construal of, resonance with, and reactions to the content.

In order to establish the potential values of imagined experiences of racial double consciousness, I integrate recent research in the social cognition of race with Du Bois's analysis. The nature and degree of a particular reader's imagining of the thoughts and feelings of a persona will vary depending on both viewpointing and whether the reader identifies and/or affiliates with the persona. When reacting to representations of other-raced persons in psychological experiments, even subjects who affirm anti-racist beliefs typically exhibit implicit racial prejudices as well as deficits in mentalizing and empathizing.[20] However, displacing one's viewpoint to take another's perspective can mitigate these deficits, enhancing mentalizing and empathizing, and also directly mitigates negative biases through identification with the other and by shifting focus to situational factors rather than personal dispositions as determinants of behavior and circumstances.[21] While visual virtual reality ameliorates biased responses to racial appearance, I hypothesize that the virtual reality of poetry may bypass visual triggering of affective response, targeting stereotypes and biased responses to race as a category stored in semantic memory. (Affective prejudice and stereotypes interact in typical social experience and behavior.)[22] Imaginative absorption in an other-raced figure's perspective thus may valuably modify certain dispositional aspects of the reader's racial imaginary. These mentalizing and empathizing enhancements may also be achieved through affiliation (identifying with an other as a member of one's in-group) with the persona, rather than full absorption in their identity and perspective.[23] The affiliative relation might even be more valuable than full identification, as it preserves the other as an individual whose thoughts and feelings in a particular situation may be different from what the reader's would be, or from what a stereotypical other would be, avoiding the risk of overly projective "flawed" or "false" empathy.[24] By maintaining the reader's own sense of self as a distinct agent, the affiliative relation can keep empathy-with-distress from overwhelming the reader and causing avoidance reactions. Compassion may then arise in response to the negative affects felt in resonance with another's suffering; these feelings of care

and concern, involving activation in neural circuits for reward and affiliation, balance the negative simulation of the other's distress, and motivate helping actions to comfort the other and/or solve the problem causing their suffering.[25] On the other hand, if the self-other distinction is maintained along with displacement into the perspective of the other, insightful double consciousness may facilitate self-criticism (buffered by self-compassion, to avoid backfire/boomerang effects), which may help the reader to develop motivations to modify future behavior to try to avoid being a problem, in addition to trying to redress problems.[26] By analyzing how textual features motivate one or another construal within imagination, we can better appreciate which alterations to the availabilities of the racial imaginary a specific poem affords.

Citizen: An Aesthetic Education

The structures of double consciousness and second sight enable us to see that Rankine's *Citizen* works to "test our inheritances" through both representational and experiential strategies. The former involve presenting information and modeling critical thinking. As the book documents and interrogates anti-black racism not only in scandals and tragedies, but also in ordinary interactions, it presents black and white figures' subjective experiences of those events as instances of black\{white} and white/{black} double consciousness. Because the reader is imagining these events, rather than encountering them as an actual social situation, her viewpoint can shift among the figures' perspectives, learning from each and recombining them into critical second sight.

Though Du Bois is not among the theorists that *Citizen* refers to by name, Rankine alludes to "Of Our Spiritual Strivings" at the same time that she frames her text as representing scenes of instruction in racial imagining. The book opens by recounting a childhood experience in the context of education, echoing the scene of coming-to-double-consciousness at the start of *The Souls of Black Folk*. Du Bois's narrative is one of exclusion due to prejudice, the social pleasure of exchanging visiting-cards with other students interrupted when "one girl, a tall newcomer, refused [his] card,—refused it peremptorily, with a glance." From this experience, Du Bois learned the lesson that he "was different from the others; or like, mayhap, in heart and life and longing, but shut out from their world by a vast veil."[27] Rankine's parallel scene is not only a first realization of racialization, but also represents how this trauma recurs; the memory returns unbidden, emerging out of a prosaic, seemingly 'safe' space of self-comfort: "When you are alone and too tired even to turn on any of your devices, you let yourself linger in a past stacked among your pillows."[28] The persona's perception that her own body smells good, a positive self-evaluation that might seem like it would transcend race, triggers recall of the same evaluation coming from the perspective of an exploitative, prejudiced white person:

> The route is often associative. You smell good. You are twelve attending Sts. Philip and James School on White Plains Road and the girl sitting in the seat behind asks you to lean to the right during exams so she can copy what you have written. …
>
> You never really speak except for the time she makes her request and later when she tells you you smell good and have features more like a white person. You assume she thinks she is thanking you for letting her cheat and feels better cheating from an almost white person.[29]

The scene thus represents black\{white} double consciousness by narrating the interruption of the persona's self-consciousness, replaced by patronizing white judgment. The association of "smell good" with "features more like a white person" in the girl's indirect discourse demonstrate her equation of positive value with whiteness, and the function of whiteness as an imagined norm from which others deviate. The persona's own viewpoint, momentarily foregrounded by "You assume," gives way again to an interpretation of the girl's perspective, inferred from these statements. Thus, in addition to documenting an act of systemic exploitation—the white girl cheats by taking credit for the persona's knowledge, but does not cheat the persona directly—the poem articulates the supremacist attitudes implicit in the girl's white-centric false consciousness, thereby exemplifying a white/{black} perspective along with the behavior it licenses.

White/{black} prejudiced assumptions and domination are then further explored as the persona considers the authority figure who presided over this education:

> Sister Evelyn never figures out your arrangement perhaps because you never turn around to copy Mary Catherine's answers. Sister Evelyn must think these two girls think a lot alike or she cares less about cheating and more about humiliation or she never actually saw you sitting there.[30]

On the one hand, the persona's speculative explanations of Sister Evelyn's failure to intervene—as supremacist, 'color-blind,' self-serving, or other-erasing—represent the uncertainty that can plague black\{white} double consciousness, especially in cases of micro-aggressions. On the other hand, the multiple possibilities also point to the over-determination of anti-black behaviors by multiple forces within the white racial imaginary. Though the persona can't know exactly what Mary Catherine and Sister Evelyn did or did not consciously believe and intend, Rankine's poem goes beyond expressing the black\{white} viewpoint, imagining the others' viewpoints 'beyond the veil' and articulating the possible motivations for such actions and inaction. As the book proceeds to document example after example of additional racial micro-aggressions, the poems aggregate to explore how particular behaviors evoke indeterminate significance in the racial imaginary, and thereby to represent a broad set of possible causes and effects—including the possibility of a symptomatic failure to recognize causes or effects—for readers' recognition.

Whereas the opening poem allegorizes how *Citizen* offers an education through representation of black\{white} experiences and white/{black} perspectives, the final poem figures these representations as confronting the reader with a learning opportunity that depends upon her own experiential perspective-taking. Answering back to the first poem's metapoetic opening ("When you are alone and too tired even to turn on any of your devices…") this last exemplar of racist micro-aggression deviates from the rest of the book by also including the situation of its telling. Here the bedroom-scene frame is presented as a lyric space, full of metaphors, that is interrupted by prose narrative:

> I can hear the even breathing that creates passages to dreams. And yes, I want to interrupt to tell him her us you me I don't know how to end what doesn't have an ending.
>
> Tell me a story, he says, wrapping his arms around me.
>
> Yesterday, I begin, I was waiting in the car for time to pass. A woman pulled in and started to park her car facing mine.

> Our eyes met and what passed passed as quickly as the look away. She backed up and parked on the other side of the lot. I could have followed her to worry my question but I had to go, I was expected on court, I grabbed my racket.
>
> The sunrise is slow and cloudy, dragging the light in, but barely.
>
> Did you win? he asks.
>
> It wasn't a match, I say. It was a lesson.[31]

Though the persona here disavows knowledge of "how to end what doesn't have an ending"—that is, the history of white supremacy and the continuing instances of anti-black violence that the book documents—one step forward, as suggested by the described act of counterstorytelling to interrupt others' dreams, might be the answer given in the nigh-pentameter final line that closes the largely-iambic prose racket: a poetic lesson.[32] The metaphor figures the educational value of poetry as experiential; one does not learn about tennis by reading representations of others' experiences, one practices those skills oneself. This closing gesture alerts readers to something that has already been going on as they've read the book, but which they may not be explicitly recognized until shifting into reflection: that the point of reading may not be to win (whether that winning is achieved knowledge of the 'tape of the world' and its effects, or some increased position in a hierarchy, real or imagined) but rather to learn from testing experiences and to practice altered availabilities of perspective and relation, so that one is better prepared to handle what comes at one in future social life.

The open-endedness of this opportunity for experiential practice becomes clear when we recognize that the beloved in the framing scene is a double for the reader. Each is an audience to the parking-lot anecdote, which ironically literalizes the problem that, for a black person and a white person, 'seeing eye to eye' may be a contested rather than an aligned "match." Within the anecdote, double consciousness is doubled, as each figure imagines the subjectivity of the other, evoking both the persona's black\{white} experience and the other woman's white/{black} projections. In the frame scene, it is an open question whether the beloved, hearing this story, will empathize with the persona's perspective, the other woman's perspective, or entirely fail to imagine his way into learning from the experience being represented.[33] The reader likewise can experience absorption in any of the poem's embedded viewpoints, and even dynamically shift among them. Rankine has described such afforded perspective-taking as "mov[ing] into and through" imagination of the narrated experience "[s]o that the words on the page become a door to one's own internal investigation."[34] That is, the work of the poem doesn't end at representing knowledge to be investigated, but continues through readers' experiential involvement in such investigation. The hopeful end in *Citizen*'s final poem (the book's refrain of "yes, and" become "And yes,") is that imaginatively experiencing the re-presented story might drag even some cloudy insight in, to enlighten her you him and us, 'woke' from sleeping/dreaming obliviousness to recognize, through the persona's I rather than the eyes that looked away from meeting hers, the mis-recognition that faces blackness. This is a non-triumphal, non-didactic lesson, affording practice of imaginative moves that readers may subsequently deploy in their real lives in order to experience, and behave in, events differently.

The poems of *Citizen* not only open the door to such internal investigations, but specifically structure readers' passages through them in ways that motivate experiential lessons in double consciousness and second sight. One key feature in these provocations is the use of "you" rather than 'the lyric "I."' Considered interpretively, the second person can be read as a sharp-edged pun

by which Rankine points to the second-class status of African Americans as objects subjected to racial traumas large and small rather than subjects who can effectively communicate their perspectives and feelings.[35] Considered in terms of readers' experiences, the pronoun at once evokes a diegetic persona as the protagonist of the poems, and addresses persons beyond the text; Rob Spillman suggests that "The 'you' is Rankine, but the 'you' is also all black people, past and present, and also the reader, and also any citizen who lives in our racist world. We, the reader, are implicated. And also drawn in, immediately."[36] But the value of this polysemy is not just that diverse referents are implicated, prompting readers to read the poems not as fiction but as about the real world. Where the race of the text's figures often goes unnamed, readers constantly infer racial identity from the narratives.[37] Reversing the process of racial profiling by requiring readers to move from effects to the determination of race in this way, the text prompts recognition of the entrenchment of the racial imaginary, both as the knowledge that enables such inferences, and as a determinant of real everyday actions. The erasure of the individuality of Rankine's sources and their subsumption as the experience of an at-once-singular-and-collective "you" enables one to see even more clearly that the anecdotes are not particular to their protagonists but structural to American society.

The second person pronoun also leads to second sight through imagined perspective-taking and identification. Address to "you" motivates absorption in the addressee's viewpoint; that the figures are more positions than characters makes such absorption even easier, as there is little information to prompt a clash between the "you" and a reader's self.[38] Absorption into the viewpoint of each "you" thus constitutes an imagined experience of being treated a particular way for no reason other than one's (often unspecified but inferred) race. Of course, the difference between some readers' racial identities and that of a textual figure might de-motivate absorption and identification. But, whereas within in-person situations one's racial identity is often inescapable as a social fact determined by its perception in others' eyes, in imagination one can displace from one's racial self-concept to identify instead with another race. In the same way that white culture builds a white perspective in black double consciousness, reading *Citizen* can acculturate white readers to identify with the perspectives of the poems' black personae.[39] And yet, even as the book solicits readers' identification with the black "you" who suffer(s) prejudice and violence, it does not elide difference; rather, the poems specifically work to prompt recognition of the ways racialization determines how "bodies mov[e] through the same life differently."[40] The flux of personal and categorical reference prevents readers from settling into any one construal of the "you"; instead, readers must constantly shift between identifying or disidentifying in any particular instance, thereby practicing flexibility and a habit of keeping relations provisional. As our analysis of double consciousness and second sight has alerted us, the ability to shift the perspective one identifies with may, in some instances, make the difference between being oppressed by internalized beliefs and being able to suspend those beliefs and critically examine them.

It should not be thought that either *Citizen* or my appreciation of it takes imagination to be race-transcending. Though others can be identified with and their experiences imagined, the difference between that imagining and one's own real experiences teaches that one knows only so much and may be able only to imagine the rest. Imaginative identification may then become cross-race affiliation. By evoking empathizing across difference, *Citizen* prompts readers to extend their imagined explorations from Du Bois's "How does it feel to be a problem?" to Rankine's "How difficult is it for one body to feel the injustice wheeled at another?"—and to meet those questions as a challenge to be risen to rather than as a threat.[41] Where Spillman focuses on absorption in the personal experiences of micro-aggressions, Lauren Berlant looks to a cumulative reaction to the repetition of social injustice. She describes *Citizen* as "like a commentary track on the bottom of a collective television screen where the ordinary of racism meets a collective nervous system's desire for events to be profoundly transformative."[42] While relating the book's representations to events in

the real world may indeed cultivate a desire for social justice, I am arguing that readers can also come to desire transformation of their own nervous system's habits and dispositions. Rather than requiring fictional "suspension of disbelief," *Citizen* affords practice in what I call the "suspension of belief": when a reader displaces her viewpoint into another perspective, she partially inhibits her own self-concepts and commitments; to imagine a different person's experience is to experience the possibility of being different one's self. In this way, the imagined perspective-taking and identification described above might contribute to black and white (and other) readers' attempts to diminish the domination of racial stereotypes and biases internalized from American culture.

Citizen thus comprises a course of aesthetic education—not a series of didactic lessons about art, but a series of imaginative experiences through which readers can learn about others' lives, about themselves, and about new ways of thinking, feeling, and behaving. As the book documents case after case of anti-black racism, the repeated representation of black\{white} and white/{black} double consciousness raises those structures to knowledge. Rankine's analytic and poetic modes of expression, representation, and questioning model critical thinking, guiding complication and reconsideration of that knowledge. Each poem is also an occasion for practice taking others' perspectives, cognitively reappraising the represented situations, and affiliating with or disaffiliating from the diegetic persons. Though this imaginative practice is not real-world praxis, it does develop skills and habituate dispositions that may then be deployed in and influence praxis; the racial imaginary has high-stake consequences, as Rankine articulates in a haiku she wrote after visiting Ferguson, Missouri, in the wake of the killing of Michael Brown by officer Darren Wilson, and added to *Citizen* in its third print run: "because white men can't / police their imagination / black men are dying."[43] Furthermore, the same limits of imagination that are betrayed in interpersonal situations also produce larger-scale institutional and systemic effects: "It seems obvious, but I don't think we connect micro-aggressions that indicate the lack of recognition of the black body as a body to the creation and enforcement of laws."[44] Rankine's work prompts readers to recognize the racial imaginary at the scale of society (as well as in individuals, including themselves), and to think critically about its psychological structures as among the causes of anti-black actions large and small. And yet, *Citizen* does not rhetorically attempt to persuade us to pursue any specific interventions. Rather, the practice 'imagining with' Rankine's text is a preparation for praxis: the end of this course is not mastery or graduation, but awareness, responsiveness, and fortitude.

A Case Study in the Transformation of Double Consciousness into Second Sight, and its Differing Values for Black and White Readers

In-depth analysis of a single prose poem from *Citizen*—the anecdote of "the man promoting his new book on humor"—provides a study-in-miniature of how the work constructs experiences of double consciousness and its transformation into second sight. In representing black\{white} and white/{black} perspectives, the anecdote offers readers a chance imaginatively to occupy both viewpoints on the other. This practice develops readers' mentalizing and empathizing abilities, to inform their processing of memories and future experiences. The poem also motivates shifts from these two viewpoints within pathological double consciousness to the alternative black/{white} and the white\{black} perspectives of second sight. As I will subsequently discuss, though the viewpoint shifts are similar for black and white readers, the particular dynamics of their experiences, and the values afforded, differ for the different audiences. In addition to raising awareness of the structures of the racial imaginary, the experience of inverted double consciousness can strengthen black readers' abilities to cope with the negative affects of everyday racism, while it can weaken white readers' biases and cultivate cross-race empathy and compassionate dispositions.

The piece I will analyze comes from section III of *Citizen*, the second series of micro-aggression anecdotes, which follows section I's opening salvo and section II's essay on Serena Williams. At this point, the book's procedure of documenting and interrogating micro-aggressions is clear to the reader. Amid the expectation that something is going to turn out to be racist, the poem plays on our wish for mutual understanding and shared experience, initially evoking a collective viewpoint so that it can then disabuse us of that momentary color-blind fantasy.

> Someone in the audience asks the man promoting his new book on humor what makes something funny. His answer is what you expect—context. After a pause he adds that if someone said something, like about someone, and you were with your friends you would probably laugh, but if they said it out in public where black people could hear what was said, you might not, probably would not. Only then do you realize you are among "the others out in public" and not among "friends."[45]

Over the course of sentences one and two, access organization, tense, formal similarity between indirect and direct discourse, and second-person address together motivate loco-temporal, vocal, and personal absorption in the diegetic scene. While multiple subjectivities are evoked—those belonging to the persona, "someone," the rest of "the audience," "the man,"—these subjectivities experience the same contents—the discourse "what makes something funny[?]," the expectation of an answer, the answer "context," a pause, and the discourse of sentence three—which motivates their alignment and compression as one collective viewpoint. Though the second-person narration, here as elsewhere in *Citizen*, activates a self-other distinction, that doubling simultaneously collapses into identification via the "you" of self-address, so that the reader-as-addressee is drawn into the self of the persona-protagonist. In sentence three, this persona-and-reader-inclusive "you" becomes the "proverbial 'you,'" identifying the man and the rest of the audience, along with the persona-and-reader, as a unified in-group with a shared perspective, who all together imaginatively occupy the hypothetical scenario of "you … with your friends." Thus, the first half of the poem blends together the doubled personae of the (expected to be black) "you" and the (as-yet racially-unmarked) "man," along with the reader's consciousness as also "in the audience," evoking affective absorption in an affiliative feeling of social inclusion.

As race has not yet been evoked, this initial collective viewpoint constitutes a 'color-blind' perspective. However, when, several phrases and clauses in to the third sentence, the man mentions "black people" as a group implicitly distinct from "you" and "your friends," the formerly inclusive viewpoint is re-construed as an excluding collective. If the reader remains aligned with viewpoint of the man as the speaker of the ongoing discourse, and/or with the "you" of his address, then this discursive act of exclusion provides an absorptive experience of white/{black} double consciousness. That is, from the viewpoint within the anecdote's diegetic space, this white/{black} perspective is assuming a non-black audience with only non-black friends, as well as (implicitly) a sense of humor that finds anti-black comments funny—that only black people, who are "out in public," not anyone "you" would be friends with, would object to racism. Perspective-taking and empathizing with the protagonist's viewpoint within the man's hypothetical enables further insight into white/{black} *false* consciousness, as it fearfully projects threat and hostility into the consciousnesses of black others, and may feel resentment at having to suppress its pleasure in the presence of black people. Feelings of loss and disappointment that attend the shift from "would probably laugh" to "probably would not" may even constitute a perspective of white\{black}

victimization, as in protests against 'political correctness.' Being hailed by the man's "you" slides into occupying his anti-black viewpoint and imaginatively entertaining its prejudices.

This white/{black} perspective is subsequently described by the persona in sentence four. The quotation of "the others out in public" and "friends," referring back to the man's discourse, creates a temporal and vocal doubling, which splits the persona's viewpoint from the man's; this splitting-away thus constitutes an ironic ventriloquization of the man's prior exclusion of the persona's black self. If the reader follows the shift in speaker, shifting from absorption in the man's viewpoint to the persona's pain of social exclusion, this ventriloquization constitutes an experience of the black\{white} perspective, suffering the micro-aggression of a white speaker's projective assumptions. What's more, if the reader second-guesses the quotation marks and takes the persona's perspective as referring to the diegetic scene, rather than the man's imagination of the hypothetical scene, then "the others out in public" can be (re-)construed as the rest of the audience who, presumably by not reacting to this micro-aggression, have shown themselves to be not among the persona's friends. This dynamic shift in focus, as well as viewpoint, enhances the reader's absorption in black\{white} suffering, constituting an experience of exclusion not just by one man but by the whole room of bystanders.[46] And yet, the insight, deft articulation, and cutting wit of the persona's summation of white/{black} prejudice may constitute a formation of black/{white} second sight, contributing to a critical world-view, modeling cognitive reappraisal, and turning the tables of rejection by disaffiliating from the man and his in-group.[47] The negative capability of construing sentence four, simultaneously affording both black\{white} and black/{white} perspectives, thus constructs blackX{white} double consciousness—at once subjected to and resisting oppression. Imagining this blackX{white} complex may help to entrench its structure as a ground for critical awareness, a resource for reflective thinking, and a support for the coping strategy of cognitively shifting from a black\{white} to a black/{white} perspective.[48]

The absorptive features of the poem, which motivate shifting from an inclusive viewpoint, to the excluding viewpoint, to the viewpoint of the excluded, prompt *both* black and white readers to take the white/{black} and blackX{white} perspectives described above. And yet, to a greater or lesser degree, black and white readers' differing racial self-concepts motivate different patterns of identification. The two double consciousnesses represented in the poem are therefore doubled yet again by readers' disabsorptive reactions, and by the difference race makes in the nature and timing of those reactions.

For black readers, identification with the protagonist of the hypothetical scenario is cancelled as soon as "black people" are mentioned as distinct from "you" in line six, well before the discursive viewpoint of the poem itself shifts back to the black perspective in line eight. That this "proverbial 'you'" is also identified with the man and his perspective may also prompt dis-absorption from his viewpoint—that is, a shift from white/{black} to black\{white}. (However, it does remain possible for the black reader's viewpoint, displaced from the excluded self, to continue in the white/{black} perspective for the rest of the sentence, as described above.) After such dis-identification and disabsorption, sentence four doubles back, explicitly (re-)narrating what black readers have just experienced. Re-identification with and/or re-absorption in the "you" of the final sentence may then provide some degree of consolation, by way of a feeling of reciprocal empathy and mutual understanding with the persona, and perhaps also an experience of compassion for the reader's self by way of compassion for the persona. The return to affiliation with the persona may also be elaborated into a sense of social support, such that the man's excluding hypothetical is answered by an experience of imagined belonging among (absent) fellow black people; in such a reappraisal, "the others out in public" is experienced as meaning 'friends' from the black/{white} perspective of the reader and persona, even if they are not "friends" to the man.[49]

The disabsorption happens differently for white readers: it constitutes an experience that parallels black readers' exclusion, yet also contains the difference of privilege. Those whose friends include black persons, who recognize the micro-aggressive act of exclusion that has been committed, and/or who infer that the humor the man is talking about is anti-black, are motivated by those factors to disaffiliate from the man, from his hypothetical "friends," and from absorption in the viewpoint of the "you" protagonist of his hypothetical. The disabsorption of the white reader's viewpoint from the sentence's viewpoint thus constitutes white∨{white} disaffiliation.[50] However, the specification of "black people" as other to "you" and "your friends" does not *categorically* exclude a reader who identifies as white; indeed, there is some motivation against white readers' dis-identification, given that the man's perspective, at least, would identify all white persons as in-group intended addressees. White readers' experience may then be more a white∨{white} double consciousness. Whereas, as described above, affiliation with the man's false consciousness motivates empathy with white\{black} resentment, this white∨{white} disaffiliation may involve anger and white\{black} guilt and shame, especially if the joke the reader was previously interpolated into imagining laughing at is understood retroactively to have been racist. Unlike the punctual exclusion of black readers, this white disaffiliation may happen gradually, perhaps blending with the man's gradient of subjunctive hedges "you might not, probably would not."

White readers who have so disaffiliated by sentence four may then, like black readers, re-identify with the persona's "you" and viewpoint of not belonging to the man's "friends." But, because the persona/"you" represents a black perspective, white readers, formerly only opting to disaffiliate, are now, here, categorically excluded from identification with the pronoun (even though they may empathize and align with the persona's perspective of disgust). Thus, white readers, too, suddenly experience dis-identification for no reason other than their race; the poem in this way orchestrates a syncopated doubling of black readers' viewpoint-shifts from mirroring positions within double consciousness. This doubling may enhance white readers' empathic resonance with black readers' and the persona's experience of exclusion. At the same time, however, it also entails knowledge that this empathy is only an approximation. The difference between the black persona's suffering of punctual, supremacist exclusion, on the one hand, and the white reader's optional disaffiliation, followed by an exclusion-from-the-full-identification-with-the-excluded, on the other, prompts white readers to recognize the privilege of their identity, and to feel the difference between their own anger and guilt/shame and the negative affects that black persons experience. By moving through the black∨{white} perspective, then, white readers come to white\{black} second sight, taking insight from the perspective of black/{white} second sight while also recognizing the differences between black\{white} and white\{black} experiences. Such recognition of the difference race makes complicates white readers' empathy with and compassion for black persons, shifts them away from color-blind ideology towards a critical world-view that recognizes the systemic nature of the racial imaginary, and contributes to anti-racist motivations through the activation of as-yet-unachieved egalitarian values and of negative affects towards anti-blackness within white persons' selves and society more broadly.[51] Yet another construal of sentence four may then be composed, where even though the white reader cannot identify with the persona's "you," she nonetheless parallels the persona's perspective, disaffiliating from the man and those who share his perspective, and affiliatively identifying as among the persona's friends.[52]

To a significant portion of *Citizen*'s audience, the micro-aggressions it reports are not news. For such readers, the book's value is not its representational function of constructing knowledge about the racial imaginary, but rather its experiential function of leading readers through particular imaginings. For black readers, reading incident after incident may serve as a kind of validating proof in the face of "post-race" denials of continuing prejudice; for white readers, it counteracts privilege

and beliefs that racist events are exceptional by sampling everyday racism and representing its chronic repetition. In addition to directing the attention of literary imaginations to black\{white} double consciousness, the book works to construct detailed critical insight into the particular forms and dynamics of the racial imaginary, and, through practice in viewpoint-shifting, develops the cognitive flexibility to cope with micro-aggressions, and to respond to racism more broadly, through reappraisal from black/{white} and white\{black} perspectives. By prompting perspective-taking and affording empathizing, the poems cultivate mutual understanding and motivate affiliative and disaffiliative dispositions towards anti-racist coalition, rather than according to racial groups. Finally, the practice in simultaneously processing two cognitive viewpoints, which is involved in simulating these various forms of double consciousness, can strengthen readers' capacities for compassionate responsiveness to others' distress, and may also combine with viewpoint-displacement to support self-criticism, self-regulation, and self-compassion.[53] By representing both black and white double consciousnesses and combining them into second sight, *Citizen* provides experiential lessons in valuable cognitive habits and strategies, a course of practice for transitioning from internalized subjection and color-blind ignorance towards mutually-supportive solidarity against anti-black prejudice, behavior, and institutions.

Citizen also teaches us not only about American racial imaginaries, but about the lyric. As the book's subtitle implies, a poem is never private, but always public, in ways that extend beyond the fact of its published circulation. Though readers may experience absorption in a persona's interiority, or feel involved in an intimate empathetic relation, their imaginings are structured by the internalized cultural imaginary as well as by the text. In addition to race, there are cultural imaginaries for all kinds of social identities, which inheritances may be evoked by explicit textual features or by representations of one or more conventional sub-structure of that imaginary. Whether reading the poem reinforces that sub-structure, raises it to consciousness, suspends belief in it, or prompts critical reappraisal of it, will depend not only on the lyric representation but also on how the reader experientially relates to the represented figures and their perspectives on the representation. Finally, a poem need not be polyvocal, nor specifically evoke a social identity, for the complex relations and dynamic shifts of viewpoint described above to form part of the reading experience. Though readers know they are not the producer of a lyric, in imagination they can take up any position, displacing their viewpoint into the perspective of, and/or identifying with, the writer, speaker, addressee, overhearer, and/or 'overreader.' Textual features, as well as the contextual factors of a particular reader's dispositions, will push and pull viewpoint to one position or another; in turn, these differences in construal will influence other dimensions of the reader's experience, as well as any reflective explorations, interpretations, and cognitive changes that emerge from that immediate imagining. Analyzing viewpoint dynamics and their effects on mentalizing, empathizing, and affiliation/disaffiliation relations enables us more fully to appreciate how poems function as imagined social experiences and how such experiences can constitute aesthetic education.

Robert Hayden's "Night, Death, Mississippi": A Triangular Circuit through Difficult Empathy

Rankine's "Someone in the audience" moves readers from collective identification to divided perspectives within double consciousness. While black and white readers' viewpoint shifts may mirror each other, taking on the differing perspectives affords them different values. The poetic lessons of *Citizen* clarify these differences, leveraging absorption in self-other doubled viewpoints and experiences of exclusion in order to cultivate critical consciousness, coping strategies, and empathy.

Robert Hayden's "Night, Death, Mississippi" pursues similar ends, but reverses the above process. Hayden's poem presents the maximally divisive consciousness of lynchers, who would seem to deny black persons' humanity and to abdicate their own humanity in the process. And yet, I argue that Hayden works to evoke empathy with even these sadistic racists, ultimately motivating affiliation with them by re-activating a sense of shared humanity, such that they become targets for compassion as well as moral engagement.[54] Mara Scanlon and Tim DeJong have insightfully analyzed the interaction between the poem's voices through the lens of Bakhtin's theory of heteroglossia, but I want to use my theory of absorption to investigate in greater depth the interactions between the voices' viewpoints and affects and the perspective-taking, empathetic, antipathetic, and compassionating responses of readers as the experiential structures that inform ethical stances they may take after reading.[55] In my analysis, the poem sets up a triangular circuit, where absorption in the sadists' viewpoint targets the disengagement of spectators "fully aware of the phenomenon of hate crime, yet reluctant to address the issue directly," and transforms it into antipathy, prompting the reader to affiliate with lynching victims and other African Americans such as the writer—only to then follow the writer's own consciousness back into a black/{white} perspective that is willing to affiliate through "difficult empathy" with the white racists, responding to their all-too-human motivations with compassion.[56] Hayden thus paradoxically combines moral disgust towards lynchers with the deconstruction, by way of perspective-taking and empathy, of that very disaffiliation, re-framed through this double consciousness as the same evil from the other side.

Robert Hayden's poetic career was marked by, and has been studied in relation to, the sense of conflicted identity figured in the concept of double consciousness. From the 1960s onward, as his work become more widely known in the wake of winning the Dakar award, Hayden was a target of criticism from proponents of the Black Arts Movement. In accordance with the racial pride and revolutionary politics of the Black Power movement, artists and critics aligned with the Black Arts Movement rejected white American and European cultural values, arguing for art forms rooted in black experience and cultural traditions and intended for black audiences as a mode of activism. Hayden, however, was resolute in rejecting political impositions on art. Though his work addressed African American history and his own experiences, he identified as "a poet who happens to be a Negro" and believed in artistic individualism in pursuit of universal justice.[57] Inflected by this controversy, much of the literary scholarship on Hayden's work has traced the influence of (white) modernism and the Bahá'í religion, along with African American forms and history, on what is thereby seen as his hybrid poetics. Beyond the scale of the individual poem, then, Hayden's work represents a synthesis of the cultural double consciousness of American society; Edward Pavlić refers to this as Hayden's "Afro-Modernism."[58]

John Hatcher points to "Night, Death, Mississippi" as the "best and last" of Hayden's poems that address lynching "as the archetypal symbol of inhumanity and evil."[59] It replaced the lynching poem "Figure" when Hayden updated *A Ballad of Remembrance* (1962) into his *Selected Poems* (1966). (Hayden subsequently maintained *Selected Poems*'s ordering, though not its sectioning, as the "A Ballad of Remembrance" section in *Angle of Ascent: New and Selected Poems* (1975).)[60] "Figure" describes the victim of a lynching after "his agonies / are accomplished," paying close attention both to the gruesome effects of the violence and to the everyday accouterments involved—a clothesline, his jeans, a commonplace chain—at once constructing an aestheticizing memorial for the dead man and marking that punctual death as, in fact, unexceptional. The poem concludes: "He is a scythe in daylight's clutch. Is gnomon, / Is metaphor of a place, a time. Is our / time geometrized."[61] Compared to the poem it replaced, "Night, Death, Mississippi" marks a shift in focus, moving beyond the figure of the lynching victim to the perpetrators of lynching and the broader sociocultural context of the violent event. In *Selected Poems*, "Night, Death, Mississippi" is positioned

as the culmination of section one, which presents, as Pavlić analyzes, a descent into the "democratic unconscious" involving "a *depth* of perception from which the divisions that inform oppositional politics become unstable."[62] The poem is thus meant to represent the nadir of what Hayden understood (in keeping with Bahá'í theology/philosophy) as the struggle of human revelation and historical progress, which nadir nonetheless contains within its darkness the potential for increasing enlightenment.[63]

Part I of the poem presents the consciousness of a white man lustfully wishing to take part in an in-earshot lynching and wistfully relishing memories of past lynchings. The poem's disturbing effect is not solely a matter of this disturbing semantic content, but a result of the absorption that the text motivates, drawing the reader into the lyncher's perspective. The text slides between description of the diegetic scene and discourse in the man's voice:

> A quavering cry. Screech-owl?
> Or one of them?
> The old man in his reek
> and gauntness laughs—
>
> One of them, I bet—
> and turns out the kitchen lamp,
> limping to the porch to listen
> in the windowless night.
>
> Be there with Boy and the rest
> if I was well again.
> Time was. Time was.
> White robes like moonlight
>
> In the sweetgum dark.[64]

DeJong and Michael Dean read the third person narration as a representation of a narrator's critical perspective on the persona, noting especially the negatively-valenced physical descriptions.[65] Indeed, this viewpoint space distinct from the man's subjectivity may also function as a kind of pressure-release, enabling readers to displace from the disturbing absorption in the lyncher's perspective that is motivated by the lines representing his thought. (Such doubling of viewpoints may also constitute practice for the self-other distinction circuit.) But the poem continuously motivates an integration compressing the two viewpoints together.[66] The narration is not distant commentary but, rather, close description of diegetic perceptual details and the man's actions; these naturally integrate as an indirect representation of the immediate scene available to, but not focused on by, his consciousness. The difference in style and the third-person forms, then, mark the narration as non-verbal experience, still embedded in the man's subjectivity, even though they contrast with his verbal interior monologue. Such embedding becomes explicit in the case of "White robes like moonlight // In the sweetgum dark," which refers not to the diegetic present but to a past scene that the man is presently remembering, and so must be accessed from the viewpoint of his subjectivity.[67]

The lines in the man's voice more directly motivate taking his viewpoint and engaging in empathetic resonance. Their colloquial fragmentation, depending in part on intonation for their meaning, motivates vocal absorption by the reader as speaker rather than hearer.[68] (The absence of a second figure in the diegetic scene means that the hearer viewpoint, too, would be attributed to the

man, speaking or verbally thinking to himself.[69]) Furthermore, the fragmentation suggests the elliptical nature of thought, motivating construal of the discourse not as speech but as interior monologue, again requiring the reader to take the viewpoint of the man's subjectivity in order to have access to his thoughts. This ellipsis also creates a situation where the reader's uncertainty about the text's meaning resonates with the man's uncertainty about what he is perceiving, creating an empathetic similarity and motivating the use of Theory of Mind, where the reader cognitively aligns with the man's perspective to infer what the phrases express. The desire that may be evoked in the reader—a desire to comprehend—may then constitute a further empathetic resonance with the desiring component of the nostalgia felt and expressed by the man.

Having drawn the reader into absorptive viewpoint-alignment, perspective-taking, and empathetic resonance with the man, the poem finally reveals sufficient details for its horrifying topic to become clear:

> White robes like moonlight
>
> In the sweetgum dark.
> Unbucked that one then
> and him squealing bloody Jesus
> as we cut it off.
>
> Time was. A cry?
> A cry all right.
> He hawks and spits,
> fevered as by groinfire.[70]

The violent acts referred to here, along with the moral condemnation entailed by the concept of lynching for most readers, prompts a reaction of disgust and perhaps anger.[71] These antipathetic feelings would seem to break the empathetic emotional resonance, motivating a shift of the reader's viewpoint out of absorption in the man's subjectivity. But the nearest alternative space for viewpoint to shift to is the diegetic scene previously constituted by the narration, which is no real escape; as in the first stanzas, the poem continues to render the man's interiority through its indirect style, such that the focus returns to his subjectivity after the lynching scene. The affects of nostalgia ("Time was") and desire ("A cry? … fevered as by groinfire"), which the reader previously empathized with, are immediately re-activated, constituting continued resonance with the man's pleasure in violence, even as the self-other distinction may be activated in aversively trying to displace from his perspective. Indeed, readers' disaffiliation from and antipathy towards the man can itself integrate with the man's own white/{black} antipathy towards the out-group target of the lynching. In this way, the poem can recapture readers, re-casting antipathy towards the man's failure to empathize with pain as a successful empathizing with the man's antipathy towards an empathy-denied other: the reader's anti-racist perspective resonates with the man's anti-black perspective.

The purpose of Hayden's strategy, directing our attention and even empathy to the lyncher, is to enable readers to better understand how anti-black violence fulfills common human desires and reproduces itself. DeJong has identified the lyncher's sadistic pleasure at the memory of emasculating the victim as a compensation for the feebleness and lost agency of his old age.[72] This fits with theories of racism as motivated in part by a drive for social dominance, especially among whites of low socioeconomic status, which class identity may be inferred here from the dialect of the man's discourse. Part I ends by evoking paternal pride, again hitting upon an appealing, relatively commonplace positive affect in order to trick readers into empathetic resonance; by reflecting on

this element, readers can recognize how anti-black violence functions in white culture as a means of establishing masculinity and as a form of intergenerational bonding. As Pavlić describes, the poem

> focuses in on the troubling dilemma that there's no easy division between the human and violent elements of the psyche or the nation. Hayden critiques the (largely Northern) liberal notion that it's "monsters" who enact these gothic horrors. Monstrous certainly, but not monsters. … it's mostly fathers, husbands, and sons out there in the Southern night.[73]

More generally, disaffiliation from out-group members both serves to construct the in-group and motivate affiliative solidarity among its members; as Walter Benn Michaels has written about white ideology's use of violence not just to terrorize the other but to define a collective: "The project of eliminating black people is here transformed into a technology for identifying white people."[74] Thus, by empathizing with the lyncher's perspective, we gain critical insights into the structures of thought and feeling of white/{black} double consciousness.

Part II features at least three additional voices, and potentially prompts four additional subjectivity spaces:

> Then we beat them, he said,
> beat them till our arms was tired
> and the big old chains
> messy and red.
>
> *O Jesus burning on the lily cross*
>
> Christ, it was better
> than hunting bear
> which don't know why
> you want him dead.
>
> *O night, rawhead and bloodybones night*
>
> You kids fetch Paw
> some water now so's he
> can wash that blood
> off him, she said.
>
> *O night betrayed by darkness not its own*[75]

The most natural inference is to integrate these voices as belonging to "Boy" from Part I and (presumably) his wife. But it is also possible that this is an unrelated family and/or the aftermath of a different lynching. In either case, the point is that, though the individual identities and relations of the figures may be indeterminate, their racial and ideological identity is clear. The subjectivities (and even the possible distinct diegetic spaces) may thus compress together, guided by the circuits linking their affiliative in-group relations as family and as sharing the categorical identity of white. (This integration may also be motivated by the formal parallelism of the quatrains, connecting back to Part I as well, and by the cue of the rhymes "read … dead … said.") By affording re-construal of these multiple subjectivities as compressed into a single collective viewpoint, the poem highlights the

empathetic consonance and ideological identity among the indeterminate members of the racial in-group, prompting recognition that racism is not a prejudice contained within individuals, but that the white/{black} perspective is fungible across persons and generations.

The second and third quatrains each make a perhaps surprising point that anti-black racism and violent sadism do not depend on a complete lack of empathy or compassion. In contrast to conceptions of racism as grounded upon dehumanization of blacks as dangerous beasts like bears, Hayden renders the thrill of dominance as specifically involving perspective-taking and schadenfreude, a white/{black} double consciousness that recognizes/projects into the human understanding and emotions of the other in order to feel (recognized as) superior.[76] Because this double consciousness entails evocation of a black subjectivity, it also affords reversal into a black\{white} perspective, as Scanlon describes:

> Within the poem human understanding becomes a site of absolute horror (the black man's anticipatory fear, the devastating knowledge of hatred). And it is also a site of resistance, since the man's knowing "why / you want him dead" is a simultaneous subversion of the dehumanization that allows such violence against him.[77]

Ironically, whether viewpoint from the white/{black} or black\{white} perspective, this relation involves empathetic recognition of the other's feelings. In the last quatrain, the older generation instructs their children in caring actions towards the family, interpellating them (and, through the second-person address, potentially the reader) into in-group preference. At the same time that compassionate feeling for and empathic distress with the suffering of out-group others is conspicuously denied—metonymically minimized as "that blood" to be easily washed away—the family is not in fact represented as "completely devoid of meaningful humanity," but is rather all-too-humanly concerned only for their own.[78] As the reader takes up each of the family members' viewpoints in turn, it is as if she too is at home in this domestic group.

The italicized lines that appear after each quatrain, however, offer an alternative. Though I have argued that the narration, despite its third-person entailment, tends towards integration into the dominant white viewpoint(s), these lines are properly distinct from the personae's voices and their diegetic scene, set off by italicization, punctuation, stanzation, lyricism, mode of address, and ideological attitude. Hatcher identifies them with the poet, W. Scott Howard with the lynching victim, and DeJong as the "the voice of the poem or of poetry itself, perhaps."[79] Among these multiple possibilities for construal, the key function of the subjectivity space evoked as the source of this discourse is to finally offer a refuge for the reader from empathizing with the abhorrent perspective(s) of the poem's main speakers. By constituting a separate subjectivity (not just an external third-person viewpoint) these lines fully activate and stabilize a self-other distinction. This new subjectivity then constitutes a new target for affective resonance, as the reader's feelings of antipathy find expression in the lines' desperation, horror, and condemnation. In affording a more stable antipathetic viewpoint, Part II recaptures readers who react to the disturbing viewpoints by decompressing from empathy, giving them the voice of a critical subjectivity to identify with, instead of pushing them back into confrontation with the other.

And yet, as much as the critical subjectivity offers an alternative viewpoint, further interpretation may bring the reader back to focus on, resonate with, and even re-absorb into the viewpoint of, the white subjectivity that dominates the poem. This return to the white viewpoint happens by way of absorption in the poet's viewpoint as the administrative consciousness behind the text. First, the source subjectivity of the three interspersed lines is generalized by associating their language with details from the roman lines of the poem. The first italic line's reference to Jesus may bring "and him squealing bloody Jesus" back to mind, linking the sections, and sits in an ironic

juxtaposition with the subsequent "Christ, it was better / than hunting bear."[80] The second italic line's lyric compounds may recall the narration's sometimes elaborate language and the coinages of "groinfire" and "windowless night." By directing attention to the poem as a made object, these formal echoes (and the textuality of the change in typeface) evoke the role of the poet as source of compositional choices. In empathizing with the italic lines' emotional expression and attitudes, then, the reader affiliates with the poet, perhaps to the point of identifying with his subjectivity.[81] Shifting to the poet's viewpoint enables further interpretation of the text from outside the poem's diegetic scene; for example, the personae's contrasts that distinguish the lynching victims from animals ("Screech-owl," "bear") can be compared to the use of predator terms for the white figures ("He hawks," "Paw").

However, given that the poem performs the voices and viewpoints of lynchers, it is a record of the poet's own acts of perspective-taking and empathetic projection. To be absorbed in the poet's viewpoint is then to return to the lynchers' viewpoints, because they are the contents and focus of the poet's imagination in composing the text. The circuit from absorption in the personae's viewpoints to a disabsorbed critical antipathy to the poet's subjectivity thus leads back to the white sadist's interiority again.[82] In this return, there is now a second perspective, that of the disgusted reader / critical lines / poet, doubling the consciousness of the white sadists. As the doubled consciousness entails activation of the reader's self-other distinction circuit, it more fully enables the black/{white} critical perspective to resonate in difficult empathy, imagining the lynchers' thoughts and feelings without being distressed into avoidance of such dark insight.

This difficult empathy is important for Hayden's goals. If readers egocentrically identify only with their antipathy, they may wind up reproducing schadenfreude and sadism in their own hatred of white racists and/or of white people more generally. Hayden ends the poem, in the italicized critical voice, with the figure of "*night betrayed by darkness not its own*." The blackness implicit in night and darkness motivates an interpretation of this line as asserting the blamelessness of the lynching victim(s), preyed upon by the unenlightened evil inside the white/{black} perspective, which the personae project onto dark skin. Yet the anti-essentialist sense of an evil that is "*not its own*" can also be applied to the white figures, especially the children addressed in the last quatrain, and perhaps (through self-implication) to (white) readers who might identify with "You kids."[83] Indeed, the image of washing off blood sets up these de-essentializing meanings, evoking a disarticulatable relation between covering, surface, and moral responsibility, which the final line then re-activates. Thus, even as it engages in black/{white} second sight to shine a light on collective complicity, Hayden's poem here also enables construal of the personae as not essentially evil. White folk, too, have been "*betrayed*" by the division of humanity into racialized groups, by the constitution of in-group affiliation through violence upon out-group members, and by the predication of masculinity and status upon that same violence.

Such difficult empathy involves not only a circuit of triangulated viewpoints, it also constitutes a testing ground for affiliation and disaffiliation. The viewpoint of the poet, if known to be African American, may serve as a bridge for black readers from black\{white} antipathy to an ability to recognize and compassionate with the humanity of white racists. Such affiliation and radical compassion does not cancel negative affects; it re-construes out-group threat and hostility as in-group moral judgment, such that disgust towards the other becomes the social emotion of indignation, motivating engagement to address the problem rather than avoidance. For white readers, the moral abhorrence of the lynchers drives affiliation with the black victim(s), absorption in the critical black/{white} perspective, and white\{black} empathy with the poet's subjectivity. Evoked empathy may motivate pro-social relations with, and actions towards, black folk, who have become part of the white reader's in-group through disaffiliating from the personae, as well as efforts to transform white ideology out of compassion for both black and white humans.[84] The

activation of the self-other distinction circuit may also afford self-implication, in which readers reflect on the degree to which they commit or are complicit with disaffiliative antipathy and/or privilege-reproducing in-group bias. Being split amongst viewpoints and overlapping affects in reading the poem, readers experience the interpenetrations of double consciousness even as they shift among its varying perspectives.[85] Through the combination of difficult compassion for the racist white personae with second sight, the poem may help both black and white readers feel compassion for themselves, recognizing stereotypes projected onto them and motivations socialized into them as non-essential ideology that betrays themselves as well as others.

Absorption in, empathy with, and compassion for those who harbor violent antipathy thus constitutes the possibility of answering divisive ideology with critical judgment and inclusive affiliation both. As Hayden asserted about "Poetry as a medium, an instrument for social and political change" in an address delivered in 1978, at the end of his tenure as Consultant in Poetry at the Library of Congress: "Poetry *does* make something happen, for it changes sensibility. … To be a poet, it seems to me, is to care passionately about justice and one's fellow beings."[86] To read "Night, Death, Mississippi" is to be absorbed in this double caring.

Prismatic Consciousness in Langston Hughes's "Christ in Alabama"

I have analyzed the absorptive dynamics of *Citizen* and "Night, Death, Mississippi," in terms of particular circuits of the reader's viewpoint through shifts in the poems' voices and the doubled subjectivities entailed. Rankine's "Someone in the audience" first evoked a collective viewpoint, revealed that viewpoint to be a falsely-inclusive 'color-blind' perspective, and doubled that white/{black} double consciousness by shifting to a blackX{white} perspective. Hayden's poem, in turn, begins in an individualized viewpoint that reveals its belonging in a chain of white/{black} perspectives, whose sadism prompts the reader's displacement into a blackX{white} double consciousness, only to re-identify with the white racists in radical empathy with the common human capacity for cruelty as well as compassion. In a third strategy using similar techniques, Langston Hughes's "Christ in Alabama" leaves the racial identities of the lines' voices indeterminate and motivates their construal from multiple perspectives, to present an experience of multiple viewpoints as not only embedded in each other or dynamically moving between each other, but simultaneously occupying the same contested space, constituting contradictory meanings from the same text. I call this phenomenon "prismatic consciousness," where each viewpoint, as an alternative angle of entry, casts its refraction of the text in a different direction. The experience of prismatic consciousness sub-divides racial groups and enables readers to appreciate, and practice moving among, a spectrum of possible perspectives, each of which affords different insights, consolations, and motivations.

"Christ in Alabama" was first published in the December 1, 1931 issue of the Chapel Hill, North Carolina magazine *Contempo*. The editors, Anthony Buttitta and Milton Abernethy, solicited work from Hughes responding to the Scottsboro Boys case, in advance of a visit to Chapel Hill as part of a reading tour, during which Hughes also planned to visit the defendants. The case involved the arrest and prosecution of nine black youths, after a freight train had been stopped due to a fight among hitchhikers, for allegedly raping two white women who had been dressed as men. White mobs initially confronted government forces outside the jails where the defendants were held, not wanting to let the justice system do their lynching for them. Having been convicted and sentenced to death (despite the defendants' testimony that they had not seen the women, doctors' testimony that there had been no rape, and one of the women's refusal to testify against the defendants) the Scottsboro Boys' appeals were being handled with the aid of the Communist Party USA's

International Labor Defense.[87] Hughes subsequently reprinted "Christ in Alabama" with three other poems and a play in the 1932 booklet, *Scottsboro Limited*.[88]

After being omitted, along with Hughes' other militantly-leftist poetry, from the 1959 *Selected Poems*, a revised version of "Christ in Alabama" was included in his final book of poems, 1967's *The Panther and the Lash*. Here are both, the original on the left, the revision on the right:

Christ is a Nigger, Beaten and black— *O, bare your back.*	Christ is a nigger, Beaten and black: Oh, bare your back!
Mary is His Mother— *Mammy of the South,* *Silence your Mouth.*	Mary is His mother: Mammy of the South, Silence your mouth.
God's His Father— *White Master above* *Grant us your love.*	God is His father: White Master above Grant Him your love.
Most holy bastard Of the bleeding mouth: *Nigger Christ* *On the cross of the South.*[89]	Most holy bastard Of the bleeding mouth, Nigger Christ On the Cross Of the South.[90]

Karen Jackson Ford interprets the revision as "repackaged in subtle ways to reflect the certitude of the 1960s; its single typeface embodies the uniformity of the black nationalist vision and obscures the significantly more ambiguous representation of racism conveyed in the original version."[91] I agree with Ford and Cary Nelson in finding greater complexity and value in the original version, where the mix of roman and italic typefaces motivates reading the poem as representing multiple voices of unspecified identities and relations.[92] My analysis will focus on the 1931/32 version, as it is this polyvocal indeterminacy I am interested in: how the implications of the metaphorical mapping, and the vocal tone and affects evoked by the individual lines, shift as the reader shifts between variant identities for the lines' speakers and their intended addressees.

In fact, viewpoint multiplicity is evoked even before the shift in typefaces suggests a shift in voices. The title motivates focus on modern Alabama as the poem's loco-temporal context. However, the present tense X-is-Y construction of the first line motivates focus on ancient Judea as the metaphorical target space (or tenor), receiving projections from the source frame (vehicle) of black-white race relations in the American south (metonymically evoked by "Alabama" and "Nigger"). Onwuchekwa Jemie unpacks the implications of this mapping as follows, beginning by projecting salient issues from the race-relations frame onto the Christianity frame, and then back-projecting the resulting group-highlighting interpretation of Jesus's life onto the context of the United States:

> "Christ is a nigger" in two senses: in the historical sense as a brown-skinned Jew like other Jews of his day, with a brown-skinned mother—both later adopted into the white West and given a lily-white heavenly father; and in the symbolic sense of Jesus as an alien presence, preaching an exacting spirituality, a foreign religion as it were, much as the black man, with his different color and culture, is an alien presence in the South.[93]

This instability in the loco-temporal viewpointing prompts the reader to treat the poem's metaphorical mappings bidirectionally, as a "double-scope" integration combining the Christianity frame (especially its sub-frames of the holy family and the crucifixion) and the American race-relations frame as inputs, which project inferences onto both the distant past and the modern south as one switches viewpoint and focus between them.[94] As Jemie's interpretation continues, he constructs just such a blend of the holy family and miscegenation, comparing black Americans to Jesus as each

> a scapegoat sacrificed for the society's sins. In particular, the white sin of lust has created a mongrel mulatto race ("most holy bastard") with black slave mothers ("Mammy of the South") and white slavemaster fathers ("White Master above"). And, once created, this race is cast out, disinherited, crucified.

The poem's metaphorical conceit thus connects racial double consciousness to a historical double consciousness, affording multiple perspectives depending on the loco-temporal viewpoint and focus.

Beyond this matter of loco-temporal mappings, the use of the racial slur, especially as a profane description of a holy figure, raises the question of the persona's race, to be construed in personal absorption as a factor for inferring the thoughts and feelings expressed in the first two lines. If attributed to a white persona (as the term evokes white discourse first and foremost), "Nigger" entails both out-group disaffiliation and denigration, to the point of disregard and/or antipathy (rather than compassion) towards the figure "Beaten and black." Such a relation and evaluation inverts the conventional white American attitude towards Christ, placing this persona in an oppositional relation to the implicit perspective of a possible white audience. The white∨{white} double consciousness then functions as irony, since the white audience that would take offense to a lack of compassion for Christ not only disregards but actively attacks non-Christ-likened black people.

If attributed to a black speaker as a performance of white discourse, the epithet's ironic targeting expands. For those familiar with the African American tradition, the statement evokes the trope of the Black Christ. For the black speaker and black readers, it casts Christ as a racial in-group member, implying affiliation and compassion for his suffering—or, through over-identification, empathic distress. And yet, besides this implication of an affiliative relation, the epithet, even if deployed ironically, evokes stereotypes recruited from black\{white} double consciousness as applying to the person so labeled. The use of "Nigger" as the "Beaten" form of "black" may therefore suggest a disaffiliating viewpoint of condescending pity, constructing a subdivision of black∨{black} double consciousness within the black community, as the white-speaker construal did for that group. In this way, conventional identity groupings and ideologies begin to be refracted from the first lines, as their vocal indeterminacy affords a prismatic spectrum of possible perspectives with differing affiliative and disaffiliative relations to each other, and to Christ's and African Americans' suffering.

The shift in typeface from roman to italics, and in grammar from indicative metaphorical description to imperative direct address, subsequently opens the possibility of a shift in voice. Given that a number of different perspectives were already possible, this shift constitutes a compounding multiplicity rather than, necessarily, a shift in the racial identity of the persona(e). Thurston, Ford, and Nelson identify the typographically-marked alternation of voices with the black formal structure of call-and-response, which integration motivates construal of both typefaces as black voices.[95] It can also be integrated with the Christianity frame as iconic of liturgical services where the

congregation collectively intones a litany of prescribed petitions and professions; this Christian call-and-response could be integrated with black voices, or could also be construed as representing white America.[96] It therefore remains possible to construe the typographically differentiated lines as consistent in source viewpoint, even as the doubling motivates the reader to second-guess and consider all possibilities. But even if the voices are consistently and/or collectively identified, the shift in grammatical mode entails a shift in the relation of the voice(s) to the target(s) of address. It is through these imperative and optative italic lines, formally addressed to the Black Christ, "*Mammy*" the mother, and "*White Master*" the father, that Hughes raises the stakes of the variant viewpoints, prompting their elaboration into both overlapping and divergent implications.

To construe the italic lines as a white voice is to indict white society—especially white Christians—on multiple counts of injustice, false consciousness, and hypocrisy. "*O, bare your back*," under the equation of the crucifixion and lynching, casts those who call for the submission and 'punishment' of black persons as non-Christian persecutors rather than as Jesus's followers. The metaphor also affords mapping the American court system to the Roman imperial authority as unjustly wielding judicial powers for political purposes. "*Mammy of the South, / Silence your mouth*" doubles down on this inversion of the purported Christianity of white/{black} ideology, equating the denial of black perspectives and grievances with an attack on the Virgin Mary's exemplary devotion. Rendering white prayer to God as "*White Master above, / Grant us your love*" points to the Euro-American repression of Christianity's Middle Eastern and African roots and its tenets of universal inclusion and equality, naming the white-washing of Father and Son in westerners' own dominating image. Furthermore, as the context of American miscegenation is evoked, white society is indicted on a third count of denying truth, justice, and love in its forsaking of the "bastard" members of the American family.

Read as a performance of a white viewpoint, Hughes's poem confronts white Christians by revealing how the white/{black} perspective is un-Christian. Even so, Christian ideals continue to function as the implicit goal for this conversion of hypocrisy into recognition. Indeed, entrenched affective associations with the evoked crucifixion scenes may function as a bridge, exemplifying how whites ought to affiliate with blacks as family members, suffering Christians, and fellow Americans. The strategy, in this interpretation, would be to reveal the liturgy of white false consciousness to a white Christian audience, that they may empathize with black\{white} subjection, to transition to what could be called Christian∨{white} double consciousness, differentiating between hypocrisy and a fully inclusive Christianity.

Of course, a fully inclusive Christianity would not contain only white consciousnesses as its voices and viewpoints. The poem can also be read as representing black∧{white} double consciousness. In this construal, the roman lines are attributed to a prophetic black speaker, representing the authentic voice of the "bleeding mouth" of African American suffering, rather than made-up blackface stereotypes. The italic lines are again interpreted as the revelatory voicing of white/{black} false consciousness—though perhaps as a black/{white} critical perspective in whiteface, performing for black audiences in order prompt reappraisal of disaffiliation and 'punishment' as unjust, and suffering as noble. Miscegenation is invoked to present a counterstory to the prevalent narrative used to 'justify' lynchings; this rebuttal is especially important in the original context, as Nelson describes: "the poem turns the false accusation of rape lodged against nine young black men back on the South's dominant culture of white privilege and power. The South's real sexual violence, Hughes insists, is the historical violence white men have carried out against black women."[97] The final italic summation metaphorically ascribes blame to "[*the cross of*] *the South*" as the instrument as well as site of crucifixion. In identifying Christ as "a Nigger" and "Most holy bastard," the poem projects the values attached to Christ's suffering onto African Americans generally,

countering denigration with veneration of the violated, such that victims of persecution and miscegenation become martyrs in Christ's image. Readers may also recruit the Christian understanding of the Romans as denying truth, and historical knowledge of the conversion and decline of the empire and eventual rise of transnational Christendom, to elaborate an anti-racist, even revolutionary, reframing of white supremacy as an ignorance that will be conquered by revelation and the power of a higher love. It may then be that white folks' sins, which have caused black folks' suffering, may be redeemed by recognition of that suffering, such that the poem's viewpoint may be taken as willing to affiliate with the subgroup of white Americans who are truly repentant. In this way, the black**X**{white} and white**v**{white} double consciousnesses may integrate into a Christian**v**{white} perspective, holding to the prospect for the triumph of shared Christian ideals, that compassion may transcend race.

And yet, along with its weaponization of Christianity as a means of revealing the false consciousness of white supremacy, the poem also problematizes non-hypocritical Christianity. It is not only the Roman and white American governments that are unjust authorities; God the Father is also indicted, identified with the white master in stanza three, as not one whose ways are justified, but a cruel rapist and son-killer. Indeed, the very lines that seem to invoke Christian ideals against white supremacy can also be read as satirizing Christianity as an ideological tool of white supremacy, constituting a critical performance of Christian\{white} double consciousness.

This critique is produced most clearly by attributing both typefaces to black voices. In this construal, the roman lines call out the injustice of the Christian story, but the italic responses continue to reproduce a script of submission, representing the congregation's indoctrination into patiently bearing an unjust cross. The faithful urge Christ to actively enable his beating: "*O, bare your back.*" Rejecting her conventional lamentation (which, by metaphorical extension, can be equated with political protest), Mary is told "*Silence your mouth*"; her identification with "*Mammy*" adds the insult of nursing the next generation of masters to the injury of reproducing the next generation of slaves. The equation of piety with subservience becomes fully explicit when stanza three is read as a collective black prayer to "*White Master above, / Grant us your love.*" (The revision to "Grant Him your love" critically weakens the motivation to consider this construal.) Re-presenting the black\{white} internalized oppression of the black community to itself, this is Hughes in blackface, abjectly performing the script of suffering with a real "bleeding mouth," transfiguring the Black Christ into "*Nigger Christ*," a stereotypical denigrated sucker. While the ultimate blame still belongs with white America, this black**v**{Christian} perspective casts black Christians as complicit, failing true black/{white} critical consciousness out of passive obedience and faith in future deliverance.[98]

Whereas Rankine and Hayden's poems deployed absorptive techniques to motivate readers' movement through a particular series of double-consciousness perspectives, in "Christ in Alabama" Hughes makes indeterminacy the principle of absorption. In imagining the various possibilities for speakers and addressees of the poem's lines, the reader takes up black and white viewpoints that triangulate each other to form a spectrum of overlapping perspectives, doubling each other through second sight while also sub-dividing racial groups. Such refractions complicate internalized stereotypes and disrupt entitativity (the degree to which a group is perceived as an entity), thereby diminishing prejudice.[99] In addition to developing critical consciousness of social perspectives as not just black-or-white, the poem prompts the reader to recognize the difference that a different viewpoint can make. The dependence of the lines' meaning and purpose on the reader's agency in moving among construals may help readers to become more proactive and self-conscious in considering others' perspectives. This cognitive flexibility and agency can also be deployed on behalf of the self as the coping strategy of reappraisal; the counterstories ennobling black suffering may be leveraged for valuable consolation in certain circumstances, while the bitter criticism, from or of

Christian ideals, may be deployed for other contexts. As the differing perspectives inhere in the very same statements and cultural frames, the poem also models an uncertainty and negativity capability that may encourage readers to be more cautious and open to revision in their double consciousness, perspective-taking, and empathy. At the same time, the individual reader's overall experience recognizing, empathizing with, and navigating among the values of multiple simultaneous perspectives, beyond her own racial position, may be taken as an optimistic demonstration that any position holds the potential to step outside its own viewpoint, interests, and habitual in-group/out-group identifications. More specifically, the Christian∨{white} and black∨{Christian} perspectives afford an experiential lesson in affiliation determined by shared values and goals rather than race, which may support cross-race solidarity, as well as empathy and compassion.[100] The poem's prismatic negative capability thus also poses the problem of resolution: with which of the conflicting perspectives will the reader ultimately choose to identify? The answer is not on the page, but in the reader.

Of course, because the divergent perspectives are so underspecified by the poem, readers may not actually imagine all of the variant construals described above. My analysis represents the poem's affordances; individual experiences will vary, in accordance with the influence of entrenched structures of thought and feeling, as well as present cognitive state. No one poem is going to dismantle a reader's internalized racism, and different anti-racist poetic affordances will have different values for different readers, in interaction with their racial positions and accumulated experiences. By comparing three examples of how absorptive techniques can be used to mitigate bias, I have worked to identify a range of angles and wavelengths within a spectrum of possible strategies. The multiplicity of "Christ in Alabama" may be taken as a miniature for the kaleidoscopic experience composed by reading many different poems of double consciousness and racism in the course of one's life. In this way, the doubling of double consciousness in *Citizen* and the difficult empathy of "Night, Death, Mississippi" also contribute to prismatic consciousness as a skill and habit cultivated across experiential lessons.

Notes

[1] Beth Loffreda and Claudia Rankine, "Introduction," in *The Racial Imaginary: Writers on Race in the Life of the Mind*, ed. Rankine, Loffreda, and Max King Cap (Albany: Fence Books, 2015), 21. The about page of the website for The Racial Imaginary Institute (established by Rankine in part using funds from her MacArthur "Genius" Grant) offers a definition that generalizes beyond the literary domain: "Our name 'racial imaginary' is meant to capture the enduring truth of race: it is an invented concept that nevertheless operates with extraordinary force in our daily lives, limiting our movements and imaginations." "About," The Racial Imaginary Institute, accessed June 21, 2018, http://theracialimaginary.org/about/.

[2] W. E. B. Du Bois, "Of Our Spiritual Strivings," in *The Souls of Black Folk* (Oxford: Oxford University Press, 2007), 3. Though my neurocognitive theory differs in many respects from Friedrich Schiller's philosophy of "aesthetic education," my adoption of this term is partially inspired by his understanding of aesthetic experience as enabling a transition, from unreflective behavior determined by one's nature, to behavior guided by one's will and moral reflection in interaction with that nature; I argue that the imagined practice in "second sight" afforded by *Citizen* both informs subsequent reflection and modifies the dispositions that constitute the personal 'nature' which reflection works to 'control.' As Schiller writes in the twenty-third letter, one "must learn to desire more nobly, so that he may not need to will sublimely." Schiller, *On the Aesthetic Education of Man: In a Series of Letters*, ed. and trans. Elizabeth M. Wilkinson and L. A. Willoughby (Oxford: Oxford University Press, 1967), 169.

[3] Psychosocial models of racism are in accord with Rankine and Loffreda's account of the racial imaginary. See, for example, Helen A. Neville, Lisa B. Spanierman, and Jioni A. Lewis, "The Expanded Psychosocial Model of Racism: A New Model for Understanding and Disrupting Racism and White Privilege," in *APA Handbook of Counseling Psychology: Vol. 2. Practice, Interventions, and Applications*, ed. Nadya A. Fouad, Jean A. Carter, and Linda Mezydlo Subich (Washington, D.C.: American Psychological Association, 2012), 333-360.

[4] An earlier version of this chapter, "Strivings of the Negro People," appeared as an *Atlantic Monthly* article in 1897.

[5] Du Bois, "Of Our Spiritual Strivings," 3.

[6] Even if we reject Du Bois's assertion that "the eyes of others" wholly dominate the self-conceptions of black people, and/or complicate his doubleness with intersectionality, the problems of both internalized racism and chronic exposure to perceived prejudice in interpersonal interactions continue to combine with, and compound, the adverse impacts of institutional and cultural racism. Cf. Suzette L. Speight, "Internalized Racism: One More Piece of the Puzzle" *The Counseling Psychologist* 35.1 (2007): 126-34; Alvin N. Alvarez, Christopher T. H. Liang, and Helen A Neville, ed., *The Cost of Racism for People of Color: Contextualizing Experiences of Discrimination* (Washington, D.C.: American Psychological Association, 2016).

[7] Du Bois, "Of Our Spiritual Strivings," 2 and passim.

[8] See, for example: Ernest Allen, Jr., "Ever Feeling One's Twoness: 'Double Ideals' and 'Double Consciousness' in *The Souls of Black Folk*," *Contributions in Black Studies* 9/10 (1992): 55-69; Paul Gilroy, *The Black Atlantic: Modernity and Double Consciousness* (Cambridge: Harvard University Press, 1993); Ernest Allen, Jr., "Du Boisian Double Consciousness: The Unsustainable Argument," *The Black Scholar* 33.2 (2003): 25-43; For analyses of the phenomenological dimension of double consciousness, including the philosophical influences and historical contexts of Du Bois's formulation, and relations between "Of Our Spiritual Strivings" and Du Bois's other writings, see:

Dickson D. Bruce, Jr., "W. E. B. Du Bois and the Idea of Double Consciousness," *American Literature* 64.2 (1992): 299-309; Sandra Adell, "*The Souls of Black Folk*: Reading Across the Color Line," in *Double-Consciousness/Double Bind: Theoretical Issues in Twentieth-Century Black Literature* (Urbana and Chicago: University of Illinois Press, 1994), 11-28; Lewis R. Gordon, *An Introduction to Africana Philosophy* (Cambridge: Cambridge University Press, 2008), 73-80; Robert Gooding-Williams, "Intimations of Immortality and Double Consciousness," in *In the Shadow of Du Bois: Afro-Modern Political Thought in America* (Cambridge: Harvard University Press, 2009), 66-95. On the intersection of gendered with racial double consciousness, see Shawn Michelle Smith, "Second-Sight: Du Bois and the Black Masculine Gaze," in *Next to the Color Line: Gender, Sexuality, and W. E. B. Du Bois*, ed. Susan Gillman and Alys Eve Weinbaum (Minneapolis, University of Minnesota Press, 2007), 350-77. For an elaboration of double consciousness through performance theory, see Malik Gaines, "The Quadruple-Consciousness of Nina Simone," *Women & Performance: A Journal of Feminist Theory* 23.2 (2013): 248-67.

[9] On cognitive linguistic theories and analysis of viewpoint, focus, and embedding relations among "mental spaces," see: Gilles Fauconnier, *Mappings in Thought and Language* (Cambridge: Cambridge University Press, 1997), 47-52 and passim; Barbara Dancygier and Eve Sweetser, eds., *Viewpoint in Language: A Multimodal Perspective* (Cambridge: Cambridge University Press, 2012).

[10] Du Bois, "Of Our Spiritual Strivings," 2.

[11] W. E. B. Du Bois, "The Souls of White Folk," in *Darkwater: Voices from Within the Veil*, (Oxford: Oxford University Press, 2007), 15. An earlier version of this essay was published in the *Independent* in 1910. On the historical contexts of Du Bois's thinking about white double consciousness, see Veronica T. Watson, "'A Form of Insanity which Overtakes White Men': W. E. B. Du Bois, Charles Chesnutt, and the Specter of White Double Consciousness," in *The Souls of White Folk: African American Writers Theorize Whiteness* (Jackson: University Press of Mississippi, 2013), 15-58. For a discussion of Du Bois's critique of white supremacy and its contributions to critical white studies, see Reiland Rabaka, *W. E. B. Du Bois and the Problems of the Twenty-First Century* (Lanham, Maryland: Lexington Books, 2007), 52-64.

[12] As anti-racist laws, norms, and values have become more widespread in American culture subsequent to the civil rights movement, white ideology has developed new modes of racism. "Symbolic racism" involves the denial that racism persists and belief in narratives that cast structural inequalities as the responsibility of individuals, obscuring how white privilege reproduces itself. David O. Sears and P.J. Henry, "Over Thirty Years Later: A Contemporary Look at Symbolic Racism," *Advances in Experimental Social Psychology*, 37 (2005) 95–150. "Color-blind racial ideology" erases white privilege along with racism through the ideal of 'not seeing race' and claims of being free from stereotypes and bias. Helen A. Neville, Miguel E. Gallardo, and Derald Wing Sue, eds., *The Myth of Color Blindness: Manifestations, Dynamics, and Impact* (Washington, D.C.: American Psychological Association, 2016). Furthermore, psychological and neurocognitive research shows that racist implicit biases persist in the brains of contemporary white Americans, continuing to produce prejudiced behavior and even unintentional "aversive racism" in those whose egalitarian values and anti-racist goals motivate self-regulation with partial success. Jennifer T. Kubota, Mahzarin R. Banaji, and Elizabeth A. Phelps, "The Neuroscience of Race" *Nature Neuroscience* 15.7 (2012): 940-8; Kumar Yogeeswaran, Thierry Devos, and Kyle Nash, "Understanding the Nature, Measurement, and Utility of Implicit Intergroup Biases," in *The Cambridge Handbook of the Psychology of Prejudice*, ed. Chris G. Sibley and Fiona Kate Barlow (Cambridge: Cambridge University Press, 2016), 241-66; John F. Dovidio, Samuel L. Gaertner, and Adam R. Pearson, "Aversive Racism and Contemporary Bias," in

The Cambridge Handbook of the Psychology of Prejudice, ed. Chris G. Sibley and Fiona Kate Barlow (Cambridge: Cambridge University Press, 2016), 267-94.

[13] See the in-depth philosophical analysis of Paget Henry, who calls this "potentiated second sight": Henry, "Africana Phenomenology: Its Philosophical Implications," *CLR James Journal* 11.1 (2005): 79-112.

[14] Ernest Allen, Jr., traces Du Bois's notion of the "gift" that African Americans can offer to America and the world to Alexander Crummell, and discusses anthropological understandings of the ways gifts function to establish social relations of esteem and equality. Ernest Allen, Jr. "On the Read of Riddles: Rethinking Du Boisian 'Double Consciousness,'" in *Existence in Black: An Anthology of Black Existential Philosophy*, ed. Lewis R. Gordon (New York: Routledge, 1997), 63.

[15] Displacement of the white reader's viewpoint to an external perspective on white subjectivity should direct focus to the dispositional factors of the subject's character that generate their behavior, rather than situational factors. Richard J. Crisp and Shenel Husnu, "Attributional Processes Underlying Imagined Contact Effects," *Group Processes & Intergroup Relations* 14.2 (2011): 275-87.

[16] Adam R. Pearson, John F. Dovidio, and Samuel L. Gaertner, "The Nature of Contemporary Prejudice: Insights from Aversive Racism," *Social and Personality Psychology Compass*, 3 (2009): 314–338; E. Ashby Plant and Patricia G. Devine, "The Active Control of Prejudice: Unpacking the Intentions Guiding Control Efforts," *Journal of Personality and Social Psychology* 96.3 (2009): 640-52.

[17] Claudia Rankine, *Don't Let Me Be Lonely: An American Lyric* (Minneapolis, Graywolf: 2004), 130-31. *Don't Let Me Be Lonely*, like *Citizen*, comprises prose-poems (often narrative, polyvocal, and/or set in public) and lyrics that address media representations of anti-black violence and other spectacles of terror and death, as well as medical and institutional administrations of persons and their affects, especially dying and grief.

[18] "Mentalizing" is also commonly referred to as "Theory of Mind" and "cognitive empathy." For introductions to social neuroscience accounts of mentalizing and empathizing, see: Jamil Zaki and Kevin Ochsner, "You, Me, and My Brain: Self and Other Representations in Social Cognitive Neuroscience," in *Social Neuroscience: Toward Understanding the Underpinnings of the Social Mind*, ed. Alexander Todorov, Susan Fiske, and Deborah Prentice (New York: Oxford University Press, 2011), 14-39; Olga Klimecki and Tania Singer, "Empathy from the Perspective of Social Neuroscience," in Jorge Armony and Patrik Vuilleumier, eds., *The Cambridge Handbook of Human Affective Neuroscience* (Cambridge: Cambridge University Press, 2013), 533-49; Jamil Zaki and Kevin Ochsner, "Empathy," in *The Handbook of Emotions*, 4th ed., ed. Lisa Feldman-Barrett, Michael Lewis, and Jeannette M. Haviland-Jones (New York: Guilford Press, 2016), 871-84; Katrin Preckel, Philipp Kanske, and Tania Singer, "On the Interaction of Social Affect and Cognition: Empathy, Compassion and Theory of Mind," *Current Opinion in Behavioral Sciences* 19 (2018): 1-6; Abigail A. Marsh, "The Neuroscience of Empathy," *Current Opinion in Behavioral Sciences* 19 (2018): 110-15.

[19] Because the persona is not a person with actual thoughts and feelings, one could argue that all such imaginings really involve reader/{persona} projections; it then may be seen as problematic, theoretically, to transfer models of "empathic accuracy," or its failure, from relations between real persons to the relation between a reader and the imagined persona. However, as literary mentalizing and empathizing use the same brain systems as real-world social cognition, readers experience personae in the same ways as they experience persons, though those experiences are provoked by text and, at some level, may be known to relate to fictional rather than actual figures. Cf. Suzanne Keen, *Empathy and the Novel* (Oxford: Oxford University Press, 2007).

[20] Kubota, Banaji, and Phelps, "The Neuroscience of Race"; Yogeeswaran, Devos, and Nash, "Understanding the Nature, Measurement, and Utility of Implicit Intergroup Biases"; Dovidio,

Gaertner, and Pearson, "Aversive Racism and Contemporary Bias"; Tiffany A. Ito and Bruce D. Bartholow, "The Neurocorrelates of Race," *Trends in Cognitive Sciences*, 13.12 (2009): 524-531; Xiaojing Xu, Xiangyu Zuo, Xiaoying Wang, and Shihui Han, "Do You Feel My Pain? Racial Group Membership Modulates Empathic Neural Responses," *The Journal of Neuroscience* 29.26 (2009): 8525-8529; Joan Y. Chiao and Vani A. Mathur, "Intergroup Empathy: How Does Race Affect Empathic Neural Responses?" *Current Biology* 20.11 (2010): R478-80. Alessio Avenanti, Angela Sirigu, and Salvatore M. Aglioti, "Racial Bias Reduces Empathic Sensorimotor Resonance with Other-Race Pain," *Current Biology* 20.11 (2010): 1018-22; Matteo Forgiarini, Marcello Gallucci, and Angelo Maravita, "Racism and Empathy for Pain on Our Skin," *Frontiers in Psychology* 2 (2011): Article 108; Renana H. Ofan, Nava Rubin, and David M. Amodio, "Seeing Race: 170 Responses to Race and Their Relation to Automatic Racial Attitudes and Controlled Processing," *Journal of Cognitive Neuroscience* 23.10 (2011): 3153-3161.

[21] Mary E. Wheeler and Susan T. Fiske, "Controlling Racial Prejudice: Social-Cognitive Goals Affect Amygdala and Stereotype Activation," *Psychological Science* 16.1 (2005): 56-63; Thomas F. Pettigrew and Linda R. Tropp, "A Meta-Analytic Test of Intergroup Contact Theory," *Journal of Personality and Social Psychology* 90.5 (2006): 751-83; Michael W. Myers and Sara D. Hodges, "Making It Up and Making Do: Simulation, Imagination, and Empathic Accuracy," in *The Handbook of Imagination and Mental Simulation*, ed. Keith D. Markman, William M. P. Klein, and Julie A. Suhr (New York: Psychology Press, 2009), 281-94; Sophie Lebrecht, Lara J. Pierce, Michael J. Tarr, and James W. Tanaka, "Perceptual Other-Race Training Reduces Implicit Racial Bias," *PLoS ONE* 4.1 (2009): e4215; John F. Dovidio, Anja Eller, and Miles Hewstone, "Improving Intergroup Relations through Direct, Extended, and Other Forms of Indirect Contact," *Group Process and Intergroup Relations* 14.2 (2011); Emile G. Bruneau, Mina Cikara, and Rebecca Saxe, "Minding the Gap: Narrative Descriptions about Mental States Attenuate Parochial Empathy," *PLoS ONE* 10.10 (2015): e0140838; Theresa K. Vescio, Gretchen B. Sechrist, and Matthew P. Paolucci, "Perspective Taking and Prejudice Reduction: The Mediational Role of Empathy Arousal and Situational Attributions. *European Journal of Social Psychology* 33.4 (2003): 455-72; Andrew W. Todd and Pascal Burgmer, "Perspective Taking and Automatic Intergroup Evaluation Change: Testing an Associative Self-Anchoring Account," *Journal of Personality and Society Psychology* 104.5 (2013): 786-802; Andrew R. Todd, Galen V. Bodenhausen, and Adam D. Galinsky, "Perspective Taking Combats the Denial of Intergroup Discrimination," *Journal of Experimental Social Psychology* 48.3 (2012): 738-45; Lara Maister, Mel Slater, Maria V. Sanchez-Vives, and Manos Tsakiris, "Changing Bodies Changes Minds: Owning Another Body Affects Social Cognition," *Trends in Cognitive Sciences* 19.1 (2015): 6-12; Domna Banakou, Parasuram D. Hanumanthu, and Mel Slater, "Virtual Embodiment of White People in a Black Virtual Body Leads to a Sustained Reduction in Their Implicit Racial Bias," *Frontiers in Human Neuroscience* 10.601 (2016): 1-12; Harry Farmer and Lara Maister, "Putting Ourselves in Another's Skin: Using the Plasticity of Self-Perception to Enhance Empathy and Decrease Prejudice," *Social Justice Research* 30.4 (2017): 323-54; Philippe Bertrand, Jérôme Guegan, Léonore Robieux, Cade Andrew McCall, and Franck Zenasni, "Learning Empathy Through Virtual Reality: Multiple Strategies for Training Empathy-Related Abilities Using Body Ownership Illusions in Embodied Virtual Reality," *Frontiers in Robotics and AI* 5 (2018): article 26.

[22] Cf. David M. Amodio, "The Neuroscience of Prejudice and Stereotyping," *Nature Reviews Neuroscience* 15 (2014): 675-7; David M. Amodio and Jeffrey J. Berg, "Toward a Multiple Memory Systems Model of Attitudes and Social Cognition," *Psychological Inquiry* 29.1 (2018): 14-19.

[23] Robert Kurzban, John Tooby, and Leda Cosmides, "Can Race Be Erased? Coalition Computation and Social Categorization," *PNAS* 98.26 (2001): 15387-92; Feng Sheng and Shihui Han,

"Manipulations of Cognitive Strategies and Intergroup Relationships Reduce the Racial Bias in Empathic Neural Responses," *NeuroImage* 61.4 (2012): 786-97; Jay J. Van Bavel, Leor M. Hackel, and Y. Jenny Xiao, "The Group Mind: The Pervasive Influence of Social Identity on Cognition," in *New Frontiers in Social Neuroscience*, ed. Jean Decety and Christen Yves (Springer, 2014): 41-56; Karl Christoph Klauer, Fabian Hölzenbein, Jimmy Calanchini, and Jeffrey W. Sherman, "How Malleable is Categorization by Race? Evidence for Competitive Category Use in Social Categorization," *Journal of Personality and Social Psychology* 107.1 (2014): 21-40. Though see also Luis Sebastian Contreras-Huerta, Katharine S. Baker, Katherine J. Reynolds, Luisa Batalha, and Ross Cunnington, "Racial Bias in Neural Empathic Responses to Pain," *PLoS One* 8.12 (2013): e84001.

[24] Imagining such particular others can then elaborate readers' stereotypes into more complex, variable schemas for individual members of a group, thereby mitigating the power of assumptions. Indeed, including both stereotypical and counterstereotypical traits has been found to be *more* effective at reducing explicit prejudice and implicit bias than purely counterstereotypical messages, which risk pure rejection. Adam D. Galinsky and Gordon B. Moskowitz, "Perspective-Taking: Decreasing Stereotype Expression, Stereotype Accessibility, and In-Group Favoritism," *Journal of Personality and Social Psychology* 78.4 (2000): 708-24; Andrew R. Todd, Galen V. Bodenhausen, Jennifer A. Richeson, and Adam D. Galinsky, "Perspective Taking Combats Automatic Expressions of Racial Bias," *Journal of Personality and Social Psychology* 100.6 (2011): 1027-42; Andrew R. Todd, Adam D. Galinsky, and Galen V. Bodenhausen, "Perspective Taking Undermines Stereotype Maintenance Processes: Evidence from Social Memory, Behavior Explanation, and Information Solicitation," *Social Cognition* 30.1 (2012): 94-108; Karyn L. Lewis and Sara D. Hodges, "Empathy is Not Always as Personal as You May Think: The Use of Stereotypes in Empathic Accuracy," in *Empathy: From Bench to Bedside*, ed. Jean Decety (Cambridge: The MIT Press, 2012): 73-84; Markus Brauer, Abdelatif Er-rafiy, Kerry Kawakami, and Curtis E. Phills, "Describing a Group in Positive Terms Reduces Prejudice Less Effectively than Describing It in Positive *and* Negative Terms," *Journal of Experimental Social Psychology* 48.3 (2012): 757-61. On "flawed" and "false" empathy, see: Keen, *Empathy and the Novel*, 148-60; Richard Delgado, "Empathy and False Empathy: The Problem with Liberalism," in *The Coming Race War? And Other Apocalyptic Tales of America after Affirmative Action and Welfare* (New York: New York University Press, 1996).

[25] Preckel, Kanske, and Singer, "On the Interaction of Social Affect and Cognition: Empathy, Compassion and Theory of Mind"; Nikolaus Steinbeis, "The Role of Self-Other Distinction in Understanding Others' Mental and Emotional States: Neurocognitive Mechanisms in Children and Adults," *Philosophical Transactions of the Royal Society B* 371 (2015): 0074; Grit Hein, Giorgia Silani, Kerstin Preuschoff, C. Daniel Batson, and Tania Singer, "Neural Responses to Ingroup and Outgroup Members' Suffering Predict Individual Differences in Costly Helping," *Neuron* 68.1 (2010) 149-60; Susanne Leiberg, Olga Klimecki, and Tania Singer, "Short-Term Compassion Training Increases Prosocial Behavior in a New Developed Prosocial Game," *PLoS ONE* 6.3 (2011): e17798; Oriel FeldmanHall, Tim Dalgleish, Davy Evans, and Dean Mobbs, "Empathic Concern Drives Costly Altruism," *NeuroImage* 105 (2015): 347-56; Veronica Sevillano and Susan T. Fiske, "*Fantasia*: Being Emotionally Involved with a Stereotype Target Changes Stereotype Warmth," *International Journal of Intercultural Relations* 54 (2016): 1-14. And yet, it is important to note that one of the components of compassion, the neuropeptide hormone oxytocin, has been found to increase out-group exclusion at the same time that it enhances in-group connections, care, and concern. The value of compassion may thus depend on the scope of affiliation. Carsten K. W. De Dreu, Lindred L. Greer, Gerben A. Van Kleef, Shaul Shalvi, and Michel J. J. Handgraaf, "Oxytocin Promotes Human Ethnocentrism," *Proceedings of the National Academy of Sciences* 108.4 (2011): 1262-66; Carsten

K. W. De Dreu and Mariska E. Kret, "Oxytocin Conditions Intergroup Relations Through Upregulated In-Group Empathy, Cooperation, Conformity, and Defense," *Biological Psychiatry* 79.3 (2016): 165-73. See also Cara A. Talaska, Susan T. Fiske, and Shelly Chaiken, "Legitimating Racial Discrimination: Emotions, Not Beliefs, Best Predict Discrimination in a Meta-Analysis," *Social Justice Research* 21 (2008): 263-96.

[26] Juliana G. Breines and Serena Chen, "Self-Compassion Increases Self-Improvement Motivation," *Personality and Social Psychology Bulletin* 38.9 (2012): 1133-43; Kristin D. Neff and Elizabeth Pommier, "The Relationship between Self-Compassion and Other-Focused Concern among College Undergraduates, Community Adults, and Practicing Meditators," *Self and Identity* 12.2 (2013): 160-76; Kristin Neff and Christopher Germer, "Self-Compassion and Psychological Well-Being," in *The Oxford Handbook of Compassion Science*, ed. Emma M. Seppälä et al. (New York: Oxford University Press, 2017), 371-85; Claudia Sassenrath, Sara D. Hodges, and Stefan Pfattheicher, "It's All About the Self: When Perspective-Taking Backfires," *Current Directions in Psychological Science* 25.6 (2016): 405-10; John F. Dovidio, Adam R. Pearson, Samuel L. Gaertner, and Gordon Hodson, "On the Nature of Contemporary Prejudice: From Subtle Bias to Severe Consequences," in *Explaining the Breakdown of Ethnic Relations: Why Neighbors Kill*, ed. Victoria M. Esses and Richard A. Vernon (Malden, MA: Blackwell, 2008), 41-60; Margo J. Monteith, Steven A. Arthur, and Sara McQueary Flynn, "Self-Regulation and Bias," in *The SAGE Handbook of Prejudice, Stereotyping, and Discrimination*, ed. John F. Dovidio, Miles Hewstone, Peter Glick, and Victoria M. Esses (Londong: Sage, 2010), 493-507.

[27] Du Bois, "Of Our Spiritual Strivings," 3.

[28] Claudia Rankine, *Citizen: An American Lyric* (Minneapolis: Graywolf Press, 2014), 5.

[29] Ibid.

[30] Ibid., 6.

[31] Ibid., 159.

[32] Cf. Bella Adams, who considers *Citizen* through the lens of Critical Race Theory, including Richard Delgado's concept of "counterstorytelling." Bella Adams, "Black Lives/White Backgrounds: Claudia Rankine's *Citizen: An American Lyric* and Critical Race Theory," *Comparative American Studies An International Journal* 15.1-2 (2017): 54-71; Richard Delgado, "Storytelling for Oppositionists and Others: A Plea for Narrative," in *Critical Race Theory: The Cutting Edge*, ed. Richard Delgado and Jean Stefancic (Philadelphia: Temple University Press, 2013): 71-80.

[33] Readers who know that Rankine is married to a white man may integrate that knowledge and read this poem as autobiography, construing the beloved as white.

[34] "I think words are the thing that either triumphs for you, in your desire to communicate something, or fails. I love language because when it succeeds, for me, it doesn't just tell me something. It enacts something. It creates something. And it goes both ways. Sometimes it's violent. Sometimes it hurts you. And sometimes it saves you. … When you achieve it fully, you create something that's transparent—that people can move into and through their own experiences. As a writer, I don't want people spending time thinking, 'What does she mean?' I want, in a way, my text to go away. So that the words on the page become a door to one's own internal investigation. It's just a passage. If the work does its job, it just opens. … Because I think poetry has no investment in anything besides openness. It's not arguing a point. It's creating an environment. Whereas if you were writing an op-ed piece or an essay, somebody would be asking, 'What's your point?' With poetry you can stay in a moment for as long as you want. … I went out to Berkeley and studied with Robert Hass. I was fascinated with the way in which he allows you to sit in the mind of the speaker, and understand the ways in which that mind has to negotiate the reality of a thing." Claudia Rankine,

"Claudia Rankine on Blackness as the Second Person," interview by Meara Sharma, *Guernica* (November 17, 2014), http://www.guernicamag.com/blackness-as-the-second-person/. Cf. Claudia Rankine, interview by Lauren Berlant, *BOMB Magazine* issue 129 (October 1, 2014), http://bombmagazine.org/articles/claudia-rankine/: "The indwelling of those Situation pieces becomes a performance of switching your body out with the body in the frame and moving methodically through pathways of thought and positionings."

[35] Rankine, "Blackness as the Second Person," interview by Sharma.

[36] Rob Spillman, "Yes, It's about Racism," review of *Citizen: An American Lyric*, by Claudia Rankine, *Guernica* (November 10, 2014), http://www.guernicamag.com/rob-spillman-yes-its-about-racism/.

[37] Rankine has explained her choice of implying, rather than specifying, race as part of "disallow[ing] the reader from knowing immediately how to position themselves. I didn't want to race the individuals. Obviously [the reader] will assume—'She's black, he must be white,' etc.—but I wanted those assumptions to be made. Because you know, amid this post-racial thing, sometimes I'll have a student who says, 'I don't really think about race. I don't *see* race.' And then I'll ask, 'Well, how do you read this?' And they say, 'Oh, that's a black person, that's a white person.' So clearly, you're race-ing these people in order to understand this dynamic. I wanted that positioning to happen for readers." Rankine, "Blackness as the Second Person," interview by Sharma.

[38] Cf. Tad T. Brunyé, Tali Ditman, Caroline R. Mahoney, Jason S. Augustyn, and Holly A. Taylor, "When You and I Share Perspectives: Pronouns Modulate Perspective-Taking During Narrative Comprehension" *Psychological Science* 20 (2009): 27-32. When the reader is "drawn in" to alignment with the perspective of one of these "yous," that perspective is not itself unified but rather represents the double consciousness (and/or second sight) of that figure. Even when the "you" is construed as Rankine, the grammar of self-address evokes a split between the viewpoint of the speaking subject and the self that it focuses on. Also, the largely middle- and upper-class details of the narratives should enhance situational resonance for a presumably middle- and upper-class audience of readers of contemporary poetry.

[39] When "counterstereotypic" associations were evoked in an experiment involving an absorptive second-person narrative in which "you" are assaulted by a white man and rescued by a black man, it resulted in a significant reduction in white subjects' implicit bias. Calvin K. Lai et al., "Reducing Implicit Racial Preferences: I. A Comparative Investigation of 17 Interventions," *Journal of Experimental Psychology: General* 143.4 (2014): 1771. Cf. Krystina A. Finlay and Walter G. Stephan, "Improving Intergroup Relations: The Effects of Empathy on Racial Attitudes," *Journal of Applied Social Psychology* 30.8 (2000): 1720-37.

[40] Rankine, *Citizen*, 117. Elsewhere, Rankine describes how "Making Room," the "Script for Public Fiction" that ends the series of "Script[s] for Situation video[s]" in section VI of *Citizen*, considers the limits of projective identification: "In a way, the train piece was meant to critique the position of wanting to repair historical damage in localized moments. The question for me was: What do I gain by dwelling in the struggling public spaces that wish to obliterate the black male body? The train piece attempts to stage the impossibility of actually putting your body in the place of devastation if it doesn't belong to you. Or it asks: If its intent is to destroy someone else, but comes out of the same history that made/makes you, does it also belong to you?" Rankine, interview by Berlant.

[41] Du Bois, "Of Our Spiritual Strivings," 2; Rankine, *Citizen*, 116. Cf. Wendy Berry Mendes, Jim Blascovich, Brian Lickel, and Sarah Hunter, "Challenge and Threat During Social Interactions with White and Black men," *Personality and Social Psychology Bulletin* 28.7 (2002): 939-52.

[42] Rankine, interview by Berlant.

[43] Mary Jo Brooks, "Poet Claudia Rankine on the Violent Deaths of Black Men, *PBS New Hour*, December 4, 2014, http://www.pbs.org/newshour/arts/poetry/poet-claudia-rankine-on-the-violent-deaths-of-black-men; Katy Waldman, "The New Printing of *Citizen* Adds a Haunting Message About Police Brutality," *Slate* January 7, 2015, http://slate.com/culture/2015/01/claudia-rankines-citizen-new-printing-mourns-michael-brown-eric-garner-black-victims-of-police-brutality.html. Rankine's choice of "can't," rather than "won't," reflects how dispositions create a disjunction between intention and action, even as it bitterly ironizes the forceful control wielded against black Americans through policing and the legal system.

[44] Rankine, interview by Berlant.

[45] Rankine, *Citizen*, 48.

[46] Cf. Rankine, *Citizen*, 54.

[47] Cognitive reappraisal, one of the main strategies studied in research on emotion regulation, involves the application by a perceiver of a new cognitive interpretation of a stimulus, resulting in a modulation of affective response. James J. Gross, "The Emerging Field of Emotion Regulation: An Integrative Review," *Review of General Psychology* 2 (1998): 271-99; Kevin N. Ochsner, Rebecca D. Ray, Jeffrey C. Cooper, Elaine R. Robertson, Sita Chopra, John D.E. Gabrieli, and James J. Gross, "For Better or For Worse: Neural Systems Supporting the Cognitive Down- and Up-Regulation of Negative Emotion," *NeuroImage* 23 (2004): 483-99; James J. Gross, ed., *Handbook of Emotion Regulation* (New York: Guilford Press, 2007); Kevin N. Ochsner, Jennifer A. Silvers, Jason T. Buhle, "Functional Imagining Studies of Emotion Regulation: A Synthetic Review and Evolving Model of the Cognitive Control of Emotion," *Annals of the New York Academy of Sciences* 1251 (2012): E1-24. Displacing to the persona's black/{white} perspective may even afford an experience of compassion and/or self-compassion, evoked to balance the reader's empathy with the persona's suffering.

[48] For black readers, this critical consciousness can help to protect self-esteem from external and internalized racism. It can inform coping behaviors and resistance actions, further buffering against negative psychological effects by shifting from rumination to reflective pondering and meaning-making. It may also help cultivate a sense of agency and empowerment in opposition to the feelings of diminished personal control and of powerlessness that can result from perceived racism. And yet, mixed findings suggest a double-edged nature to such critical judgments as degrees of belief in a just or unjust world, racial bias preparation, and mistrust; there appears to be an adaptive sweet spot of being neither so naïve as to internalize prejudice nor so suspicious as to suffer from pessimism and the anticipatory stress of hypervigilance. Mendes et al., "Challenge and Threat During Social Interactions with White and Black men"; Kubota, Banaji, and Phelps, "The Neuroscience of Race," 945-6; Alvin N. Alvarez, Christopher T. H. Liang, Carin Molenaar, and David Nguyen, "Moderators and Mediators of the Experience of Perceived Racism," in *The Costs of Racism for People of Color*, ed. Alvarez, Liang, and Neville, 94-8; Elizabeth Brondolo, Wan Ng, Kristy-Lee J. Pierre, and Robert Lane, "Racism and Mental Health: Examining the Link between Racism and Depression from a Social Cognitive Perspective," in *The Costs of Racism for People of Color*, ed. Alvarez, Liang, and Neville, 109-32; Martin R. Pierre and James R. Mahalik, "Examining African Self-Consciousness and Black Racial Identity as Predictors of Black Men's Psychological Well-Being," *Cultural Diversity and Ethnic Minority Psychology* 11.1 (2005): 28-40; April Harris-Britt, Cecelia R. Valrie, Beth Kurtz-Costes, and Stephanie J. Rowley, "Perceived Racial Discrimination and Self-Esteem in African American Youth: Racial Socialization as a Protective Factor," *Journal of Research on Adolescence* 17.4 (2007): 669-82; Roderick J. Watts, Matthew A. Diemer, and Adam M. Voight, "Critical Consciousness: Current Status and Future Directions," *New Directions for Child and Adolescent Development* 134 (2011): 43-57;

Regina Miranda, Lillian Polanco-Roman, Aliona Tsypes, and Jorge Valderrama, "Perceived Discrimination, Ruminative Subtypes, and Risk for Depressive Symptoms in Emerging Adulthood," *Cultural Diversity and Ethnic Minority Psychology* 19.4 (2013): 395-403.

[49] On the claimed buffering effects of social support and the perceived availability of social support, see: Elizabeth Brondolo, Nisha Brady ver Halen, Melissa Pencille, Danielle Beatty, and Richard J. Contrada, "Coping with Racism: A Selective Review of the Literature and a Theoretical and Methodological Critique," *Journal of Behavioral Medicine* 32.1 (2009): 64-88; Elizabeth A. Pascoe and Laura Smart Richman, "Perceived Discrimination and Health: A Meta-Analytic Review," *Psychological Bulletin* 135.4 (2009): 531-54; Michael T. Schmitt, Nyla R. Branscombe, Tom Postmes, and Amber Garcia, "The Consequences of Perceived Discrimination for Psychological Well-Being: A Meta-Analytic Review," *Psychological Bulletin* 140.4 (2014): 921-48.

[50] In some experiments designed to reduce white subjects' implicit racial biases, the combination of stimuli or situations that evoke *both* positive=black=ally *and* negative=white=enemy associations was found to enhance effectiveness. Emina Subasic, Katherine J. Reynolds, and John C. Turner, "The Political Solidarity Model of Social Change: Dynamics of Self-Categorization in Intergroup Power Relations," *Personality and Social Psychology Review* 12.4 (2008): 330-52; Jennifer A. Joy-Gaba, and Brian A. Nosek, "The Surprisingly Limited Malleability of Implicit Racial Evaluations," *Social Psychology* 41.3 (2010): 137-46; Lai et al., "Reducing Implicit Racial Preferences," 1771-4.

[51] Cf. Neville, Gallardo, and Sue, eds., *The Myth of Color Blindness*; Janet K. Swim and Deborah L. Miller, "White Guilt: Its Antecedents and Consequences for Attitudes Toward Affirmative Action," *Personality and Social Psychology Bulletin* 25.4 (1999): 500-14; David M. Amodio, Patricia G. Devine, and Eddie Harmon-Jones, "A Dynamic Model of Guilt," *Psychological Science* 18.6 (2007): 524-30; Sven Zebel, Anja Zimmermann, G. Tendayi Viki, and Bertjan Doosje, "Dehumanization and Guilt as Distinct but Related Predictors of Support for Reparation Policies," *Political Psychology* 29.2 (2008): 193-219.

[52] Experiments support the value of such an imagining of multicultural difference amid affiliation, a "dual identity model" in which in-group and out-group identities remain but are both included in a superordinate category, as opposed to color-blind ideology or promotion of a "common in-group identity model" which focuses solely on the superordinate category. Richard J. Crisp, Catriona H. Stone, and Natalie R. Hall, "Recategorization and Subgroup Identification: Predicting and Preventing Threats from Common Ingroups," *Personality and Social Psychology Bulletin* 32.2 (2006): 230-43; Lindsey Cameron, Adam Rutland, Rupert Brown, and Rebecca Douch, "Changing Children's Intergroup Attitudes Toward Refugees: Testing Different Models of Extended Contact," *Child Development* 77.5 (2006): 1208-19; Jacquie D. Vorauer, Annette Gagnon, and Stacey J. Sasaki, "Salient Intergroup Ideology and Intergroup Interaction," *Psychological Science* 20.7 (2009): 838-45; Daan Scheepers, Tamar Saguy, John F. Dovidio, and Samuel L. Gaertner, "A Shared Dual Identity Promotes a Cardiovascular Challenge Response During Interethnic Interactions," *Group Processes & Intergroup Relations* 17.3 (2014): 324-41; Lai et al., "Reducing Implicit Racial Preferences," 1773.

[53] See note 26 and David M. Amodio, "The Neuroscience of Prejudice and Stereotyping."

[54] By relating to a white/{black} perspective with compassion, readers can reappraise prejudice as (in part) a weakness that is not (entirely) the white person's fault, and which can be ameliorated through intervention. The shift from a black\{white} to a black/{white} (or white\{black}) perspective, when combined with compassion for white personae, may then involve reappraisal of injustice as a challenge that can be redressed, rather than an inevitable threat, thereby increasing readers' psychological resilience and motivations towards anti-racist action. Cf. Wendy Berry

Mendes, Jim Blascovich, Brian Lickel, and Sarah Hunter, "Challenge and Threat during Social Interactions with White and Black Men," *Personality and Social Psychology Bulletin*, 28.7 (2002): 939-52.
[55] Mara Scanlon, "Ethics and the Lyric: Form, Dialogue, and Answerability," *College Literature* 34.1 (2007): 1-22; Tim DeJong, "'Nothing Human is Foreign': Polyphony and Recognition in the Poetry of Robert Hayden," *College Literature* 43.3 (2016): 481-508.
[56] Sarah Wyman, "Beyond the Veil: Indeterminacy and Iconoclasm in the Art of Robert Hayden, Janet Kozachek, and Tom Feelings," *The Comparatist* 36 (2012): 273; cf. Eric Leake, "Humanizing the Inhumane: The Value of Difficult Empathy," in *Rethinking Empathy through Literature*, ed. Meghan Marie Hammond and Sue J. Kim, (New York: Routledge, 2014), 175-85.
[57] For a detailed account of this controversy, see John Hatcher, *From the Auroral Darkness: The Life and Poetry of Robert Hayden* (Oxford: George Ronal, 1984), 51-90.
[58] Edward M. Pavlić, "'something patterned, wild, and free': Robert Hayden's Angles of Descent and the Democratic Unconscious," *African American Review* 36.4 (2002): 533-55.
[59] Hatcher, *From the Auroral Darkness*, 149.
[60] For an account of the accumulative continuity, replacements, and re-organizations across Hayden's collections, see Hatcher, *From the Auroral Darkness*, 93-4 and *passim*.
[61] Robert Hayden, *A Ballad of Remembrance* (London: Paul Breman, 1962), 37.
[62] Pavlić, "'something patterned, wild, and free'," 534.
[63] In the poem "Words in the Mourning Time," Hayden writes of the "means whereby, / oh dreadfully, our humanness must be achieved." Robert Hayden, *Collected Poems*, ed. Frederick Glaysher (New York: Liveright, 1985), 90.
[64] Robert Hayden, *Selected Poems* (New York: October House, 1966), 23.
[65] DeJong, "'Nothing Human is Foreign'," 488; Michael Dean, "Magnolias, Mayhem, and Malice: Two 'Mississippi Poems' by Robert Hayden," *Publications of the Mississippi Philological Association* (1986): 4.
[66] In this, I side with Scanlon, "Ethics and the Lyric," 14.
[67] I propose that the difference in style between the interior monologue and indirect narration can also be read metapoetically as Hayden's writing-back to the tradition of Negro dialect verse: here the African American writer's expression is highly literary, while the white persona's voice is ungrammatical and colloquial, inverting the traditional hierarchy. Harryette Mullen has made a general observation along these lines: "For Hayden a further aspect of double consciousness seems also reflected in the poet's attempt to reconcile the presumption of Western literacy with the presumption of African-American orality—or, put in somewhat different terms, the presumption of the master's literacy and the slave's illiteracy. Traces of the strain of these interlocking presumptions are apparent in the body of Hayden's poetry." Harryette Mullen and Stephen Yenser, "Theme and Variations on Robert Hayden's Poetry," *Antioch Review* 55.2 (1997), reprinted in *Robert Hayden: Essays on the Poetry*, ed. Laurence Goldstein and Robert Chrisman (Ann Arbor, University of Michigan Press, 2001), 245.
[68] Sarah Wyman, in contrast, reads such fragmentation as dis-absorptive, in the tradition of modernist foregrounding of the medium of language. Wyman, "Beyond the Veil," 269-70.
[69] In this, I differ from Scanlon, who posits with regard to the absence of any diegetic listeners: "Arguably, then, we readers are his primary listeners, those to whom he directs his speech." "Ethics and the Lyric," 13. Of course, while I argue that absorption is motivated, individual experiences will vary.
[70] Hayden, *Selected Poems*, 23.

[71] This imagined experience of antipathy could have an anti-racist value in itself, as some experiments designed to reduce white subjects' implicit racial biases found that evoking negative=white=enemy, as well as positive=black=ally, associations was found to enhance effectiveness. Subasic, Reynolds, and Turner, "The Political Solidarity Model of Social Change; Joy-Gaba and Nosek, "The Surprisingly Limited Malleability of Implicit Racial Evaluations"; Lai et al., "Reducing Implicit Racial Preferences," 1771-4. Cf. Margrethe Bruun Vaage, "On the Repulsive Rapist and the Difference between Morality in Fiction and Real Life," in *The Oxford Handbook of Cognitive Literary Studies*, ed. Lisa Zunshine (Oxford: Oxford University Press, 2015), 411-39. For an introduction to the neuroscience of such moral emotions, see Roland Zahn, Ricardo de Oliveira-Souza, and Jorge Moll, "Moral Emotions," in *The Cambridge Handbook of Human Affective Neuroscience*, ed. Jorge Armony and Patrick Vuilleumier (Cambridge: Cambridge University Press, 2013), 491-508.
[72] DeJong, "'Nothing Human is Foreign'," 488.
[73] Pavlić, "'something patterned, wild, and free'," 547.
[74] Walter Benn Michaels, "The Souls of White Folk," in *Literature and the Body: Essays on Populations and Persons*, ed. Elaine Scarry (Baltimore: The Johns Hopkins University Press, 1988), 193.
[75] Hayden, *Selected Poems*, 23-4.
[76] On the interactions between affiliation/disaffiliation and schadenfreude, see: Richard H. Smith, Caitlin A. J. Powell, David J. Y. Combs, and David Ryan Schurtz, "Exploring the When and Why of Schadenfreude," *Social and Personality Psychology Compass* 3/4 (2009): 530-46; Mina Cikara, Matthew M. Botvinick, and Susan T. Fiske, "Us versus Them: Social Identity Shapes Neural Responses to Intergroup Competition and Harm," *Psychological Science* 22.3 (2011) 306-13.
[77] Scanlon, "Ethics and the Lyric," 12.
[78] Hatcher, *From the Auroral Darkness*, 277.
[79] Hatcher, *From the Auroral Darkness*, 153; W. Scott Howard, "Resistance, Sacrifice, and Historicity in the Elegies of Robert Hayden," in *Reading the Middle Generation Anew: Culture, Community, and Form in Twentieth-Century American Poetry*, ed. Eric Haralson (Iowa City: University of Iowa Press, 2006), 142; DeJong, "'Nothing Human is Foreign'," 488.
[80] DeJong, "'Nothing Human is Foreign'," 489-90.
[81] Integration of readers' knowledge of Hayden's later poem "The Peacock Room," which mentions "Raw-Head-And-Bloody-Bones as a bogeyman from his childhood, reinforces identification of the italic voice with the poet, and might evoke the affect of abject childhood terror, perhaps even motivating an identification and/or comparison of the italic lines with the white children of the final quatrain. Hayden, *Collected Poems*, 118.
[82] My analysis should be understood as a narrativization of more open-ended negative capability; readers' responses need not necessarily occur in this order, but rather may start in any of the relations of the triangle, stay in that viewpoint or make only one shift, or oscillate among the positions in more complex patterns than the triangular circulation I've described.
[83] Cf. Scanlon, "Ethics and the Lyric," 15.
[84] See C. Daniel Batson, "The Empathy-Altruism Hypothesis: What and So What?," in *The Oxford Handbook of Compassion Science*, ed. Seppälä et al., 27-40.
[85] "Rather than an 'authentic self' pitted against an outside threat and masked by a 'tactical self,' Hayden imagined a labyrinth of selves all of which wear—even exchange—masks. As he was aware, this internal complexity does not negate exterior forces of confinement. … [F]ormulations of a 'real' self/culture protected by a 'masked,' tactical self/performance neglect the areas of *overlap*, both social and metaphorical, which Du Bois describes in his formulation of double-consciousness. …

Hayden's Afro-Modernism focuses precisely on the anguish created by simplistic conceptions of stable divisions among self, mask, and world." Pavlić, "'something patterned, wild, and free'," 540-1.
[86] Robert Hayden, "'How It Strikes a Contemporary': Reflections on Poetry and the Role of the Poet," in *Collected Prose*, ed. Frederick Glaysher (Ann Arbor: University of Michigan Press, 1984), 11.
[87] Michael Thurston, "Black Christ, Red Flag: Langston Hughes on Scottsboro," *College Literature* 22.3 (1995): 32. See Thurston for an interpretation of the poem's presentation on the from page of *Contempo*, immediately below an illustration by Zell Ingram. On the Scottsboro case, see Dan T. Carter, *Scottsboro: A Tragedy of the American South* (Baton Rouge: Louisiana State University Press, 1979).
[88] *Scottsboro Limited* includes illustrations by Prentiss Taylor, with a Black Christ crucifixion scene preceding "Christ in Alabama." Langston Hughes and Prentiss Taylor, *Scottsboro Limited* (New York: The Golden Stair Press, 1932), n. pag.
[89] Hughes, *Scottsboro Limited*, n. pag.
[90] Langston Hughes, *The Panther and the Lash* (New York: Knopf, 1967), 37.
[91] Karen Jackson Ford, "Making Poetry Pay: The Commodification of Langston Hughes," in *Marketing Modernisms: Self-Promotion, Canonization, Rereading*, edited by Kevin J. H. Dettmar and Stephen Watt (Ann Arbor: University of Michigan Press, 1996), 282.
[92] Ibid.; Cary Nelson, *Revolutionary Memory: Recovering the Poetry of the American Left* (New York: Routledge, 2001), 69-75.
[93] Onwuchekwa Jemie, *Langston Hughes: An Introduction to the Poetry* (New York: Columbia University Press, 1976), 113.
[94] On the conceptual blending theory of double-scope integration networks, see Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002).
[95] Thurston, "Black Christ, Red Flag," 33; Ford, "Making Poetry Pay," 281; Nelson 72.
[96] One might even go so far as to interpret the names of the typefaces as allusively meaningful, the one connecting to the persecuting imperial authority in the Crucifixion frame, the other to the central sub-group of that empire whose identity historically converted into an association with a geographical body rather than a lapsed political body. In this interpretation, that Romans became Italians might serve as an example for whites of the possibility of identifying with an American community that is inclusive of all its geographical residents, rather than the internal colonialism of white supremacy. At the same time, the difficulty of achieving such a transition in identification is highlighted by the ethnic essentialism in the concept of "Italian" and the history of continued idolization of the Roman empire by Fascist Italy and Nazi Germany, not to mention white America.
[97] Nelson, *Revolutionary Memory*, 70.
[98] Such subdivision of the African American viewpoint into black∨{black} double consciousness could be related to the revolutionary perspective that would become Black Power, as in the context of the poem's revision; but relative to the original context, it would be more apt to interpret it as a red/{Christian} communist viewpoint, with which non-black readers could also affiliate in cross-race solidarity. This critique becomes fully explicit in the play "Scottsboro Limited." that accompanies "Christ in Alabama" in *Scottsboro Limited*. There, salvation comes not from the Preacher (who opens with "Ashes to ashes and dust to dust— / If the law don't kill you then the lynchers must" and responds to one boy's rejection of "Every praying white lie" by yelling "Let the niggers die!") but from Communist comrades arising from the audience to join with the black boys to fight together. At yet, though submission to The Man's religion is for Hughes at this time a target of satire, the poem "Scottsboro" identifies the "8 black boys in a Southern jail" with a tradition of

revolutionary sacrifice that includes Christ, along with John Brown, "That mad mob / That tore the Bastile down," Moses, Joan of Arc, Dessalines, Nat Turner, Lenin, Gandhi, Sandino, and Evangelista.

[99] Mina Cikara, E. Bruneau, J. J. Van Bavel, and R. Saxe, "Their Pain Gives Us Pleasure: How Intergroup Dynamics Shape Empathic Failures and Counter-Empathic Responses," *Journal of Experimental Social Psychology* 55 (2014): 110-25.

[100] Where my narrativization of "Night, Death, Mississippi" involved a transition from disaffiliative antipathy to radical/universal compassion, in "Christ in Alabama" disaffiliation remains, functioning as a motivating principle for re-grouping along ideological rather than racial lines, and as a motivation to anti-racist action.

Chapter 5

Speak/Hear and "See Here": Vocal and Perceptual Absorption in "This Living Hand"

The Problems of Poetic Representation

Artistic representations do not all happen in the same way. In *Dreaming by the Book*, Elaine Scarry differentiates three types of mimetic representation: the "*immediate sensory content*" of artworks that are seen and/or heard; "*delayed sensory content*, or what can be called 'instructions for the production of actual sensory content,'" as in the artwork of a musical score; and "*mimetic content*," which is produced not in actual performance but by the imagination under the instructions of verbal art. Verbal representation "shifts the site of mimesis from the object to the mental act. We habitually say of images in novels that they 'represent' or 'are mimetic of' the real world. But the mimesis is perhaps less in them than in our seeing of them."[1] To assess representation in verbal art, then, we need to understand the relations between the 'instructions' of the text's language and the "mental act" of imagining. Furthermore, because literary content does not exist independent of imagining—our "seeing of" the real or fictional world 'through' a text is an act of production, not reception, even though it is grounded in a pre-existing work—we also need to understand the nature and effects of the reader's mentally active *participation* in representation.

Written language may be taken to mimetically represent voice as well as imagery. This is canonically the case in poetry, especially lyric poetry, as Scarry articulates:

> Both narrative prose and poetry devote themselves centrally to mimetic perception, but poetry retains a strong engagement with delayed perception … : like the musical score, its sequence of printed signs contains a set of instructions for the production of actual sound; the page does not itself sing but exists forever on the verge of song.[2]

The analogy with song raises additional problems, especially if we compare it to the more prosaic construal of text as speech or thought. When we read dialogue in a novel or play, we construe the represented voice as belonging to a character within the diegetic world. But when a reader recites a poem, as when a singer sings a song, does the performer's voice itself present the poem/song, or re-present some other voice? As in Yeats's line "How can we know the dancer from the dance?," there is the problem that participatory representation involves inhabitation: if you imagine a song or poem, are you the singer/speaker or a listener?[3] Though I addressed these questions in Chapter 3 in terms of the construal of identification and reference, I show here that we must add vocal and perceptual viewpointing to the cognitive viewpointing of personal and loco-temporal absorption in the lyric.

Mimetic content beyond voice poses a further problem. In contrast to the objective form of the text, which can be treated as mimetic of speech or song, perceptual images are subjective phenomena, generally examinable only through introspection. In *Principles of Literary Criticism*, I. A. Richards claims that vocal and perceptual representations involve contrasting degrees of determinacy. Auditory images "in the mind's ear" and articulatory images "in the lips, mouth, and throat, of what the words would be like to speak" are closely "tied" to the visual text; though readers' experiences vary with regard to the vividness of such imagining, Richards holds that these tied images have regular effects. However, he contends that "free imagery"—perceptual imagining of the "things words stand for … in the mind's eye" and other sensory modalities—is far less regular: "Fifty different readers will experience not one common picture but fifty different pictures. If the value of the poem derived from the value *qua* picture of the visual image excited then criticism

might well despair." Because these phenomena are perceptual rather than conceptual, they are difficult to address in interpretive writing: unless she wants to resort to drawing, miming, or some other means of objective representation, the critic is stuck using language to describe the non-linguistic experience evoked by the language of a poem. Richards tries to get around these problems by proposing that it is not vividness or consistency but rather the downstream effects of imagery in "directing thought and arousing emotion" that matters, and so he passes on to semantic thoughts and affective attitudes, rather than represented imagery, as the proper content of poems.[4]

But this difficulty might spur us to desire, rather than despair of, theories and methods that enable us to analyze the contributions that mental imagery makes to the value of a poem. While I believe Richards may be right in his generalizations, I want to draw on advances in neurocognitive research on mental imagery to unpack the intricacies of vocal and perceptual imagery and the contributions that these pathways of linguistic processing make, both to poetic meaning and to the aesthetic experience of reading a poem. This chapter will show, on the one hand, that even though imagined voicing is very much driven by formal structures, the fixed representation of the text affords more indeterminacy and qualitative elaboration than formalist analysis has previously recognized. On the other hand, while perceptual imagery may involve highly variable experiences, analysis of particular parameters in specific sensory modalities makes it possible to engage in principled interpretation of the range of experiences motivated by the text. Delving into these details clarifies how vocal imagery and perceptual imagery at once ground and complicate semantic and affective construal of a poem's meaning, even as they also constitute an absorptive aesthetic experience beyond linguistic concepts.

Poetic Voice and Vocal Simulation

Taking a neurocognitive perspective enables us to understand that even silent reading prompts performance by the reader, who becomes as much an actor or player bringing the intonation and rhythm of the poem to life, as a receptive audience. It might seem one must be thinking metaphorically to claim voice and phonological qualities such as intonation and rhythm as effects in the silent reading of a poem. Lyric poetry is thought to have begun in oral performances, poetry readings continue to be a mainstay of literary culture, and literature classrooms often invoke the practice of reading aloud—but what sense does it make to look at text itself in terms of its medium of performance? What we need is to explain how voice is imagined in silent reading, to understand the effects textual features have on that vocal imagining, and the function of imagined voicing in interpretation.

In "What is Poetry?," J. S. Mill claims that "All poetry is of the nature of soliloquy," an "expression or uttering forth of feeling" that does not address the reader but rather is "overheard."[5] T. S. Eliot expanded this definition, identifying "The Three Voices of Poetry" as "the voice of the poet talking" to herself, to an audience, or to characters in the guise of a persona.[6] By extension from 'who' to 'how,' the *style* of a poet's poems is also commonly referred to as that poet's voice, according to a metaphorical understanding of style as having the same individuality that speaking voices are typically experienced as having.[7] Whether expressing feelings, representing address, or presenting subjectivity, poetic voice is taken to inhere in the text, in the same way that a speaker's voice may be understood as the expressive, active, individual medium of her speech. But, alternatively, language itself can be understood as the medium that makes one's voice express meaning in speech, as in writing we may recognize that the words of a poem are the medium from which voice is inferred. In the seminal essay "Anthropomorphism and Trope in the Lyric," Paul de Man argues that poetic voice is metaphorical, a trope deployed in the "lyrical reading" of an object text as "the representation of a vocal utterance."[8] Though the other uses of the term persist, de

Man's demystification has become a critical consensus, such that the entry for voice in the *Princeton Encyclopedia of Poetry and Poetics* declares: "there is no literal voice in the poem: voice is an oral metaphor employed in the description and analysis of the written word."[9]

The evidence of real readers' experiences, however, calls for a revision of this theoretical consensus. While critical concepts of voice and the vocal terms such as tone and rhythm may be used metaphorically in interpretive discourse, for many readers voice is a literal part of reading: to see a poem is to hear it. In a survey conducted in collaboration with the Edinburgh International Book Festival and *The Guardian* newspaper, out of 1,566 respondents, 79% reported that they hear voices when reading "some of the time," "most of the time," or "all of the time." These imagined voices vary, from having the qualities of the reader's own voice to those of the author, famous persons, personal acquaintances, or fictional characters.[10] While such findings may surprise the minority who never experience imagined voices, psycholinguistic research has established that the reading process involves not only the brain's visual system, but also portions of both the auditory system that processes hearing and the articulatory system that produces speech.[11] That is, reading is a neurotypical form of synesthesia, in which the seen text evokes "neural simulations" of speaking and hearing.[12] When such vocal simulations are integrated into consciousness, they constitute an "inner reading voice." I call this experience, in which the reader's attention is occupied by silently-read text as imagined speech, "vocal absorption." For absorbed readers, at least, de Man has it wrong. Poetry makes voice happen, not just as a metaphor in interpretation, but as a literal imagined experience.

In the first half of this chapter, I explain how the literal imagined voice is produced, the effects that formal features such as phonetic patterns and grammatical constructions have on that vocal imagining, and the differences that vocal viewpoint and qualities make in interpretation. Literary critics already attend to sonic qualities in poetry, using the metaphorical model of speech without worrying over how it is that text is perceived as speech in silent reading. But understanding the neurocognitive mechanisms of vocal absorption reveals unrecognized experiential intricacies. First: whereas the oral metaphor conventionally assigns the reader to the position of a hearer—with the poet, a persona, or the text itself cast as the speaker—the union of the articulatory and auditory systems in vocal simulation means that the reader can experience a poem's voice *both* as her own act of speaking (whether in her own voice or that of another) *and* from the cognitive viewpoint of a hearer. Alongside contextual factors such as habitual reading practices, textual features motivate which viewpoint the reader adopts. It is even possible for a poem to prompt dynamic shifts between the speaker and hearer viewpoints during the course of reading. Experiential viewpointing thus helps to explain how lyric poems produce effects of vocal presence, the sense of access to the speaker's "interiority," and even a sense of "intimacy" between the speaker and reader.

Second, because emotional and rhetorical qualities inhere in the imagined voice, understanding how textual structures evoke affective qualities enables us to fully appreciate and assess the contributions that form makes to a poem's meaningfulness. In contrast to the Saussurean principle of the arbitrariness of the signifier, phonolinguistc research has found evidence of significant correlations between certain sounds and certain affects or rhetorical functions.[13] That is, a poem's formal patterns can themselves suggest aspects of meaning, such that vocal absorption constitutes a pathway of lyric 'expression' that operates in parallel with semantic content, interacting with and complicating interpretation. Extending the analysis of "tone" beyond description of a poem's mood or persona's stance, my account of the neural simulation of tone-of-voice elucidates how phonemic, syntactic, and grammatical structures evoke tonal complexity and rhetorical relations between the speaker and addressee.

Like tone, rhythm is not a determinate feature of the text but an improvisational construal constructed during reading. Vocal rhythms depend not only on stress-patterns within words and phrasal constructions, but also on the pragmatics of the discourse, and so are often more ambiguous

in experiential construal than in the determinations of metrical analysis. Rhythmic regularities, irregularities, and ambiguities evoke affects of expectation, confidence, surprise, and uncertainty. In contrast to a conventional conception of expression, in which emotion is transmitted from the poet to the reader through the conduit of the poem, this neurocognitive analysis shows that evoked affects can be construed as the addressee's/reader's *reactions to* the speaker's speech, as well as attributed to the speaker and integrated as qualities of the voice. These additional parameters clarify how a printed text can be experienced as alive with emotional drama.

Keats's "This living hand" as a Case Study in Vocal Absorption

John Keats's "This living hand" at first may seem an odd choice for a study in voice. While on the one hand the poem lyrically performs an act of address, its allegory of reading is figured not as an event of speaking or hearing, but in terms of bodily presence, undead haunting, and a reanimation of the persona through the addressee's sacrifice of blood.[14]

> This living hand, now warm and capable
> Of earnest grasping, would, if it were cold
> And in the icy silence of the tomb,
> So haunt thy days and chill thy dreaming nights
> That thou would wish thine own heart dry of blood
> So in my veins red life might stream again,
> And thou be conscience-calm'd—see here it is—
> I hold it towards you.[15]

But it is just such an absence of the figures of voice that makes the poem a perfect test case for the difference that vocal absorption makes: we must analyze voice as an aspect of the reading experience itself, not as a metaphor in (or applied to) the text. Whether the poem is interpreted as the representation of a speech act or as a written (silent) object, vocal simulation makes a vital contribution to the sense of apparent or apparitional presence evoked, as well as to readers' feelings of involvement in an intimate, emotionally complex interaction.

The vocal dimension of "This living hand" has received only oblique attention. Critical commentary initially concerned establishing a biographical and/or intentional context for the lines, interpreting them as written out of Keats's feelings towards his fiancée Fanny Brawne, or as a scrap of dialogue to be incorporated into a play he planned to write.[16] Starting with Jonathan Culler's 1977 article on "Apostrophe," interpreters' attention shifted to the frame(s) of reference for construing the hand and its status as living or dead, present or absent. Culler describes a

> complex play of mystification and demystification at work in the neutralization of time through reference to the temporality of writing. … The poem baldly asserts what is false: that a living hand, warm and capable, is being held towards us, that we can see it. … Whether read aloud to audiences or read silently to oneself … readers seem to do precisely what the poem predicts. … We fulfill this icy prediction, not by seeking actually to sacrifice our lives that Keats might live but by losing our empirical lives: forgetting the temporality that supports them and trying to embrace a purely fictional time in which we can believe that the hand is really present and perpetually held towards us through the poem.[17]

Regardless of the actual agent ("Whether read aloud to audiences to audiences or read silently to oneself"), Culler identifies the poem's "speaker" as Keats—and yet he only attends to the hand's

presence, and not to the presence of the apostrophizing voice that is also "held towards us through the poem." A reified "purely fictional time" is insufficient to explain the 'when' and 'where' of the voice, which readers may not only 'try to believe' but really experience during the nonfictional time of reading.[18]

Whereas Culler interprets the poem's absorptive effects as a case of mystification and fictionality, Lawrence Lipking frames the discourse in terms of interpretive multiplicity: "the fragment constitutes one of the best examples in literature of a radical ambiguity or 'rabbit-duck'—an artifact that can be read in two fully coherent yet mutually exclusive ways." In one of these ways, "as speech in a play," Lipking recognizes the validity of reading the text as speech. His other reading rebuts Culler's claim that the poem "asserts what is false," pointing out that the hand *was* truthfully present in the event of the poem's writing—a historical fact re-membered, we might say, by readers in reading the poem—such that the text need not be construed from the perspective of the silent reader, but can also be imagined "[f]rom the speaker's point of view."[19] But if one can displace from the viewpoint of a reader reading, to occupy other viewpoints regarding the poem's referents, is one's experience really limited to the "two fully coherent yet mutually exclusive" interpretations?

Lipking also considers a third possible interpretation of the poem: as a "private" address to Fanny Brawne. This context is rejected merely because it does not cohere with the critic's assumption (or idealization) that Keats (despite the evidence of the letters) must be above self-pity, conflicted feelings, or the impulse to guilt trip: "Its tone becomes bullying and painful, its mixture of horror and pathos appears too selfish to carry a message of love." Perhaps to some; to me, it is this very complexity that makes the poem more interesting and compelling than an expression of 'pure' love—it prompts us to confront how fraught desire can be. Furthermore, we may ask where these mismatching tones come from. Lipking's initial thesis was that "'The meaning and effect of 'This living hand' depend entirely, in fact, on context'"—and yet his exclusion of the address-to-Fanny interpretation depends not on context but on tone as the factor which determines whether the possible context is appropriate.[20] In order to properly assess both the independent, formal evocation of tone and its interactions with content and interpretation, we need a method of inductive analysis, tracking the influence of textual structures on vocal simulation, which can then be combined with deduction-from-context. The point of reading and interpreting the poem is not to reach some summary verdict, determining "meaning and effect" once and for all, but to appreciate the aesthetic experience in its dynamic richness and its artful construction syllable-by-syllable, word-by-word, phrase-by-phrase, and line-by-line. This intricate complexity is what neurocognitive analysis tracks.

Whereas Lipking treats possible construals as non-interacting alternatives, Timothy Bahti reads Keats's poem as a series of self-contradictions that drive shifts among variant interpretations. Bahti narrativizes this circuit as a Moebius strip of referential determinations: one moves from the "living hand" of the writer in the past to reading the final "it," which can no longer be the hand writing, but is instead its handwriting, the text of the poem itself. But, Bahti proposes that, on re-reading, one recognizes that "'This living hand' is handwriting alive and warm only because it is read…. The 'I' is therefore also arrived upon as dead, as script, and yet the text 'speaks' here: 'I.'"[21] In other words, construal of Keats as the self-referring and other-anticipating writer gets replaced by the text as an agent speaking about and for itself; the reader then recognizes this textual agency as her own act of ventriloquism, metaphorically pre-figured by Keats in the poem's narrative, such that the absorptive reading experience has made the speaker's claims (as well as the purported wishes of the hearer) come true, even as the contextual and/or interpretive frame of reference by which they are understood as true keeps changing. Such analysis gets at the experiential dynamics involved in interpreting the poem as an allegory of reading. But where Bahti focuses on the pronoun "I" as the sign of an agent, like Culler and Lipking he ignores the voice that speaks all the text's signs. It is the

action of speaking—construed as belonging first to Keats, then to the text, then to the reader—that constitutes the sense of agency that stays constant across the shifting interpretations.

Bahti acknowledges that the interpretive circuit he describes is not the only possible sequence of construals. Beyond this qualification, I want to recast Bahti's frame-shifting contradictions as non-exclusive complications. The lexical, grammatical, and formal components of the poetic text evoke a variety of component simulations, which may be integrated in multiple ways. Operating according to principles of "best fit," in which construal emerges as neural activation flows within pre-existing cognitive structure, readers' brains do indeed privilege local coherence when constructing meaning from a text's formal features.[22] On the one hand, the combination of an underspecific text with a pre-structured cognitive system means that any particular reader will, at least initially, construe the text according to her expectations and assumptions.[23] On the other hand, in re-reading and reflection, she can entertain alternative interpretations, including complications of the construal that best fits her preconceptions, as well as experiences that deviate from rules and truth outside the imagination. The text on the page, read with one's outward eyes, can give rise to a hand in the mind's eye, and a voice in the mind's ear, all of which currently occurring experiences might be construed, like a memory, as an event that happened in some real past time and place, rather than a fictional world. In imagination, the hand can be perceptible *and* absent, alive *and* dead, limb *and* script; 'logical' contradiction in itself does not prevent an experiential construal.[24]

More specifically, vocal simulation, as a neural process, is not constrained by the physics of actual speech acts. The imagined speaking and hearing evoked by "This living hand" can be cognitively attributed to Keats, to Brawne, to a play's fictional characters, to the reader, to the text—or even to two or more of these at once, and/or as one. Lipking's three interpretations can be remixed into a more various multiplicity, while Bahti's frames of reference can be not only consecutive but additive. The voice could be construed as the 'interiority' of Keats's own inner speech, thinking the poem as he wrote it. Besides taking the lines as a script for a play, we could take them as Keats's imagination of a speech he might make to Brawne—not necessarily as a planned address, but perhaps as a mere daydream or moment of poetic inspiration. In this construal the poem may become more rhetorical, whether as a sincere wish to be understood, an artful display, or even as strategic manipulation. Alternatively, we can occupy the viewpoint of Brawne and the "inner hearing" she would have experienced reading the manuscript and imagining Keats speaking the discourse to her, the way many people conduct imagined dialogues with loved ones who are absent or dead. Indeed, whether as Brawne or as one's self, the reader can integrate the imagined voice with real knowledge that the poet is dead, construing the discourse as Keats speaking in the present 'from beyond the grave,' haunting by his voice as well as his hand.

Because the interpretation that initially strikes a reader as most apt is the one that best coheres with, and hence reinforces, her expectations, it is by considering alternatives that one gets beyond pre-existing cognitive structures to learn from and be modified by the poem. Literary value is thus increased by practicing what Keats called "*Negative Capability*, that is when a man is capable of being in uncertainties, Mysteries, doubts, without any irritable reaching after fact & reason."[25] By affording multiple construals of the same content, poetic texts demonstrate how a particular situation can be thought and felt about in various ways, which differing perspectives enrich and complicate each other. This complexity and experiential dynamism is central to "This living hand," such that it exemplifies, as Culler writes, "the kind of effect which the lyric seeks, one whose successes should be celebrated and explained." Rather than reaching after a single interpretation that best coheres with fact and reason, criticism should identify the multiple construals afforded by literary works, clarify how textual features structure and complicate readers' imagined experiences, and explore the possible values of those imagined experiences and multiple interpretations as means of expanding readers' repertoire of cognitive structures and as particular sources of novel insights.

The Neurocognitive Mechanisms of Vocal Absorption and Speaker/Hearer Viewpointing

Once we acknowledge the experiential reality of the imagined voice, and that poems such as "This living hand" afford multiple interpretions of that voice and the reader's relation to it, the next step is to clarify how vocal simulation and its viewpointing happen, so that we have a theory to ground analysis of stylistic details' vocal effects. In this section, I explain how the subjective experience of poetic voice is constituted by neural processes typically involved in reading. This imagining can be quality-rich, involving experiential dynamics that may easily go ignored in focusing on the (silent) text. One such dynamic, which has not been recognized in poetic theory, is the construal of viewpoint within vocal absorption—that is, whether the reader experiences the poetic voice as its speaker or hearer. Whereas canonical lyric models conventionalize one viewpoint or the other, both are inherently afforded. While a reader's habituated reading strategies may set a default viewpoint, features of the text itself also motivate the experiential construal during reading. After I have explained these general neurocognitive principles, I will demonstrate how "This living hand" plays upon these mechanisms to create tonal complexity and a sense of fraught rhetorical relations between the speaker and hearer.

The neurotypical synesthesia of imagined voice is best demystified not by dismissing it as metaphorical but by incorporating psycholinguistic theory into our poetic theory. For hearing and speaking humans, the neural circuitry that processes language first develops in the auditory and articulatory modalities, which become interconnected with each other, forming a "phonological loop" that serves feedforward-feedback coordination of one's speech.[26] Through further interconnection of this phonological network with semantic knowledge, competence in speech-sounds becomes competence in spoken language; learning to read then interconnects these auditory-articulatory-semantic circuits with circuits in the visual system.[27] In the act of reading, neural activation flows from the visual system into the auditory and articulatory systems' phonological processing circuits and on to the processing of meaning.[28] The theory that experience of an inner voice is constituted by such auditory and articulatory activation is supported by experimental studies using behavioral data, electromyography (EMG), electroencephalography (EEG), positron-emission tomography (PET), transcranial magnetic stimulation (TMS) disruption, and functional magnetic resonance imaging (fMRI).[29] Vocal absorption, though an imagined experience, is a factual event, composed by real processes of neural activation in the reader's brain.

Because voice happens not on the page but in readers' brains, a poem's voice is not a unique essence deriving from the individual author and/or determinate text, but a matter of construal. Imagined voices have the same variety as actual voices: they may sound like the reader's own voice; exhibit the accents, gendered timbres, and pitches of fictional characters or historical persons; and/or be based on the remembered voice of real persons, like an acquaintance, an actor, or the author. Dynamic qualities including tone, loudness, pacing, rhythm, and emotion also frequently inhere in the vocal simulation.[30] Though the particular voice and qualities imagined in a particular reading will depend on the reader and particular context, the text itself exerts at least some underspecifying influence. In prose fiction, speech tags and other information in the narration provide explicit cues as to these qualities of direct discourse's imagined voice. Narration-less poetry, however, depends on formal structures and implication to evoke vocal dynamics. Analysis of such textual features in terms of their neurocognitive processes enables us to account for the range of motivated effects and to appreciate a poem's technical artistry.

Whereas the metaphorical model of poetic voice conventionally figures the reader as a passive hearer of speech coming from the poet, persona, or poem, in fact it is the reader's brain that simulates the act of speaking along with the experience of hearing. The reader is, neurally, an active

participant even if the imagined voice is attributed to, and has the qualities of, some other person (or 'the poem itself'), because that other voice's speaking is still simulated by the reader's own articulatory-auditory phonological loop. And yet, vocal simulation always involves both articulatory and auditory circuits, this dual process is dissociable into two distinct phenomenological construals: the imagined voice can be experienced as either inner speaking or inner hearing.[31] I therefore distinguish between the "cognitive viewpoints" of the speaker and hearer. While vocally performing a text, or listening to a text being vocalized, makes one or the other vocal viewpoint actual, silent reading inherently affords both options.[32] Given this underspecification, which viewpoint a reader experiences in a particular reading may be determined by interpretive habits and expectations. At the same time, vocal viewpointing may also be influence by features of the text itself.

Psycholinguistic research into inner speaking and hearing provides grounds for hypothesizing which textual factors motivate speaker/hearer viewpointing in reading poems. Recent experimental studies have found that inner speaking correlates with greater activation in *both* articulatory and auditory areas, compared to inner hearing.[33] While it is possible that vocal simulation when reading may differ from task-elicited inner voicing, I have extrapolated from the research available in order to formulate the following conjectures:

- Speaker viewpoint is motivated by explicit marking, implicit cues, and/or habituated expectations, that frame the discourse as speech, specifically focusing attention / directing activation to vocal simulation.[34] These include such features (especially common in lyric poetry) as: references to speaking, hearing, or song; the use of first-person pronouns, second-person address, or apostrophe (which bring the speaker and/or hearer "on-stage"); and implications of co-presence through deictics and/or imagery referring to a present scene as perceptually accessible to both the speaker and hearer.[35] That is, separate from functioning as generic markers that evoke the interpretive metaphor of voice, these features motivate enhanced vocal simulation in the reader's articulatory-auditory circuits.[36]
- Speaker viewpoint is motivated by passages where the qualities inhering in the imagined voice are especially salient, complex, and/or significant, due to the corresponding greater activation in articulatory-auditory circuits.[37] These may include: phonemic repetitions, as in consonance and assonance; sonic patterning such as rhythm and rhyme; and diction and phrasal constructions that have strong intonational or attitudinal associations. Such features thus not only function as markers of 'the poetic,' they motivate vocal absorption by way of general language-processing mechanisms.
- Speaker viewpoint is motivated by sites of vocal indeterminacy (regarding pronunciation, stress/rhythm, intonation, etc.), as more activation and attention is directed to the phonological loop in order to produce the enhanced simulation needed to resolve that indeterminacy.[38]
- Speaker viewpoint is motivated by imagining a voice other than one's own, as greater activation is involved in constructing a voice from memory.[39]
- Hearer viewpoint, then, may be more motivated the more familiar the imagined voice is.[40] Having listened to a poet's voice thus makes one more likely to experience that poet's poems (both those previously listened to and new poems) as inner hearing rather than inner speaking.[41]
- Though counterintuitive, it follows that imagining a poem in one's own voice (as the most familiar options) motivates alignment with the hearer viewpoint. This construal is similar to the way the inner voice of spontaneous verbal thinking is often experienced as hearing rather than speaking.[42] However, this motivation may reverse if one specifically construes the

discourse as an act of address, such as by imagining an addressee: identifying the hearer viewpoint with an other may displace the reader to the speaker viewpoint, in keeping with my claims in the first bullet-point above about the effect of bringing a hearer or apostrophic addressee "on-stage."[43] The experience of a poem as an act of self-address, whether in one's own voice (including the inner voice of thinking) or that of an other, is a further sub-case in which either the speaking agency or hearing self may be the viewpoint of construal.

- Hearer viewpoint is motivated by an easier-to-process text, including by greater familiarity with the poem. There is, then, a trade-off between the enrichment and elaboration that happens as activation spreads in re-reading, and the eventual bypassing of meaningfulness as performance becomes rote, as in memorization, where the discourse may be executed in the phonological loop without needing to involve semantic, affective, and other active simulations.[44]

In the case of "This living hand," though speech is not explicitly figured, the text motivates readers to construe the imagined voice from the viewpoint of its speaking—in part through the first- and second-person pronouns; the deictics, including "This," "now," "here," and the present tense; and the references to the hand as perceptually accessible to the hearer. Thus, beyond adopting the discourse's deictic center as the frame of reference in which the hand is truly living, the reader is drawn into identifying with the speaker himself, her imagined speaking become his living voice.[45] And yet, the (arguably) relatively prosaic (rather than sonically salient) texture of the poem's blank verse, and the likelihood that readers will fall back on their own or some other familiar voice (rather than try to imagine a male Cockney accent), mean that the text does not *demand* the speaking viewpoint, but in part also motivates an experience of imagined hearing.[46] Both viewpoints legitimately deserve critical consideration. Indeed, in the following, I argue that "This living hand" leverages dual viewpointing to elaborate its emotional drama and enrich the lyric effects of interiority and intimacy.[47]

Vocal Tones of Feeling via the Vowel "Frequency Code"

Now that I have explained the mechanisms of vocal simulation, I can properly address the vocal complexities of "This living hand." I will do so by analyzing the text's formal features as motivators of intonation, in this section, and of rhythm, in the next. At the same time that the poem's semantic content evokes ideas of earnestness, death, haunting, and wishing, I argue that the text's vowel and phrasal structures motivate tones of solicitation, urgency, fear, aggression, and offering. In construing the discourse's rhythm, experiences of confidence or uncertainty, and of fulfillment or incompletion, are variably motivated, which reactions may then be integrated into one's interpretation of the poem. By identifying the chords of ambivalence knotted together in the vocal simulation, we can track how the poem's emotional and relational multiplicity is resolved and/or elaborated in varying viewpoints and interpretations. Though one's initial reading of the text will tend towards construing the poem in accordance with one's expectations, re-reading enables one to return to the core complexity in order to explore how the poem complicates her habitual structures of thought and feeling.

A neurocognitive approach opens the way for an empirically-grounded analysis of poetic tone in terms of the simulated intonation of the imagined voice and even the simulated facial expressions of the speaker. The critical concept of tone derives from classical rhetoric, according to which the vocal delivery of an oration aims to convey the speaker's emotions to the audience, to convince them of the speaker's sincerity and enhance the persuasive power of his argument.[48] From

this sense of expressive tones of voice, an additional modern interpretation developed of tone as a quality inhering in literary style, such that the manner of the writing is taken to evoke a more general mood, or, as I. A. Richards defined it, to display the attitude of the writer or persona towards the discourse, topic, and/or reader(s).[49] In "This living hand," the elaborate branching syntax, with its interruptive phrases and causal relations predicated across a series of subordinate and coordinate clauses, evokes a sense of a presiding subjectivity behind the language, if not a specific intention or tonal quality. Keats's use of "thy," "thou," and "thine," for twenty-first century readers, marks the text as literary and/or archaic, while the alliterative and unusually passive construction "be conscience-calm'd" is a notably artful manipulation of language. But though these features may motivate a sense that the speaker is calculating and cultured, these most mannered moments contribute little to the simulation of vocal tone. For this poem, we must find tone in formal features other than displays of salient style.

Because intonation is a paralinguistic quality of speech, it is not immediately clear how written English, lacking tonal markings (other than the question mark, exclamation point, and expressive uses of italics, boldface, or capitalization), can guide the construal of vocal tone apart from explicit and implicit semantic evocations of affects. But Keats himself suggests one way. The poet's close friend Benjamin Bailey reported:

> One of his favorite topics of discourse was the principle of melody in verse, upon which he had his own notions, particularly in the management of open & close [*sic*] vowels. … Keats's theory was, that the vowels should be so managed as not to clash one with another so as to mar the melody,—& yet that they should be interchanged, like differing notes of music to prevent monotony.[50]

Modern research into sound symbolism bears out aspects of Keats's intuition. Cross-linguistic (and even cross-species) evidence points to a "frequency code" based in the contrast between higher-pitched front vowels and lower-pitched back vowels. Animal vocalization evolved, and human language has developed, in a biological and environmental context where pitch correlates with size; as a consequence of the significance of relative body size in interactions, threat and dominance are communicated by modulating vocal pitch downward, while heightened pitch communicates fear, submission, and/or a need of assistance.[51] John Ohala argues that this biologically-motivated frequency code is behind the pattern, common across many languages, of using high and/or rising pitch to mark questions, and low and/or falling pitch to mark statements: typically, questions constitute a deferential request for information or other assistance, whereas statements reflect confidence and purport to authority.[52] Beyond coding specifically for interrogative and declarative moods (which are also marked by syntax and grammar), vowel-pitch relations enable texts to evoke other intonational contours as qualities of a poem's voicing, construed without the need for the reader to consciously analyze the vowel patterns.[53]

The very patterns that Ohala describes are operative in "This living hand." Below, front vowels are italicized in the text, and back vowels are boldfaced. (In the analysis, I further differentiate high-front (hF) and low-back (lB) vowels, which exhibit the greatest pitch contrast and so most fully evoke the frequency code.[54])

This living hand, **now warm** and *ca*pa**ble**	*hF hF hF F*, **lB B** *F hF* M **L**
Of **ear**†n*est* **gr***a*†sp*ing*, **would**, *if it* were **cold**	M M/**B**† *F* **lB**/*F*† *hF*, **B**, *hF hF* M **B**
*And in the icy s*ilence **of** the **tomb**,	*F hF hF aI hF aI* M **lB** M **B**,
So haunt thy *days and chill thy dreaming nights*	**B B aI** *hF F hF aI hF hF aI*
That **thou** would *wish thine* **own heart dry** of **blood**	M **lB** M *hF aI* **B lB aI** M **lB**

So *in my veins red life might stream* a**g***ain*,	**B** *hF aI*/*hF hF F aI aI hF* M (*h*†)*F*,
And **thou** *be* **con**science-**calm'd**—*see here it is*—	*F* **lB** *hF* **lB** M **lB**—*hF hF hF hF*—
I **hold** *it* to**wards you**.	*aI* **B** *hF* M **lB B**.

Figure 5.1 For vowels marked †, vowel category depends on accent. Tthe dipthong /aI/ may be categorized as a back vowel or front vowel; here I construe it according to the immediately preceding vowel, in keeping with evidence that simulation influences subsequent phoneme discrimination.[55] The middle vowels might likewise experientially assimilate towards the category of the preceding vowel.

Strings of front vowels predominate in the poem, but are punctuated by back vowels in contrasting strings and at the starts or ends of phrases/clauses. The movement between these vowels across the poem's syntactical units motivates rising, falling, or oscillating intonation contours in the imagined voice. Whether these patterns were consciously designed by Keats, intuited through a sensitivity to vowels, or arose 'organically' in channeling "the true voice of feeling," they enrich vocal simulation and make rhetorically-significant contributions to the reader's overall construal of the poem.[56]

Attention to the details of these vowel structures reveals the tonal work they can do, in some cases reinforcing semantic and affective content, in other cases undercutting or complicating it. The steady high pitch of the opening phrase, invoking the topic "This living hand," initiates the communication in a tone of polite solicitation, perhaps with overtones of distress or excitement.[57] The next phrase, with its alternating pitches ("now warm and capable / of earnest grasping") evokes a sense of animatedness, especially in "earnest grasping," where the rising-pitch within individual words constitutes "melisms," tonally conveying the speaker's emotional investment in the speech act.[58] As the poem moves from describing its subject to predication, the low pitch of "would" asserts the act of stating, leading into the hypothetical claim with declarative confidence. The culmination of phrases in the back vowels of "cold," "tomb," "blood," and "calm'd" motivates simulating the lines so finished as aggressive assertions.[59] The vowel patterns thus guide construal of the speaker's feelings, through tone, in conjunction with the lines' meanings.

At the same time, even though these tonal qualities inhere in the speaking voice, their entailed affects can also contribute to construal of the hearer's subjectivity. For example, the front vowel string of "thy days and chill thy dreaming nights," as a tone of fear, evokes the feeling that the speaker is attributing to the addressee.[60] The alternation of rising and falling contours that accompany the articulation of this projected haunting, then, at once evokes a sense of the speaker's mix of desperation and aggression, and of the hearer's mix of distress and pity.

The last two lines of the poem make a final recapitulation of these vowel patterns and their complex tonal drama. The penultimate phrase, "see here it is," reprises the opening phrase's deferential/desperate high pitch. While "see" is an imperative, as an imperative of perception its success is inherently uncertain, making the questioning tonal quality apt. Similarly, whereas "it is here" would be a statement, "here it is" is an instance of the "presentational deictic" phrasal construction, which is used in the act of deferential presenting (including cases of offering, like offering one's hand) and entails a rising intonational contour (as in 'heeeeere you are!' which vowel elongation may be mimicked by the vowel-repetition of "here" following "see").[61] The clause "I hold it towards you," which semantically is redundant, then functions to shift to the lowering pitch of an assertive statement. This sense is further motivated by a closural effect, as "hold" and "you" echo the line-ending back-vowels of "cold" and "tomb." Through the shifted vowels of this restatement, the uncertain tone of the penultimate imperative-to-perceive becomes a final demand-to-receive. The implicitly threatening sense of this ultimatum motivates reconstrual of the speaker's fear-of-refusal as an unspoken fear-to-refuse in the addressee. Thus, the poem's "bullying and painful …

mixture of horror and pathos" (which complexity Lipking disavows as "too selfish to carry a message of love") is not dependent on inference from a specific interpretive context, but rather is constituted through vocal simulation itself, as the vowels of the text evoke meaningful tonal contours.[62]

The Articulatory-Facial-Affective Pathway and the Complication of Lyric Expression in Vocal Viewpointing

By following the neurocognitive process still further, we can appreciate that the affective significance of a poem's discourse derives not only an imagined voice, but also the imagined face. As with the significance of vowels, Keats noticed this phenomenon. In the 1817 letter in which the poet articulates his ideas of "the authenticity of the Imagination," Keats also puts forward an example of an imagined face evoked by musical voicing:

> have you never by being surprised with an old Melody … by a delicious voice, felt over again your very speculations and surmises at the time it first operated on your soul—do you not remember forming to yourself the singer's face … even then you were mounted on the Wings of Imagination so high—that the Prototype must be here after—that delicious face you will see….[63]

De Man, too, associated the imagination of face with the imagined voice, interpreting prosopopoeia as another metaphorical anthropomorphization of text.[64] But again, de Man's apparently empirical denial of facing, as with voicing, again actually misses a literal simulation, which is revealed by neurocognitive research. The articulatory portion of the phonological loop involves neural circuits for control of the lips and mouth, which are connected to, or even shared with, those used for facial expressions; in simulating a text as speech, one simulates the motions of one's face pronouncing that speech. Such simulations can potentially become integrated with visual simulation, constituting imagery of the speaker's face—or they may remain partitioned, contributing to the determination of vocal and affective qualities without entering conscious awareness.[65] To the extent that the facial simulations correspond to emotional facial expressions, activation then flows through them from the articulatory system into the reader's affective systems. Phonemic patterns therefore not only motivate simulation of the discourse's tones of voice, but also affective simulations by way of facial expressions.[66]

These tonal and facial pathways may reinforce each other, such that the imagined voicing is enriched with the qualities of the facially-evoked emotion.[67] Or they may also complicate each other. After all, though vowel patterns can suggest prototypical expressive vocalizations that are common across species and languages, human communication is culturally variable and far more flexible than a set of innate tonal contours. Likewise, the mouth shapes involved in articulatory simulation are not the only parameters in the emotional facial repertoire. Facial expressions for different emotions can overlap with regard to some of their muscle contractions: the lip-corners that pull back to form a smile, which may be evoked by front vowels, may also form a grimace; the "o-face" evoked by back vowels may be involved in anger, but it could also occur in a sigh of relief, a groan of grief, or even a moan of pleasure. The simulation of these facial expressions as a result of articulatory simulation, then, motivates *multiple* affects.

This multiplicity of affects, evoked by the direct vocal and indirect facial pathways, constitutes experiences of ambiguity and ambivalence. The meaning of these combinations will then be motivated not only by interpretive context but also, I argue, by viewpointing within vocal absorption. Because alignment with the speaker, focusing attention on articulatory simulations,

increases the activation flowing through facial simulation to affective simulation, the speaker viewpoint motivates greater tonal complexity.[68] Furthermore, the affective simulations constitute a sense of unmediated access to the speaker's subjectivity. Combining this focalization with the affective multiplicity, the reader-as-speaker construes the tonal ambiguity as an expression of genuine ambivalence, the way in real life one is sometimes surprised by the layers of emotion betrayed by one's voice. When attributing "This living hand" to the historical Keats while aligning with his speaking in this way, the author's imagined voice comes vividly to life, its multiple tones integrating with his complex situation—fearful in confronting early death, confident his death will haunt, yet uncertain even while asserting the power to command romantic consummation and/or to produce lyric immortality posthumously.

In contrast to this viewpoint-motivated interpretation of the poem's tonal complexity as sincere, taking the hearer viewpoint motivates construal of its multiplicity as unreliable, even duplicitous. When a reader-as-hearer registers both solicitous and domineering tones and affects as qualities of the speaker's expression, the sense of a discrepancy in the speaker's intentions evokes a response of suspicion. The speech's appealing tones are then construed as a rhetorical cover, incompletely concealing an underlying aggression. This sense of concealment is even literalized by cognitive comparison between the speaker's simulated facial expressions and the reader's actual face: the front-vowel smile, as a simulation that fails to match one's actual expression, seems an insinuating mask-like grin, and the back-vowel "o-face" of love-talk is likewise 'revealed' to be a put-on for the sake of persuasion. In such a hearer-viewpoint construal, the voice is experienced as chillingly manipulative, only pretending earnestness in order to grasp the addressee's pity. Thus, instead of defaulting to a verdict of mutual exclusion or undecidability, experiential construal makes rich sense out of contradiction.

The multiplicity of the speaker's affects can also be resolved by attributing some of the emotions to the hearer's subjectivity. That is, even though excitement, amorousness, distress, grief, and fear are evoked through articulatory simulation as feelings expressed by the speaker, they can be re-construed as belonging to the hearer, comprising reactions to the discourse.[69] After all, "This living hand" specifically prompts construction of the hearer's subjectivity as a content of the counterfactual statements that thou would be so haunted as to wish what the speaker says thou would wish. Having been evoked and explicitly identified with the content affects of fear and desire already, it is easy for the hearer's subjectivity to integrate additional affective simulations, supplementing and/or replacing those of the hypothetical. What's more, evoked affects can function as contents of *both* the speaker's and hearer's subjectivities, such that the subjectivities form an overlapping structure of empathetic resonance. In Keats's poem, this resonance is framed as an affective transfer, where the speaker's distress at the thought of dying motivates the hearer's distress, whether as fear at the thought of being haunted, a pitying wish that the speaker not die, or grief that the speaker is in fact dead. At a general level, such construals exemplify the cognitive structure of intimacy, in which reciprocally-directed social affects interconnect the subjectivities of the speaker and hearer in empathetic resonance and mutual understanding.

Rhythmic Indeterminacy, Rhetorical Relations, and the Complexity of Lyric Intimacy

In the preface to the 1800 edition of *Lyrical Ballads*, William Wordsworth claims that a poem's meter provides the reader with "continual and regular impulses of pleasurable surprise" derived from "the perception of similitude in dissimilitude" as words with varying rhythms and degrees of stress fit harmoniously into the "certain laws" of meter. While particular rhythms may evoke various associated affects ("whether chearful [*sic*] or melancholy"), as a general principle Wordsworth argues that the "overbalance of pleasure" produced by metrical language serves to

"[temper] the painful feeling which will always be found intermingled with powerful descriptions of the deeper passions."[70] But what happens when, within a regular metrical pattern, a particular phrase's rhythm is *un*certain?

Keats's "This living hand" complicates Wordsworth's seminal account, as its interactions between sonic pattern and irregularity prompt responses beyond a pleasurable overbalance tempering described pain. Though the poem lacks the overt structure of end-rhyme, it uses other forms of segmentation to set up expectations and deliver satisfaction. In the opening lines the syntax repeatedly interrupts itself, evoking a desire for sentence-completion in the reader—a grasping after meaning and the speaker's reasons for speaking thus—that resonates with the speaker's desire for more carnal grasping and/or reincarnation. This drama becomes sonic in the course of the appositive phrase, "NOW WARM and CApaBLE / Of EARNest GRASPing." Though the discourse is metrically iambic, the strong unstressed syllable of "now" and the weak stressed syllable of "ble" leave one wanting for a steady rhythm. The enjambment returns the reader to even rhythmic alternation, but "EARNest" and "GRASPing" evoke a sense of trochees more than iambs, especially when followed by the comma's mid-foot caesura.[71] This interruption creates anticipation for the foot's completion, coinciding with the frustrated expectation for the shift from topic to predicate, both of which are satisfied by "would"—only to be immediately interrupted by another comma, and the conditional "if" clause that carries on through the end of line 3. Meanwhile, the back-vowels of "cold" and "tomb" echo "would," creating a sense of structure that reinforces the phrasal units and pentameter line, and yet is neither so sonically salient nor so regular as end-rhyme, such that the poem tends more towards calculating prose than song. This punctuating function of echo carries on through "blood" and "calm'd" to the last line's "hold" and "you."[72] Where the rough regularity of lineation can be perceived visually, these patterns depend on vocal simulation for their segmenting effects and the sense of progressing expectation and satisfaction.

As for patterning that participates in more certain laws, the meter of "This living hand" scans as regularly iambic. However, within vocal absorption this regularity is not arrived at analytically, but must be determined dynamically during the act of reading. Instances of rhythmic indeterminacy, where it is not immediately clear which syllable receives greater stress, require improvisation on the part of the reader in making an articulatory-auditory construal. There are several such moments in "This living hand"; each indeterminate rhythm is underlined below:

> <u>This living hand</u>, <u>now warm</u> and capable
> Of earnest grasping, <u>would, if it were cold</u>
> And in the icy silence of the tomb,
> So haunt thy days and chill thy dreaming nights
> That thou would wish thine own heart dry of blood
> So in my veins red life might stream again,
> And thou be conscience-calm'd—<u>see here it is</u>—
> I hold <u>it towards you</u>.

The uncertainty of these moments results from questions of pragmatic stress that are, at least initially, open. Is the point being stressed that it is THIS living hand, that it is this LIVING hand, or that it is this living HAND? That it is NOW warm or now WARM? Would the contrast be IF it were cold, if IT were cold, if it WERE cold, or if it were COLD? Is the imperative pointing to SEE, to HERE, to IT, or that it IS? On a first reading (or one in which the reader's knowledge of the poem's subsequent elaboration has been forgotten or inhibited) one can't know for sure which information the speaker is meaning to stress—especially in the opening phrases, before an iambic

norm has been established. The reader's vocal simulation has to improvise degrees of stress as she reads.[73]

Rather than superadded pleasure, improvisational stress-construal in such a context of many competing alternatives may evoke feelings of tentativeness and uncertainty. If attributed to the speaker, these feelings motivate a sense of doubt that makes Keats's speaker's assertive tone seem more like desperation. When integrated into the hearer's viewpoint, the sense of rhythmic uncertainty reinforces suspicion of the speaker's untrustworthiness. The difficulty in imaginatively hearing the discourse 'clearly' may also be construed as a quality of faintness or 'ghostliness,' contributing to interpretation of the voice as coming from the distant past and/or from beyond the grave. The more definite iambic regularity in the middle lines of the poem, then, contributes to a sense of the speaker's certitude about his assertive projection; it also motivates construing his hypothetical as accurate, for the reader's confidence in the poem's rhythm contributes to a sense that the hearer is convinced to wish as the discourse describes.

Given that certainty and assertiveness resonate with feelings of closure, the poem's final line constitutes a crux. On the one hand, its return to back vowels (after the "penultimate variation" front-vowel-string of "see here it is") motivates a tonal effect of definitive closure, which is further strengthened by the rhymes of line-ending "cold" and "tomb" with "hold" and "you," as well as by the three-vowel couplet that hold/towards/you makes with thou/con/calm'd.[74] On the other hand, the closural stability is undercut by a falling-off in rhythmic coordination and/or confidence, depending on the simulated accent and pragmatic degree of stress on the final word ("i HOLD it toWARDS YOU," "i HOLD it toWARDS you," or "i HOLD it TOWARDS you").[75] Whatever the construal, the sense of a lost rhythmic coherence here reinforces, and is reinforced by, the metrical (and visual) incompleteness of the line. The prosody of the poem's ending thus works against the closural sense motivated by the vowel patterns. This vocal ambivalence combines, in semantic construal, with the self-defeating way that the speaker's offer of his hand seeks to be a demand, yet is incomplete, dependent upon whether the addressee hears, sees, and reaches in turn.

Dynamic Shifts in Vocal Viewpointing via Rhythmic Indeterminacy and Regularity

In addition to contributing to viewpointed interpretations of tone, rhythmic uncertainties motivate viewpoint-construal in the first place. Because syllable stress *must* be determined in the vocal simulation (while tonal qualities are optional), moments of rhythmic indeterminacy motivate assuming the speaker viewpoint even more than moments of tonal ambiguity do. Rhythmic indeterminacies therefore have the power to guide the course of the reader's viewpoint while reading the poem, drawing her attention to salient articulations or letting her settle back into easier listening. Vocal absorption thus may often involve shifts back and forth between the viewpoints of the speaker and hearer.

Once we recognize the possibility of shifts in experiential viewpoint, we can appreciate how poems leverage features such as rhythmic indeterminacies and regularity to motivate such shifts. In "This living hand," the rhythmic indeterminacies make a frame structure.[76] As analyzed above, the need to make guesses as to the opening phrases' pragmatic stresses prompts the reader to increase activation of her articulatory simulation. While these guesses are uncertain, their determinations involve predictions about where the discourse is semantically headed, such that the reader is making inferences about the speaker's intentions, and hence simulating his subjectivity. In the middle lines, the discourse shifts from the speaker's sensory experiences (warmth and earnest grasping; cold, silence, and death) to his imagination of the addressee's experiences of being haunted, wishing, and then ending up conscience-calm'd. The shift to more determinate iambic regularity at once supports a shift of attention, from vocal absorption in the speech act to focus instead on the counterfactual

scenario, and at the same time motivates a shift from the speaker viewpoint to that of the hearer whose hypothetical experience is being narrated.[77] In fact, the speaker's and hearer's viewpoints collapse together here, as the content of the text, in the reader's imagination, is both the speaker's imagination of the addressee's imagination and the hearer's imagination of the speaker's imagination. Keats's poem achieves lyric communication of interiority, and provides us with its allegory: what is "expressed" by the text is the reader's imagining the addressee's imagining the speaker's imagining. Vocal simulation of the poem's discourse functions as a bridge, a component shared by and therefore connecting the two subjectivities.

But the poem's allegory also figures the literal impossibility of the transmission of interiority: the text is dead, formed by the writer's imagination but depending on the reader to give it life; at the same time, this dependence is vampiric, occupying the reader's imagination with the simulations evoked by the text. "This living hand" does not dwell on the fantasy of communion for its entirety; instead, it motivates an oscillation between the speaker's and hearer's viewpoints, constituting lyric intimacy as a reciprocal transfusion of interiority between persons, who remain distinct rather than a collapse into one identity. The return of rhythmic indeterminacy at the end of line 7 re-distinguishes the viewpoints. Upon the culmination of the hypnosis of the hearer into imagined self-sacrifice—"And thou be conscience-calm'd"—the chain of counterfactual causes and effects breaks off, interrupted by the imperative "see here it is." The foregoing iambic pattern carries forward into simulation of this phrase, such that conditioned expectation converts its possible indeterminacy into "see HERE it IS." And yet, the verb "see," especially in its imperative function, also receives prosodic emphasis, such that the first iamb approaches a spondee, "SEE HERE it IS." Destabilizing the preceding iambic certainty, this moment re-centers attention on articulatory simulation, at the same time that the hazarded iambic construal shifts to the speaker's subjectivity as locus of the pragmatic intention to stress presence and existence (rather than stressing "it" to focus on the dead or living hand). Joint imagination of narration thus gives way to absorption in the act of address. The vocal tone and intentions of this imperative offering (aggression, supplication, suspicion, and sympathy) now take center stage as the substance of the poem's emotional drama. The speaker and hearer no longer share one imagination but are now intimately attending to and invested in each other's feelings, lyric intimates brought into this relation by the discourse.

Ultimately, the reader must shift away from the speaker's viewpoint as the speaking stops with the end of the poem.[78] With "This living hand," this final shift affords a strange after-effect. At the semantic level, the poem motivates interpretation of the final "it" as referring to the text itself as well as the dead and/or living hand. From the experiential perspective of vocal absorption, the speaker *has* "now" been living as the imagined voice speaking the discourse. The logically impossible resurrection has become neurocognitively real. Furthermore, it's also neurocognitively possible for the poem's apparent incompleteness to become apparitionally whole. Vocal simulation can overrule vision, such that the final line break is backgrounded out of attention and the poem's last two phrases are (re-)construed as their own complete (if metrically irregular) pentameter: "SEE HERE it IS—i HOLD it toWARDS YOU."[79] Taking the hearer viewpoint, in which vocal simulation is less rich, de-emphasizes the rhythmic indeterminacy here, such that what was an unstable falling-off in the speaker viewpoint instead functions as a sense of closure, integrating together the structural culmination of internal rhymes and back-vowels, the definitive tone of the pitch-lowering contour, and the wholeness of the re-analyzed pentameter. At the level of prosody too, then, the poem's completion lies in the reader-hearer's imagination, and goes beyond the apparent facts of the page.

Perceptual Imagery in "This living hand": Believing and Seeing

Whereas the completion of the text in vocal imagination has gone unremarked in the reception of "This living hand," the poem's departure from apparent perceptual fact has been a central point of commentary. But even as critics focus on impossible presence, ghostly embodiment, and reader involvement, they follow in an antipictorialist bias of twentieth century literary theory, demurring at addressing the poem's imagery as imagery, treating its effects instead in terms of epistemology, temporality, reference, figurative meaning, and/or discursive troping.[80] Jonathan Culler, in his seminal discussion of the poem's "complex play of mystification and demystification," puts a finger on the issue of embodied action and perception, noting that "The poem baldly asserts what is false: that a living hand, warm and capable, is being held towards us, that we can see it." And yet, when we "fulfill" this predictive assertion "by losing our empirical lives," Culler puts this "imaginative act" in terms of "trying to embrace a purely fictional time in which we can believe that the hand is really present and perpetually held towards us through the poem."[81] But the poem not only asserts the hand's presence in time, it prompts us to imagine its immediate perception.

Where Culler focuses on loco-temporal absorption, where the hand is present to the reader's viewpoint, William Waters uses displacement to the author's perspective to resolve its reference to a visible hand: ""This living hand' is the hand Keats saw before him as he wrote the handwritten poem…." Waters then argues that the poet's death has transformed his corporeal hand into a metaphor for his handwriting, "haunting by means of a hand which is extended in the very medium of the poem … its incorporation of the immediate presence, by definition, of any written text to its reader."[82] In this way, the focus on the text as a historical artifact combines with interpretation of its figurative meaning, such that perceptual imagery as a phenomenon in itself is subsumed into its semantic function as an *image for* the text. Critics also commonly focus on descriptive discourse itself rather than the perceptual images that discourse causes. So, in *Keats and Philosophy: The Life of Sensations*, Shahidha Bari discusses not the imagined sensations the reader experiences while reading, but "the trope of touch … [t]he figurative hand."[83] Brooke Hopkins, interpreting the poem in Freudian terms, only in passing admits the ghostly vision that makes the poem uncanny: "It is difficult for the reader to turn his eyes away from the hand he imagines to be in front of him, although he *knows* that hand is not there."[84] While the force of the poem's imagery is symptomatically evident in critics' efforts to explain its haunting effects, the readerly experience of imagined sight, sound, touch, feeling, and action is unaddressed.

We can better understand what poetry makes happen by recognizing that perceptual imagery, while apparently magical as a form of cognition that extends beyond the text, is not a myth or mystification, but a natural mode of perceiving verbal art. Keats himself may be taken as pointing us in this direction. In his letter on "the authenticity of the Imagination," the poet takes a critical position regarding the pursuit of conceptual reasoning divorced from sensory experience:

> The Imagination may be compared to Adam's dream—he awoke and found it truth. I am the more zealous in this affair because I have never yet been able to perceive how any thing can be known for truth by consequitive [*sic*] reasoning—and yet it must be—Can it be that even the greatest Philosopher ever arrived at his goal without putting aside numerous objections—However it may be, O for a Life of Sensations rather than of Thoughts![85]

Alan Richardson documents the influence of Keats's medical training on the "unprecedented poetics of embodied cognition that runs throughout his best and most characteristically daring verse."[86] Richardson has also shown that, before it fell out of favor in the twentieth century, visualization was understood in the nineteenth century as a prevalent part of literary reading; he argues that, concurrent with the increasing treatment of the senses as distinct organs and neural pathways in contemporary physiological discourse, Romantic writers specifically explored the complications and

effects of perceptual imagery across multiple modalities.[87] Though "This living hand" clearly asks to be read as referring to the text's handwriting, the power of the poem's figurative meaning in large part derives from the perceived figure it evokes through perceptual absorption. Believing in the hand involves seeing it. Grasping the poem's meaning involves feeling it. Our appreciation of the poem's artfulness should account for these perceptual dimensions of experience.

The Immediacy of Perceptual Imagery and the Negative Capability of Visualizing "This Living Hand"

Approaching imagery from the perspective of neurocognitive simulation enables enhanced analysis and appreciation of the intricacies of readers' imagined experiences. We move from a conception of verbal art as referring to or representing sensory objects themselves to an investigation of readers' subjective perceptual imagining and the ways that textual features prompt and play upon that imagining. Treating poetic imagery as a perceptual experience in this way focuses our attention on the variable and dynamic parameters of imagined perception, as well as on the reader-perceiver's relations to the images.

According to the theory of simulation semantics, understanding language involves not only conceptual construal but also perceptual simulations. Accumulating experimental research using multiple behavioral protocols and brain imaging techniques supports the theory that such simulations are a typical, automatic part of language-processing. Though there is variation among persons, modalities, and cases as to the detail of the simulations and whether or not they are consciously experienced as mental imagery, reading activates not only linguistic and semantic areas of the brain, but also perceptual and motor-control areas, which help to construct meaning by simulating the beyond-linguistic experience described by a text's language.[88] These simulations are not contained within the imagination as a discrete system. Rather, perceptual imagery is constituted within the brain's systems for the sensory modalities, activated by language in a "top down" process, along the same pathways that connect non-imagined perceptions to language in a "bottom up" process. Mention of a 'warm hand grasping' activates somatosensory circuits that register warmth, visual circuits that would recognize a hand in the act of grasping, and motor control circuits that would produce the action of grasping. The qualitative differences between imagery and perception result, in part, from limitations in the extent of this top down activation: the neural cascade of an image may reach only part way into the hierarchical structure of the perceptual system, rather than all the way down to the regions where processing of actual stimuli begins.[89] Nonetheless, it is appropriate to understand mental imagery as perception running in reverse.

Understanding imagery as neural simulation helps to clarify the immediacy of literary experience—both the sense of presence it can evoke, and the way that perceptual imagery goes beyond the text's linguistic medium. As I explained in Chapter 3, literary works can afford experiences of transport, where the reader displaces from her real situation of reading to the cognitive viewpoint of some other time and/or place, or of presence, where the past or fictional event is construed as happening in the reader's here and now. When it comes to imagery, though images can be cognitively construed as belonging to some other place, time, or even person, the perceptual simulation itself is always in the present tense and first person, constituted in the act of reading by the reader's own perceptual systems.[90] Even if one construes "This living hand" as representing a past event of inscription (as many critics do), reading the poem that way triggers current imagining of the activity of writing, such that what is understood as past is at the same time perceptually present.

Perceptual imagery also has immediacy in that this absorption of attention in present simulation can diminish attention to the medium of the text. Whereas in vocal absorption the

poem's language is brought to sensory life, in perceptual absorption the text can come to seem "transparent," as the reader's attention is occupied by the perceptual simulations rather than by the sight of the text itself.[91] This illusion of transparency, as the term suggests, is especially pronounced in visual imagery. The human capacity for neural partitioning makes it possible to both read and visualize at the same time, but because the process of simulating uses the same visual system as the act of reading, attending to the imagery is likely to produce an interference effect, backgrounding the text itself out of conscious focus.[92] When the visual text is backgrounded in favor of visual imagery of the persona and/or addressee, and this perceptual simulation combines with vocal simulation of the poem's language as imagined speaking/hearing, the integrated simulation constitutes an experience of the poem as an event of speech within a diegetic scene.[93] Such imagining could contribute to interpretations of "This living hand" as intended for a play, where the imagined images would actually be embodied—though my point is that we do not need an actual production, but can experience the poem as an embodied performance staged in mental perception. Verbal art is the original technology of virtual reality.

In what follows, I will show that we need to acknowledge the complex play of sensory and somatic simulations to appreciate the full richness of Keats's poem as a lyric event, experienced with perceptual immediacy at the same time that it is linguistically and textually mediated. Key to this analysis is the neurocognitive insight that perception only appears to be unmediated. In fact, there are layered structures within the perceptual systems that construct the experienced world through elaborate processing of sensory inputs.[94] The same structures that convert so-called 'raw' sense-organ stimuli into perceived objects and experiences also provide schematic parameters that govern top-down simulations of such perceptions. In visual simulations, for example, these parameters include the perspective on the image, the shape and orientation of the image, the location and motion of the image, and even the clarity of the image. The specific form that a perceptual simulation takes results from interactions between the prompting language, knowledge embedded in the neural structures that constitute the simulations, and the present context. Linguistic analysis informed by such research can therefore make grounded claims about particular perceptual simulations being motivated by particular textual features, even as it also acknowledges variation across readers and instances of reading.[95]

For those who experience conscious mental imagery, it may seem pointless to describe the image that a specific phrase evokes, because the image seems a given.[96] But when we know the possible parameters, we can analyze the degree to which the text motivates one simulation, to the exclusion of others, or explore where multiple construals are afforded, to consider their alternative and/or combining effects. For example, in the final lines of "This living hand" ("see here it is— / I hold it towards you"), the imperative "see" focuses the reader's attention on visual perception of the hand, not only temporally present but spatially near ("here" rather than 'there'). If one simply imagines the diegetic situation described, the hand *can* be simulated from an observer perspective, moving sideways across the field of vision as the persona holds it towards the addressee—*or* it can be visualized from the perspective of the persona, seeing his own hand from above/behind as it moves outward. But the imperative address, spatial deictics, and personal pronouns in these phrases together push the reader into seeing the hand specifically from the perspective of the addressee, not the logically available observer or agent-participant perspectives.[97] Reinforcing the addressee perspective on the hand's proximal presence, "towards you" further prompts simulation of the image growing larger as it moves closer to the reader.[98] Recognition of this gesture as an offering (thanks to the perceptual knowledge Guillemette Bolens calls "kinesic intelligence") combines with the shape evoked by "hold" to motivate picturing the hand in a semi-open posture, its movement smooth, medium-slow, and reaching a stopping point within arm's reach of the reader, somewhere between waist- and shoulder-height.[99] The effect here is not just a matter of the hand being

predicated as present rather than absent, as alive when we know the poet is dead, but that in the mind's eye its meaningful gesture comes at the reader herself.

Though perceptual simulations create immediacy, they are not necessarily determinate. Unlike in life, where actual sight is always from one's own viewpoint, viewpoint in imagination can shift over the course of a poem, and can take up alternative perspectives in rereading and/or reflection. In the description of the hand at the opening of the poem, while the proximal deictic "This" suggests that the referent is near to the persona, the lack of stress on "This," combined with the present tense of "now," implicates that the referent is *also* perceptually accessible to the addressee, so that either visual perspective on the hand is viable. Whereas critics almost uniformly discuss the poem's ending from the perspective of the reader as addressee, their interpretations of the beginning vary, with some taking the perspective of the poet's view of his own hand writing. And yet, even as the semantic interpretation of "hand" as handwriting licenses this visualization, the poem simultaneously motivates perceptual simulation of a co-present embodied encounter, rather than a solitary act of inscription. Though "capable / of earnest grasping" describes the potential for an action, it nonetheless prompts visual simulation of that action, making the hypothetical immediate. That this visualized grasping *expresses* earnestness entails that it is a "kinesic" social gesture (as Bolens theorizes) rather than a mere "kinetic" action, and implicates a person rather than a pen as the object of the grasping—and, hence, that there is a graspable, co-present addressed subject, and that it is this addressee, rather than an overhearing or over-the-shoulder-reading observer, who embodies the implicated second viewpoint. It is by perceptually evoking a situation where vocal and physical expression of intimacy is possible that the poem affords, in negatively capable construal, the investment of written communication with such a sense of interiority and interpersonal emotional stakes.

The Charm of Image: Downstream Effects of Perceptual Simulations and the Convergent Convincingness of Differences in Vividness

These perceptual simulations not only provide an understanding of the persona's feelings and actions, they also prompt reactions in the reader. Such reactions can be both aesthetic—e.g. a sense of pleasure at the artistic medium's success in evoking imagined vision—and absorbed in the immediacy. Actual perception informs us about the world around us, such that seeing is believing. While readers do not mistake mental images for reality, the activity of simulation does have real effects, as it is a real neural process, constituted by systems with manifold downstream connections. These downstream connections may constitute simulations that elaborate beyond semantic content—multimodal, quality-rich, immersive imagined experiences—and/or they may produce physiological changes in the imaginer beyond the brain. In some experiments, imagining physical activity increased subjects' heart rates and breathing, and could modify and induce conditioned behaviors. Or one can think of haunting or aroused responses to frightening or erotic content.[100] After all, an evolutionary and ecological value of simulation is that it enables an organism to evaluate possible actions and situations—the simulation therefore must have some output not only in terms of the end result, but the organism's appraisal of that result.[101] Imagining someone's hand coming towards you to grasp may evoke an affective response. Depending on your construal of the situation, this might comprise a feeling of endearment towards the earnest gesture, perhaps even a solicited sense of obligation or guilt—or it might trigger a reaction of fear at the sudden invasion of your personal space. In analogy with "the curse of knowledge," a phenomenon where people consistently overproject their own knowledge onto others, even when they know others don't know what they know, I call such effects "the charm of image."[102]

Elaine Scarry's insights into an additional intricacy of perceptual simulation enables us to recognize how Keats's "This living hand" manages to produce the charm of image even for readers whose mental imagery may not be vivid. Scarry proposes that, because mental imagery is less vivid than actual perception, images of objects or phenomena that are themselves relatively less vivid will be more convincing. That is, when the unclarity of the simulation matches the unclarity of the diegetic situation, imagined experience becomes realistic. Recent experiments support Scarry's hypothesis, having found evidence that perceptual simulations are less vivid when the prompt suggests diminished visibility, as in fog.[103] Scarry furthermore suggests that the convincingness of images that are supposed to be less vivid has a broader reality effect, such that we find the rest of the diegetic world that supports ghostly objects to be "solid," even though imagination continues to be a pale imitation of actual perception.[104] Artful evocation and/or implication of degrees of vividness can therefore elicit experiences of aesthetic convincingness and/or epistemic realness.

In "This living hand," the charm of the ghostly image contributes to multiple alternative construals which make the poem convincing, whether the reader's visualization is vivid or not. If a reader has a vivid simulation of the hand, then that experience substantiates the text's assertions of presence. If a reader's simulation is less vivid, that faintness can be integrated as representing the hand's ghostliness and/or temporal distance, motivating a construal of it as reaching from the grave or the past. If a reader does not experience a visual image of the hand at all, she can construe this non-experience as fitting the truth of the actual hand's absence, focusing instead on the handwriting or text itself as the perceptually present referent. Whatever the individual reader's visualization, or one's varying visualizations across different readings and in the course of negatively capable reflection, Keats's poem manages to capture that experience as apt. Such aptness, as "processing fluency," may then contribute to a sense of aesthetic pleasure.[105]

I propose that the poem is also designed to play upon contrasts in visual imageability. The hand of the poem's opening and closing lines is not only the subject of the main clause of the poem, it is the easiest of its images to imagine. Readers who can see see hands every day, pretty much all day, such that the neural circuit for a hand is entrenched, detailed, and easily activated. The poem's other images, however, are less likely to be entrenched as readily-evoked gestalts. A "tomb"—especially its interior—is a far less common sight than a hand, and far more irregular in shape and size; readers' visual attention is therefore likely to remain focused on the image of the hand, leaving the tomb as a relatively indistinct background, perhaps the pale color of marble or aptly dark. While the anatomical imagery of "heart," "blood," and "veins" was visually familiar to Keats from his experience as a medical student, most readers will not have such vivid knowledge. Instead, their visual simulations in response to these nouns are likely to be schematic rather than pictorial images, comprising a general shape, size, color, and location. When the hand is subsequently returned to after these difficult-to-visualize images, it seems to be even more vivid than in the opening in virtue of this contrast with the intervening less-vivid images. The orchestration of shifts in imageability thus makes the poem's ending convincing, perhaps even shocking, even if one's visual image of the hand, taken on its own, would not seem so vivid.

Beyond differences in vividness, the anatomical imagery also creates an ambiguity as to visual perspective. This is because we typically imagine known objects according to a specific "canonical perspective" and in a relative "canonical location."[106] In visualizing a heart, one is arguably most prone to visualize it from the perspective of an observer looking at/into the chest of the heart's possessor. When imagining one's own heart, then, one would likely take an external perspective on the self, rather than a line of sight from the head torqued to peer down at one's own chest. For this reason, whereas the second-person address in the poem's final lines prompts the reader to adopt the visual perspective of the addressee, the phrase "wish thine own heart dry of blood" has the opposite effect: the canonical perspective for the heart image pushes the reader *out* of

the viewpoint of the addressee and *into* the viewpoint of the persona. And yet, when "veins" likewise motivates an observer rather than possessor perspective, the reader's vision shifts *back* into the addressee's eyes, preparing for the sudden re-appearance of the hand before them. The dimension of visual absorption thus features an oscillation between the persona's and addressee's viewpoints in the poem's middle lines—the same passage where, in the dimensions of vocal absorption, prosodic stability motivates taking the hearer's viewpoint, while in the dimension of personal absorption, the addressee's haunted, wishing, and then calm'd subjectivity is embedded within the persona's cognitive viewpoint as the one predicting the other's response. Through this analysis, we begin to see that multiplicity and negative capability happen within the experience of the poem, as well as between alternative interpretations. Though it is a univocal lyric, Keats's poem does not cohere into a singular viewpoint, but rather prompts divergent-yet-interrelated construals across the different dimensions of absorption.

Somatic Imagery and the Negative Capability of Imagined Inhabitation

The insight that perceptual perspective does not necessarily cohere with viewpointing in other dimensions extends to sensory modalities beyond the visual. While vision focuses on objects distinct from the organ of perception—as Husserl pointed out, one sees *through* one's eye, not the eye itself—somatic modalities involve the perceiver's body as an object of perception.[107] Touch involves contact, where one's own body serves as the medium of sensing another body. Interoception monitors the self's internal states, overlapping with affective systems, producing a sometimes-conscious "body image" in the brain that represents the body's states. Proprioception also contributes to the body image, representing one's posture and the position of one's body parts in space, while also using an unconscious "body schema" to regulate posture and movement. The body image and schema are also integrated with the motor control system that executes intentional actions.[108] The imagination of bodily experience thus involves multiple systems and parameters.

These somatic systems not only serve to represent one's own body, they also afford understanding of other bodies. In "motor resonance," so-called "mirror neurons" within the motor control system simulate the actions of others, using the self's own body image and schema. That is, when you see someone else grasp or hold out their hand, there is automatic activation of the neural circuits that would make your own hand grasp or arm extend.[109] Such "action understanding" serves as one of the pathways to cognitive and emotional empathy: when you use your own body schema to simulate someone else's posture or facial expression, activation flows from that body schema simulation to your own semantic and affective systems, such that you both infer the other person's intentions and may begin to feel feelings similar to those their body apparently expresses.[110] Automatic simulations of resonance also occur in the somatosensory systems more broadly, including haptic simulations in response to observing others' experiences of touch.[111] One's own sensorium is partially occupied by the experiences of others, and yet this occupation is actually a projection, as it is the body schema of the self that virtually inhabits observed bodies.

The same processes of sensorimotor resonance occur in reading, as the reader's haptic, interoceptive, proprioceptive, and motor systems simulate somatic imagery.[112] Such simulations are informed by the reader's entrenched knowledge of bodily experiences and behaviors, including gestural expression. This "kinesic intelligence" is used by readers in understanding the expressive meaning of narrated manners of action.[113] But what Bolens' theory of kinesic intelligence leaves out is the involvement of the reader's own body image and schema in described actions. Readers not only understand textual figures' behavior through somatic as well as semantic knowledge, they imaginatively experience that behavior, simulating it in their own sensorimotor systems.

Somatic simulation also complicates analysis of viewpointing in perceptual imagery. In actual experience, the abundance of coherent, bottom-up input from one's own body typically establishes the dominance of one's own viewpoint, even when one focuses attention on one's simulation of another's body. (Compare the condition of mirror-touch synesthesia, where the synesthete experiences the observed touch as occurring on her own body.[114]) To the extent that one's actual experience is backgrounded while reading, however, somatic imagery can draw the reader into imaginatively inhabiting the body described. Though visual simulation is always experienced in the first person present, it varies whether that visual perspective aligns with or looks upon a described body; but with somatic simulation the reader necessarily takes the first person perspective of the body itself.[115] The reader is, therefore, not a detached observer, but rather, as a text moves between describing different somatic experiences, she is drawn into imaginatively inhabiting each body in turn. These somatic simulations then also motivate for simulations in other modalities to align with the inhabited perspective(s).[116]

In "This living hand," somatic simulations are evoked representing bodily experiences of both the persona and addressee. These somatic images sometimes converge and at other times diverge, such that their interactions contribute to readers' experiences of intimacy, pathos that becomes compassion, an impulse to reciprocation, and the feeling of an abstract living agency. As the opening lines prompt simulations of warmth and then cold in the reader's somatosensory system, the ambiguity of temperature as both other- and self-representing creates a duality. We know from experience that contact with a warm hand makes one's own hand feel warm, and that a cold hand or icy air can give one the chills. Therefore, even though the temperatures are predicated of the persona's hand, they also afford inhabitation of the addressee's body, either as an alternative to the persona's body, or in conjunction with it as a simulation of the empathetic resonance that the addressee feels for the persona. The implication of proximity between the hand and its potential graspee also actives peripersonal neuron circuits, which register the presence of an object in one's personal space, contributing to a feeling of literal intimate closeness, as well as emotional closeness, as the experience of both figures.[117]

Though these haptic simulations may be experienced as a mutuality in the somatic dimension, semantic and loco-temporal construals may motivate their distribution into distinct inhabitations. The persona's hand, though capable, has not technically grasped, and so holds on to its warmth alone. Likewise, the cold corpse is presumably alone in the icy tomb. And yet, that this simulation has the reader inhabit the corpse as a sensing body, despite its being dead, prompts a shift to a separate chilled observer viewpoint. This chilled viewpoint subsequently gets identified with the addressee, taking on the explicit meaning of being haunted and/or the implicit meaning of a projective empathetic feeling for the persona-as-dead. The synesthetic image of "icy silence" ingeniously doubles-down on the pivot-across-paradox. On the one hand, by evoking a simulation *of* silence in the reader's auditory system, the phrase aligns the reader with the cold corpse as the viewpoint that hears nothing.[118] This auditory image of silence thus prompts the reader to imagine being dead as the perception of an absence of percepts—what Keats elsewhere described as "the feel of not to feel it"—long before the semantic ambiguity of the final "it" affords construal of the hand as both present and absent, living and dead. On the other hand, the "silence of the tomb" can be construed unparadoxically as representing that the persona-as-corpse does not hear anything. The auditory viewpoint on the silence, then, like the simulated cold, shifts to belong to the addressee as the surviving, haunted observer.[119] Ironically, the conflict between the diegetic auditory image and the imagined voice (which compete for auditory simulation), and the potential match between the silence and the reader's actual situation reading silently, make the silent text's representation of the speaker's death convincing and immediate, playing its diegetic counterfactuality into extradiegetic factuality at the perceptual as well as semantic and loco-temporal levels.[120] In this way, the assertion

that the dead hand will "haunt thy days and chill thy dreaming nights" is inhabited by the reader before it is even described, as she already inhabited the corpse's cold and cast the tomb's iciness as a present silence of the persona's absence, even as the voice continues to describe and assert.

In the poem's middle lines, the paired movement from warmth to cold becomes an oscillation, where the reader shifts between contrasting interoceptions at the same time that she shifts back and forth between inhabitation of the persona and addressee. The empathetic intimacy of lines 1-4, where the addressee feels with the pathos of the persona's death, transforms into a compassionate reaction, imagining how helping behavior would make the persona feel good again, and then the addressee calm. This oscillation begins with a last instance of convergence: the state of being "dry of blood," while invoked as the wish imagined by the addressee about their own body, is implicitly the antecedent state of the persona's corpse. But, while the invocation of dryness evokes haptic simulation, it's a fair bet that no reader has ever experienced the dryness of her heart. Instead, a feeling of enervation is activated by way of connections between interoception and semantic construal: the conventional conceptual metaphor Life Is A Fluid In The Body entails that lack of fluid in the body means a lack of vitality, and so prompts simulation of a state of low energy and attendant negative affect. The image of the persona's veins streaming with "red life" then shifts interoceptive simulation to the opposite state, evoking both an aroused sensation of a rapid heart rate and, through the same metaphor, a positive feeling of being flush with energy. The reader's inhabitation then shifts once again, back to an interoceptive state of being "calm'd" that is attributed to the addressee, prompting simulation of a slowed pulse rate, relaxed breathing, decreased muscle tension, and low arousal. In addition to conceptual understanding, the charm of these images may produce corresponding fluctuations in the reader's own physiology.[121] At the same time that the semantic evocation of transfusion or vampirism figures the blood of the addressee as the means of the persona's revivification, in the somatic dimension of perceptual absorption it is the reader's body that brings both experiences—and the feeling of their contrasting states—to life. Like the way that a reader gives her voice to a poem when reciting aloud, when reading somatic imagery, she simulationally gives her body to it. The figured vampiric transfusion is, at the level of simulation, a body-snatching transfiguration of self into other.

As in the visual dimension, somatic simulation gives immediacy to the images embedded in the if/would clause. "This living hand" capitalizes on this immediacy in order to embed a ghostly sense of reciprocation within its gestures of confrontation. Even though the action "of earnest grasping" is not technically executed in the poem, I posit that the gerund does activate the "execution schema" for its motoric simulation, focused on the stage of grasping itself, as in the progressive aspect of the verb, and enriched by the specification of an "earnest" manner of acting, recruiting affective inputs through kinesic intelligence.[122] (The simulation of this gesture is also primed and strengthened if the reader has her actual hand extended, grasping the text in front of her.) Because the perspective of inhabitation is ambiguous during the opening, this simulation of grasping can be construed as both the persona's future-oriented sense of capability and the addressee's disposition to answer such an act by grasping back. When the not-yet-actualized action is re-evoked as actualized by "I hold it towards you" at the poem's end, the same motor program is re-activated. While the diegetic action that this motor schema represents is performed by the persona, the prior association of the grasp as a possible response by the addressee, along with the addressee perspective motivated in visual simulation by "see here it is," may produce the alternative construal by yet another re-activation of the simulation from the perspective of the addressee. That is, the reader may experience her re-imagining the hand's action after the end of the poem as her own impulse to reach out and grasp it back.

The Somatic Simulation of Abstract Agency and Intention via Kinetic Imagery and Force Dynamics

In addition to these more-or-less vivid experiences of ghostly embodied action, the more abstract schemas in the reader's motor control system contribute to a sense of agency that makes the poem's asserted vitality seem real. Where the images of actual and potential hand movements activate specific motor programs, other kinetic imagery evokes general schemas of motion. Learned in development by abstraction across specific actions and experiences, these general motion schemas constitute the meaning of adverbial language such as "fast," "slow," "smooth," "sudden," etc., and support understanding of non-human movement.[123] That is, reading "red life might stream again" prompts not only visual simulation of a red mass in rapid linear motion, but also activates neural circuits that represent the reader's somatic sense of rapid, sustained movement. The kinetic image thus evokes a kinesthetic feeling of bodily agency at the same time that it figures the return of agency to the persona's body. Similarly, the transitive verbs in "haunt thy days and chill thy dreaming nights," though explicitly predicated of the hand and implicitly effects of the persona's death and/or addressee's guilty conscience, involve an embodied sense of movement and agency by way of the "Object Event-Structure Metaphor," in which causation is understood as a transfer of a possessed attribute.[124] In this way, haunting and chilling are simulated as the transfer of cold and fear from the hand to the addressee, re-construing the direction of the hand's potential grasping movement in motor simulation as a spatial trajectory from cause to effect. This abstract agency in the reader's somatic systems is attributed to the persona (or to the text itself) via its association with the hand(writing).

At an even more abstract level, the poem's many modal verbs also contribute to the felt drama of desire, capability, and dependence, due to the connection between modality and viewpointed simulations of physical effort. According to the theory of force dynamics, modal meaning is grounded in our physical experiences of, for example, pushing or pulling an object, or being pushed or pulled by an object, where the combination of one's own active force or passivity, on the one hand, with the force, passivity, or resistance of the object, on the other, determines whether motion will, won't, would, might, etc., result.[125] The poem's "capable," "would," "would wish," and "might stream" repeatedly evoke the sense of a current state of inertness, where the initiation of a force (equivalent to the realization of specific causal conditions) would result in movement without any opposition. These force-dynamic somatic simulations may not only supply semantic understanding of cause-effect relations, but also contribute to affective simulations of the pleasure and sense of power associated with unresisted action in pursuit of one's goals.[126] The chain of causation as yet-to-be-enabled-motion reaches its end with "And thou be conscience-calm'd," which has the opposite force-dynamic structure, entailing a current state of forced motion (and emotional agitation) that would become forceless stillness. But of course this modal stasis is belied when the poem ends on the persona's movement, which final actualization of action suggests itself for construal as the start of the causal dominoes the poem has previously described. Below the level of pictorial or kinesic imagery, this simulation of the deep intersection between semantic meaning and somatic experience provides a sense of interiority as well as agency, as the reader feels the intentions of the persona and addressee in the tensions of her own motor control system.[127]

Multimodal Divergence

I have analyzed the intricacies of vocal and perceptual absorption in such detail in an attempt to show the contributions these simulations make to the poem's meaning. As an aesthetic object, the text is incommensurate with its semantic paraphrase and critical commentary. Its power lies in the

evocation of quality-rich imagined experience, as well as in the affordance of interpretive reflection. It gives the reader an opportunity to explore ways of speaking, hearing, perceiving, feeling, and acting. These ways of happening take advantage of the virtuality of imagined experience, going beyond a single embodied perspective. Instead, the motivated alignment with the persona and/or addressee is dynamic: viewpointing both shifts within a single modality over the course of the poem, and diverges across the multiple modalities. These divergent viewpointings are represented in the figure below.

Visual

This living hand, now warm and capable
Of earnest grasping, would, if it were cold
And in the icy silence of the tomb,
So haunt thy days and chill thy dreaming nights
That thou would wish thineownheartdryofblood
So in my veins red life might stream again,
And thou be conscience-calm'd—see here it is—
I hold it towards you.

Interoceptive

This living hand, now warm and capable
Of earnest grasping, would, if it were cold
And in the icy silence of the tomb,
So haunt thy days and chill thy dreaming nights
That thou would wish thineownheartdryofblood
So in my veins red life might stream again,
And thou be conscience-calm'd—see here it is—
I hold it towards you.

Haptic (incl. Peripersonal Proximity)

This living hand, now warm and capable
Of earnest grasping, would, if it were cold
And in the icy silence of the tomb,
So haunt thy days and chill thy dreaming nights
That thou would wish thineownheartdryofblood
So in my veins red life might stream again,
And thou be conscience-calm'd—see here it is—
I hold it towards you.

Motor/Proprioceptive (incl. ForceDynamics)

This living hand, now warm and capable
Of earnest grasping, would, if it were cold
And in the icy silence of the tomb,
So haunt thy days and chill thy dreaming nights
That thou would wish thineownheartdryofblood
So in my veins red life might stream again,
And thou be conscience-calm'd—see here it is—
I hold it towards you. [imagined reaching back]

Figure 5.2 Simulation viewpoint: persona's perspective; addressee's perspective; ambiguous perspective/duality.

This divergence within multimodal simulation affords multiple alternative construals, integrates into the embedded dual viewpoints of intimate lyric empathy, or may constitute negatively capable imagined experience of simultaneous double perspectives/inhabitation.

One way to respond to the poem is to integrate its divergent simulations into a single, coherent construal. If we read the text as dialogue for a play, we can imagine the voice and bodies as actual presences, and the writing as an absence. If we reduce it to an allegory for writing and reading, we might subsume the perceived voice and imagery into textual figurative meaning. Simulations that do not cohere may be transformed into a cohering construal in wrap-up processing, as in the visualization of the persona's hand as engaged in the act of writing rather than reaching-to-grasp, or they may be backgrounded out of consciousness.[128] The determination of which construal dominates will vary reader by reader, and even to some extent reading by reading, under the influence of factors such as: the individual reader's general propensity for certain modalities over others; habits or present intentions regarding reading lyric poems as direct address, apostrophic address, scripts for performance, etc.; and interaction with the semantic, affective, personal, loco-temporal, and vocal

dimensions of absorption. However, even when component simulations are excluded from the final interpretation, they can still contribute inferences and experiential qualities to the dominant reading. My in-depth analysis has aimed to show that vocal and perceptual processing contribute to the reader's understanding of the persona's expressed interiority and the felt relations of the addressee to that expression, even if the poem is interpreted as a silent writing on the present page.

The evocation of divergent perspectives and multiple modalities also offers readers the chance to explore alternative interpretations in rereading and reflection, over the course of which consideration of multiple construals the variant simulations may be combined. When the variants are integrated into a disabsorbed viewpoint of reflection, they combine as a prismatic, multi-perspective understanding of the multiple possible interpretations available to different readers and readings. When they are integrated into the absorbed experience of reading, they combine to constitute internal multiplicities, whether indeterminate, ambiguous, or accretively complex. By bringing both a persona and addressee on-stage, "This living hand" specifically motivates distributing the various simulations as two sets of experiences attributed to the two figures' opposed perspectives—the reader feels an intimacy with each, as she inhabits both. Or the experiences can be integrated together, either embedding the addressee's perspective within the persona's viewpoint, as the persona's projective imagination of the response his words will cause, or embedding the persona's perspective within the addressee's viewpoint, as an empathetic listening, watching, and co-imagining of the vision that the persona expresses. In this way, Keats's poem enables the reader to inhabit a complex intimate relation, in which love is not necessarily patient or kind, but can also be desperate and demanding, frightening and haunting—yet what that love wants is to be accepted and reciprocated, to find consolation for the self in desire of the other, to grasp vital communication in the face of uncertainty and the fact of death. By reading the poem with negative capability, we experience a complication of the more conventional conceptualizations that the poem evokes. The process of simulating this complex experience strengthens connections between those components, such that readers may be left better able to think and feel this particular complexity, instead of reducing the poem and similar situations to one or another simpler interpretation.

Beyond resolution of divergence into coherent duality, the reader can also revel in the unity-transcending negative capability of aesthetic experience. Where painting may create an illusion of space through point perspective, the poem's multimodal divergence extends perception beyond one or the other perspective or body. I believe this is, in the end, the strongest, most appreciative reading of "This living hand." Yes, the poem prompts us to consider its hand as a metaphor for its text—but it also cunningly capitalizes upon simulation, prompting us to speak and hear the living voice, to see and feel the ghostly hand, to inhabit its action and an answering response as well. At the same time that the poem articulates figurative meaning, it prompts the reader to experience its figures: that intimacy, whether between beloveds or between the reader and writer across the gulf of text, involves a sacrifice of one's independence and self-control to embrace the viewpoint and feelings of the other. And yet, this sacrifice is at the same time a gift, as each gets to imaginatively inhabit the other at the same time that the other occupies the self. The feelings that attend this transgression and communion are fraught, elaborated through improvisatory vocal imagining and kinesic intelligence, investing the poem-as-text with the expressive power of spoken address and the interpersonal stakes of the actions described. This aesthetic experience then modifies all these structures of thought, feeling, perceiving, and acting, informing the ways writing and reading, grasping and offering, love, life, and death happen for the reader in the future. As well as being an allegory for reading, the poem makes a voice present, haunts the reader's vision, and leaves her touched. By believing in vocal and perceptual absorption and incorporating the dynamics of their simulation into our theoretical framework, we do justice to this reality of what the poem makes happen.

Notes

[1] Elaine Scarry, *Dreaming by the Book* (New York: Farrar, Straus and Giroux, 1999), 6.
[2] Ibid., 7.
[3] W. B. Yeats, "Among School Children," *The Major Works*, ed. Edward Larrissy (Oxford: Oxford University Press, 2001), 115. On simulational inhabitation of dancers' bodies by both expert and novice viewers, see Calvo-Merino Beatriz et al., "Action Observation and Acquired Motor Skills: An fMRI Study with Expert Dancers" *Cerebral Cortex* 15 (2005): 1243-49; Catherine Stevens and Shirley McKechnie, "Thinking in Action: Thought Made Visible in Contemporary Dance" *Cognitive Processing* 6 (2005): 243-52.
[4] I. A. Richards, *Principles of Literary Criticism* (London: Kegan Paul, Trench, Trubner and Co., 1926), 114-33.
[5] John Stuart Mill, "What Is Poetry?," in *Essays on Poetry*, ed. F. Parvin Sharpless (Columbia, South Carolina: University of South Carolina Press, 1976), 12.
[6] T. S. Eliot, "The Three Voices of Poetry," in *On Poetry and Poets* (New York: The Noonday Press, 1961), 96-112.
[7] As Marjorie Perloff describes: "the poetry establishment (especially the official verse-culture of the university writing programs) still posits a situation in which the aspiring poet can—indeed must—discover his or her own unique *voice*, a voice that somehow differs from all others." Marjorie Perloff, *Wittgenstein's Ladder: Poetic Language and the Strangeness of the Ordinary* (Chicago: The University of Chicago Press, 1996), 187.
[8] Paul de Man, *The Rhetoric of Romanticism* (New York: Columbia University Press, 1984), 254. An earlier demystification of voice appears, more in passing, in de Man's 1973 essay "Semiology and Rhetoric": "The term *voice* … is, of course, a metaphor inferring by analogy the intent of the subject from the structure of the predicate." *Allegories of Reading: Figural Language in Rousseau, Nietzsche, Rilke, and Proust* (New Haven: Yale University Press, 1979), 18.
[9] Eliza Richards, "Voice," in *The Princeton Encyclopedia of Poetry and Poetics*, 4th ed., ed. Roland Greene et al. (Princeton: Princeton University Press, 2012), 1525.
[10] Ben Alderson-Day, Marco Bernini, and Charles Fernyhough, "Uncharted Features and Dynamics of Reading: Voices, Characters, and Crossing of Experiences," *Consciousness and Cognition* 49 (2017): 100. Ruvanee P. Vilhauer reports similar findings from survey results and qualitative analysis of online message-board posts: Ruvanee P. Vilhauer, "Characteristics of Inner Reading Voices," *Scandinavian Journal of Psychology* 58 (2017): 269-74; Ruvanee P. Vilhauer, "Inner Reading Voices: An Overlooked Form of Inner Speech," *Psychosis* 8.1 (2016): 37-47.
[11] Stanislas Dehaene, *Reading in the Brain: The Science and Evolution of a Human Invention* (New York: Viking, 2009), 100-16 and passim. In Alderson-Day, Bernini, and Fernyhough, 11% of respondents reported never hearing characters' voices when reading. "Uncharted Features and Dynamics of Reading," 101. In Vilhauer's survey, 19.3% reported that they "always understood words being read without hearing an inner voice." "Characteristics of Inner Reading Voices," 271.
[12] I argue that this synesthetic processing is an inherent part of reading, though it may not be integrated into consciousness. James Phelan makes a parallel claim for the non-metaphorical nature of voice as a "learnable synesthesia," focusing more on the contextual construction of tone and voice, where I focus on evocation through formal features. James Phelan, "Voice, Tone, and the Rhetoric of Narrative Communication" *Language and Literature* 23.1 (2014): 49-60.
[13] Though sound-meaning pairings may not be entirely arbitrary, that does not mean that sound symbolism is wholly determinate. Reuven Tsur has described the multiple affordances of speech

sounds as "clusters of features, each of which may serve as ground for some combinatorial potential." *Playing by Ear and the Tip of the Tongue: Precategorial Information in Poetry* (Amsterdam: John Benjamins, 2012), 193. Tsur's cognitive poetic research has been seminal in theorizing the indeterminate affective meaningfulness of poetic phonology. However, where Tsur analyzes how hearers experience the waveforms of a determinate vocal performance, I focus on the neural simulation of both speaking and hearing in processing the underspecific text.

[14] Where de Man reads Baudelaire's "Correspondances" as substituting one sense experience for another, here it is one form of vitality (the animation of writing by reading) that is substituted for another (the animation of a body by blood), with both text and voice present, depending on each other as the combined means and sign of *re*-animation. And yet, Keats too mobilizes a metaphor of interiorization and chiasmus to figure the text as containing—or receiving—life. Cf.: "Anthropomorphism seems to be the illusionary resuscitation of the natural breath of language, frozen into stone by the semantic power of the trope. It is a figural affirmation that claims to overcome the deadly negative power invested in the figure. … The canon of romantic and post-romantic lyric poetry offer innumerable versions and variations of this inside/outside pattern of exchange that founds the metaphor of the lyrical voice as subject. In a parallel movement, reading interiorizes the meaning of the text by its understanding." De Man, "Anthropomorphism," 245, 247, 256.

[15] John Keats, *Keats's Poetry and Prose*, ed. Jeffrey N. Cox (New York: W. W. Norton and Company, 2009), 378. In line five, for the sake of fidelity I follow the holograph MS reading of "would," which Cox (and others) emend to "wouldst" as the standard form for a verb agreeing with "thou." These lines appear on the manuscript of Keats's abandoned poem *The Cap and Bells; Or, The Jealousies*, and there is no indication there of the poet's intention regarding them, nor are they mentioned in any of his extant letters.

[16] The text was first published in 1898 under the title "Lines Supposed to Have Been Addressed to Fanny Brawne," and Robert Gittings continues in his 1968 *John Keats* to take the likeness between the text's tone and Keats's letters to Fanny Brawne as evidence for the lines' basis in that relationship, pointing particularly to the epistolary passage: "If my health would bear it, I could write a Poem which I have in my head, which would be a consolation for people in such a situation as mine. I would show some one in Love as I am, with a person living in such Liberty as you do." Robert Gittings, *John Keats* (London: Heinemann, 1968), 403. In his 1963 *John Keats*, Walter Jackson Bate instead pronounced "The little fragment used to be thought of as something addressed to Fanny Brawne. The general feeling now is that the lines were a passage he might have intended to use in some future poem or play." Walter Jackson Bate, *John Keats* (Cambridge: Harvard University Press, 1963), 626-27. Andrew Motion's 1997 *Keats* persists in this interpretation of the text as a scrap for a drama, though most other commentators have either followed Culler in reading it as direct address, or admit the multiplicity of interpretive options. Andrew Motion, *Keats* (New York: Farrar, Straus and Giroux, 1998), 476.

[17] Jonathan Culler, "Apostrophe," *Diacritics* 7.4 (1977): 68-9.

[18] When Culler redeploys this reading in his 2015 *Theory of the Lyric*, the poem's "reference to the temporality of writing" is revised as "boldly collapsing into one the time of *articulation* [my emphasis] … and the time of reading." Mention of a "speaker" is now avoided; aside from a reference to "the poet's life [and] his death" as referents invoked by the text, it is the poem itself that is cast as the agent of assertion, or as producing the opportunity for readers to "[grant] it the power to make us imaginatively overcome the death with which it simultaneously threatens us." Thus, in both versions, while Culler focuses on the ontological status of the hand as the foreground of his interpretation, in

the background there is indeterminacy as to whether it is the writer, speaker, or text that addresses the reader, and as to whether the reader is actually passive regarding this address or actively performs its event in the fusion of reading and articulation. Jonathan Culler, *Theory of the Lyric* (Cambridge: Harvard University Press, 2015), 197.

[19] Lawrence Lipking, *The Life of the Poet: Beginning and Ending Poetic Careers* (Chicago: The University of Chicago Press, 1981), 181-2.

[20] Ibid.

[21] Timothy Bahti, "Ambiguity and Indeterminacy: The Juncture," *Comparative Literature* 38.3 (1986): 221.

[22] These principles of "best fit" are, ultimately, a matter of conservation-of-energy and ecological fitness. Gilles Fauconnier and Mark Turner, *The Way We Think: Conceptual Blending and the Mind's Hidden Complexities* (New York: Basic Books, 2002).

[23] Because of the cognitive privileging of coherent construals, the reader may not even recognize that alternative interpretations are possible. Daniel Kahneman calls this phenomenon "What You See Is All There Is." Daniel Kahneman, *Thinking, Fast and Slow* (New York: Farrar, Straus and Giroux, 2011), 85-88 and *passim*.

[24] This is in fact what happens to produce interpretations, like Bahti's, that equate the hand referenced with the text read: a metonymic association between "hand" and handwriting is recruited from background knowledge; the relations of cause-effect, instrument-for-producer, and producer-for-product that are components of this metonymy are re-construed as relation of identity, where the hand is not merely linked to the handwriting, but equals it; this neurally conflated hand(writing) then functions as a component in a larger metaphorical blend, in which living (an activity of the producer) is equated with meaning (an activity of the product). At the same time, knowledge is elided of the non-identity and perceptual/formal differences between Keats's singular holograph manuscript and the printed, not handwritten, text that the reader actually confronts.

[25] Letter to George and Tom Keats, December 1817; Keats, *Keats's Poetry and Prose*, 109. Cf. Keats's letter to George and Georgiana Keats from September 1819: "Dilke was a Man who cannot feel he has a personal identity unless he has made up his Mind about every thing. The only means of strengthening one's intellect is to make up one's mind about nothing—to let the mind be a thoroughfare for all thoughts." 371-2.

[26] Dehaene, *Reading in the Brain*, 107-9, 197-98; Linda R. Wheeldon and Willem J. M. Levelt, "Monitoring the Time Course of Phonological Encoding," *Journal of Memory and Language* 34 (1995): 311-34. During the final weeks in the womb and throughout an infant's first year of life, auditory circuitry in the brain is gradually structured as a result of repeatedly being stimulated by the rhythms, vowels, consonants, phonotactic patterns, and lexicon of their language environment. Articulatory circuitry, which orchestrates muscle control of the mouth, tongue, larynx, and diaphragm, begins to organize with babbling, and continues to develop in speech acquisition, learning to produce sounds that fit the auditory system's phonemic, prosodic, and intonational categories. The phonological loop is also theorized as enabling mental rehearsal of verbal imagery in working memory, as when you repeat an address to yourself. Eraldo Paulesu, Chris D. Frith, and Richard Frackowiak, "The Neural Correlates of the Verbal Component of Working Memory," *Nature* 362 (1993): 342-45.

[27] Dehaene, *Reading in the Brain*, 200-7.

[28] Ibid., 26-29; 38-41; 100-16. In parallel with this "phonological route" from text through vocal simulation to meaning, there is also a "lexical route" from letters to words to meaning. Interestingly, some of the brain regions that are held to process lexical meaning are no more activated when reading than in a resting state, reflecting their function as the substrate for semantic processing in

general, including that of the thinking that goes on while in a resting state. (The functional connection of those brain regions to lexical processing is instead established by observations of a *decrease* in activation in response to pseudo-words that do not have any meaning.) Ibid. 109-13. See also David C. Plaut, "Connectionist Approaches to Reading," in *The Science of Reading: A Handbook*, ed. Margaret J. Snowling and Charles Hulme (Malden, MA: Blackwell Publishing, 2005),24-38.

[29] Timothy L. Hubbard, "Auditory Imagery: Empirical Findings," *Psychological Bulletin*, 136.2 (2010): 309-12, 318-24; Cathy J. Price; "A Review and Synthesis of the First 20 Years of PET and fMRI Studies of Heard Speech, Spoken Language and Reading," *NeuroImage* 62 (2012): 816-47; Marcela Perrone-Berlotti et al., "How Silent is Silent Reading? Intracerebral Evidence for Top-Down Activation of Temporal Voice Areas during Reading," *The Journal of Neuroscience* 32.49 (2012): 17554-62; Alexander Pollatsek, "The Role of Sound in Silent Reading," *The Oxford Handbook of Reading*, ed. Pollatsek and Rebecca Treiman (Oxford: Oxford University Press, 2015), 197-8 and passim. Cf. Ben Alderson-Day and Charles Fernyhough, "Inner Speech: Development, Cognitive Functions, Phenomenology, and Neurobiology," *Psychological Bulletin* 141.5 (2015): 931-65.

[30] Survey responses also evidence variation as to how regularly voices are experienced when reading, what types of texts prompt voices, the voices' vividness, the degree to which imagining a voice is automatic or effortful, and the degree of control that readers can exercise over the experience. Alderson-Day, Bernini, and Fernyhough, "Uncharted Features and Dynamics of Reading"; Vilhauer, "Characteristics of Inner Reading Voices"; Vilhauer, "Inner Reading Voices: An Overlooked Form of Inner Speech." For experimental validation of such reports of the varying qualities of imagined voices, see: Ruth Filik and Emma Barber, "Inner Speech during Silent Reading Reflects the Reader's Regional Accent," *PLoS ONE* 6.10 (2011): e25782; Bo Yao, Pascal Belin, and Christoph Scheepers, "Silent Reading of Direct versus Indirect Speech Activates Voice-selective Areas in the Auditory Cortex," *Journal of Cognitive Neuroscience* 23.10 (2011): 3146-52; Celia M. Klin and April M. Drumm, "Seeing What They Read and Hearing What They Say: Readers' Representation of the Story Characters' World," *Psychonomic Bulletin & Review* 17.2 (2010): 231-6; Christopher A. Kurby, Joseph P. Magliano, and David N. Rapp, "Those Voices in Your Head: Activation of Auditory Images During Reading," *Cognition* 112 (2009): 457-61; and Jessica D. Alexander and Lynne C. Nygaard, "Reading Voices and Hearing Text: Talker-Specific Auditory Imagery in Reading," *Journal of Experimental Psychology: Human Perception and Performance* 34.2 (2008): 446-59.

[31] I cite the studies most relevant to the silent reading of text in the paragraphs that follow. For reviews that address the question of inner speech versus inner hearing more generally, see Hubbard, "Auditory Imagery," and Alderson-Day and Fernyhough, "Inner Speech."

[32] For about a third of voice-hearers in Vilhauer's survey, the accent, gender, and pitch of the voice is always the same as that of the reader, whereas about 50% reported that these qualities vary case by case. Vilhauer, "Inner Reading Voices: An Overlooked Form of Inner Speech."

[33] Xing Tian, Jean Mary Zarate, and David Poeppel, "Mental Imagery of Speech Implicates Two Mechanisms of Perceptual Reactivation," *Cortex* 77 (2016): 1-12; Xing Tian and David Poeppel, "The Effect of Imagination on Stimulation: The Functional Specificity of Efference Copies in Speech Processing," *Journal of Cognitive Neuroscience* 6 (2013), 314; Xing Tian and David Poeppel, "Mental Imagery of Speech: Linking Motor and Perceptual Systems through Internal Simulation and Estimation," *Frontiers in Human Neuroscience* 6 (2012), 314; Xing Tian and David Poeppel, "Mental Imagery of Speech and Movement Implicates the Dynamics of Internal Forward Models," *Frontiers in Psychology* 1 (2010), 166. Cf. Mark Scott et al., "Inner Speech Captures the Perception of External Speech," *The Journal of the Acoustical Society of America* 133.4 (2013): 286-92. Separately, researchers investigating auditory verbal hallucinations have proposed that inner hearing might differ from inner

speaking due to lesser activation in areas associated with self-monitoring and the sense of agency; see Sukhwinder S. Shergill, Ed T. Bullmore, Michael J. Brammer, S. C. R. Williams, Robin M. Murray, and Philip K. McGuire, "A Functional Study of Auditory Verbal Imagery," *Psychological Medicine* 31 (2001): 241-53; and Alderson-Day and Fernyhough, "Inner Speech."

[34] Yao and collaborators found evidence that readers differentiate between direct and indirect speech in text, automatically making greater use of vocal simulation in response to cues of spoken discourse. Yao, Belin, and Scheepers, "Silent Reading of Direct versus Indirect Speech"; cf. Klin and Drumm, "Seeing What They Read and Hearing What They Say."

[35] Though the principles described here remain valid, particular cases of first- and second-person pronouns may instead motivate construal from a hearer viewpoint; for example: when information about the first-person speaker makes it difficult for the reader to identify with him, or when the reader *does* identify with the second-person pronoun as an addressed hearer. Tad T. Brunyé, Tali Ditman, Caroline R. Mahoney, Jason S. Augustyn, Holly A. Taylor, "When You and I Share Perspective: Pronouns Modulate Perspective Taking During Narrative Comprehension," *Psychological Science* 20.1 (2009): 27-32.

[36] Such effects likely contributed to the historical consolidation of these features as conventions of the written lyric.

[37] Cf. Shergill et al., "A Functional Study of Auditory Imagery."

[38] Cf. André Aleman and Mascha van't Wout, "Subvocalization in Auditory-Verbal Imagery: Just a Form of Motor Imagery?" *Cognitive Processes* 5 (2004): 228-31; André Aleman, Elia Formisano, Heidi Koppenhagen, Peter Hagoort, Edward H. F. de Haan, and René S. Kahn, "The Functional Neuroanatomy of Metrical Stress Evaluation of Perceived and Imagined Spoken Words," *Cerebral Cortex* 15 (2005): 221-8; Emilie Cousin et al., "Functional MRI Approach for Assessing Hemispheric Predominance of Regions Activated by a Phonological and a Semantic Task," *European Journal of Radiology* 63.2 (2007): 274-85; Khateb et al., "Rhyme Processing in the Brain: An ERP Mapping Study," *International Journal of Psychophysiology* 63.3 (2007): 240-50; Filik and Barber, "Inner Speech during Silent Reading"; Barbara Wagensveld et al., "A Neurocognitive Perspective on Rhyme Awareness: The N450 Rhyme Effect," *Brain Research* 1483 (2012): 63-70.

[39] Shergill et al., "A Functional Study of Auditory Imagery."

[40] However, Tian and Poeppel's 2013 findings that imagined hearing suppresses responses to auditory probes, and imagined speaking enhances responses, when combined with Kurby, Magliano, and Rapp's findings that increased voice familiarity increases priming, might suggest that increased voice familiarity motivates aligning with speaking. Tian and Poeppel, "The Effect of Imagination on Stimulation"; Kurby, Magliano, and Rapp, "Those Voices in Your Head." More research is necessary to resolve the relations between speaker/hearer viewpointing, self/other voicing, and effects of differing degrees of familiarity with the voice involved.

[41] Cf. Kurby, Magliano, and Rapp, "Those Voices in Your Head"; Alexander and Nygaard, "Reading Voices and Hearing Text."

[42] Russell Hurlburt and collaborators found that, whereas elicited inner speech involves increased articulatory activation and decreased auditory activation, spontaneous verbal thinking involves increased auditory activation and no significant change in articulatory activation. Russell T. Hurlburt et al., "Exploring the Ecological Validity of Thinking on Demand: Neural Correlates of Elicited vs. Spontaneously Occurring Inner Speech," *PLoS ONE* 11.2 (2016): e0147932.

[43] Ben Alderson-Day et al., "The Brain's Conversation with Itself: Neural Substrates of Dialogic Inner Speech," *Social Cognitive and Affective Neuroscience* (2015), doi: 10.1093/scan/nsv094.

[44] Of course, while mentally replaying a memorized poem motivates hearer viewpoint, actually reciting it aloud would actualize the speaker viewpoint, which might become a default construal habituated by out-loud practice.
[45] Or (despite it not being a scholarly practice) the may integrate the discourse into the frame of her own life, imagined as her own act of address to a romantic interest of her own, or to generations yet farther in the future.
[46] In this latter construal from the hearer viewpoint, the voice may be attributed to Keats, to a fictional character, to 'the text itself,' to a dead beloved of the reader, or perhaps to some acquaintance she wishes was desperate for her reciprocated attention.
[47] Indeed, the point of these hypotheses is not to determine which viewpoint a particular poem motivates more. After all, the experiences of individual readers (and instances of reading) will vary. Furthermore, neural simulations in other modalities—what I call the semantic, affective, personal, loco-temporal, and perceptual dimensions of absorption—will also contribute to the motivation of one viewpoint or the other, and influence / interact with the vocal simulation. In the same way that semantic circuits are interconnected with auditory-articulatory circuits, neurocognitive theory holds that much semantic knowledge and processing is constituted by neural simulations in other modalities. However, as in the discrepancy between the real and the imagined in displacement from one's actual position as reader to the viewpoint of speaking in someone else's voice, construal need not be coherent across these different dimensions (though it is likely to resolve into coherence under the pressures of 'best fit' and in interpretive reflection). "This living hand," for example, motivates oscillation between agent-participant and patient-participant perspectives within sensory and somatic absorption—but the shifts back and forth between these perspectives need not require, nor sync up with, parallel shifts between speaker and hearer viewpoints in vocal absorption. For formulations of the theory that meaning is composed in part through multimodal neural simulations, see: Rolf A. Zwaan, "The Immersed Experiencer: Toward an Embodied Theory of Language Comprehension," *The Psychology of Learning and Motivation* 44 (2004): 35-62; Jerome A, Feldman, *From Molecule to Metaphor: A Neural Theory of Language* (Cambridge: The MIT Press, 2006); Benjamin K. Bergen, *Louder than Words: The New Science of How the Mind Makes Meaning* (New York: Basic Books, 2012).
[48] E.g. Aristotle's *Rhetoric* and Cicero's *De oratore*.
[49] In his account of "the four kinds of meaning," I. A. Richards differentiates "tone," defined as the speaker's "*attitude to his listener,*" from "feeling" and "intention," as well as from "sense." However, in general critical use, "tone" may variously used to any of these non-semantic qualities, and sometimes as a vague gesture towards all of them. I. A. Richards, *Practical Criticism: A Study of Literary Judgment* (New York: Harcourt, Brace and Company, 1929), 182.
[50] Hyder Edward Rollins, ed. *The Keats Circle: Letters and Papers and More Letters and Poems of the Keats Circle*, vol. 2 (Cambridge: Harvard University Press, 1965), 277. Walter Jackson Bate points out that Keats's and Bailey's sense of "open" and "close" vowels would not align with modern phonetic terminology; Bate pursues analysis of lines from Keats's poetry according to a contrast between historically "long" vowels/dipthongs and "short" vowels, as opposed to my sound-symbolism-motivated focus on front vs. back vowels. Walter Jackson Bate, *The Stylistic Development of Keats* (New York: The Modern Language Association of America, 1945), 50-65.
[51] Russell Ultan, "Size-Sound Symbolism," in *Universals of Human Language*, vol. 2, ed. J. H. Greenberg, C. A. Ferguson, and E. A. Moravcsik (Stanford: Stanford University Press, 1978), 527-68; Leanne Hinton, Johanna Nichols, and John J. Ohala, eds., *Sound Symbolism* (Cambridge: Cambridge University Press, 1994). Ultan argues that front vs. back vowel contrast is also frequently

symbolic of spatial proximity vs. distance. See also the work of Richard Rhodes and John M. Lawler on phonemic iconicity in English simplex words.

[52] John J. Ohala, "The Frequency Code Underlies the Sound-Symbolic Use of Voice Pitch," in *Sound Symbolism*, ed. Hinton, Nichols, and Ohala, 325-47. Consonants also produce different pitches, and contrasts of tonal vs. rough and voiced vs. unvoiced consonants have been proposed as also having symbolic significance; see the parallel argument from cross-species evidence in Eugene S. Morton, "Sound Symbolism and Its Role in Non-Human Vertebrate Communication," also in *Sound Symbolism*, ed. Hinton, Nichols, and Ohala, 348-65. I focus on vowels, rather than consonants, in "This living hand" as a salient and pervasive pattern, appropriate to an introduction of sound symbolism as a motivator of tonal construal in vocal simulation. See also the work of Reuven Tsur, who focuses on the processing of actual heard speech/poetry, rather than neural processing from silently read text.

[53] Humans are typically quite skilled at 'reading' affective tonality in voices, performing far better than chance at emotion-identification tasks in experiments of listening to recorded voices—even when those voices are speaking in a foreign language, or have been stripped of phonetic details other than intonation. See, for example: Ohala, "The Frequency Code"; Takaaki Shochi et al., "Intercultural Perception of English, French and Japanese Social Affective Prosody," in *The Role of Prosody in Affective Speech*, ed. Sylvie Hancil (Bern: Peter Lang, 2009), 31-60.

[54] See Tsur, *Playing by Ear*, 211 and passim.

[55] See Mark Scott et al., "Inner Speech Captures the Perception of External Speech," *The Journal of the Acoustical Society of America* 133.4 (2013): 286-92.

[56] In a September 1819 letter to J. H. Reynolds, Keats suggests "It may be interesting to you to pick out some lines from [Keats's poem] Hyperion and put a mark › to the false beauty proceeding from art, and one || to the true voice of feeling." Keats, *Keats's Poetry and Prose*, 359. For an account of Keats's and other Romantic's conceptions of how feeling is organically expressed through poetry, see Herbert Read, *The True Voice of Feeling: Studies in English Romantic Poetry* (New York: Pantheon Books, 1953).

[57] Ohala, "The Frequency Code;" Morton, "Sound Symbolism."

[58] Geneviève Caelen-Haumont, "Emotion, Emotions and Prosodic Structure: An Analysis of Melisms Patterns and Statistical Results in the Spontaneous Discourse of Four Female Speakers over Four Generations," in *The Role of Prosody in Affective Speech*, ed. Sylvie Hancil (Bern: Peter Lang, 2009), 95-138.

[59] In contrast, the rising/high pitches of "thy days and chill thy dreaming nights" and "in my veins red life might stream again," as contours of incompleteness, fit their identifications of causes whose effects are subsequently articulated in lines 5 and 7, where the pitch then falls.

[60] The high pitch of "wish thine" may suggest that there remains some uncertainty as to whether the addressee would or would not in fact wish as the speaker claims, expressing both the speaker's distress in soliciting the addressee's help and the hearer's distress at the expectation or threat implicit in the hypothetical scenario. Alternatively, this interpolation of high pitch within the falling-pitch endings could be construed as an appeasing tone, serving to partially soften the dominant tone of these demands. The front vowels of "in my veins red life might stream again" could then express residual distress and fear in the speaker, even though they ultimately complete in a confident assertion of the addressee's desire to self-sacrifice—or, at least, of the hearer-reader's hypothetical grieving wish that the speaker not be dead.

[61] On the Presentational Deictic construction, see Lakoff, *Women, Fire, and Dangerous Things*, 520-22. Cf. Heather Dubrow's analysis of this feature from a non-absorbed viewpoint in "Neither Here Nor

There: Deixis and the Sixteenth-Century Sonnet," in *The Lyric Poem: Formations and Transformations*, ed. Marion Thain (Cambridge: Cambridge University Press, 2013), 40. A similar moment of enhanced tonality in articulatory simulation occurs at the start of line 4, where "So haunt" evokes the So X construction, in which tone is used to express a subjective evaluation of the degree of X. (Compare the "So" of "So in thy veins…," which is an elision of the "so that" construction, which does not involve expressive tone.) For more on constructions, see: Adele Goldberg, *Constructions: A Construction Grammar Approach to Argument Structure* (Chicago: University of Chicago Press, 1995); Adele E. Goldberg, *Constructions at Work: The Nature of Generalization in Language* (Oxford: Oxford University Press, 2006).

[62] Lipking, *The Life of the Poet*, 181.

[63] Keats, *Keats's Poetry and Prose*, 102-3.

[64] De Man, "Autobiography As De-Facement" and "Shelley Disfigured," which, with "Anthropomorphism and Trope in the Lyric," are included in *The Rhetoric of Romanticism.*

[65] When such bodily imagery is integrated into consciousness I call it "somatic simulation," a sub-case of "perceptual absorption." On the basis of evidence that judgment of vocal affect and visual perception of facial expression influence each other, it has been hypothesized that processing of emotional tone in heard speech regularly recruits visual processing of facial expressions as an input to interpretation, even relying on simulation-from-knowledge in the absence of visual access to the speaker's face. Beatrice de Gelder and Jean Vroomen, "The Perception of Emotions by Ear and by Eye," *Cognition and Emotion* 14.3 (2000): 289-311; Carolin Brück, Benjamin Kreifelts, Thomas Ethofer, and Dirk Wildgruber, "Emotional Voices: The Tone of (True) Feelings," *The Cambridge Handbook of Human Affective Neuroscience*, ed. Jorge Armony and Patrik Vuilleumier (Cambridge: Cambridge University Press, 2013), 269.

[66] Combining physiological and evolutionary evidence, Ohala theorizes that the pitch-modifying function of smiling and the rounded-mouth "o-face" was the primary evolutionary motivation for these expressions, and that the function of the visible expression of emotion subsequently developed from conjunctions in affective states and the situations that called for specific vocalizations.

[67] Influence of facial expression on emotion simulation during language comprehension has been observed experimentally, though the study produced results at the level of phrase and sentence and not in response to individual words. David A. Havas, Arthur M. Glenberg, and Mike Rinck, "Emotional Simulation During Language Comprehension," *Psychonomic Bulletin &* Review 14.3 (2007): 436-41. The feedforward and feedback simulation process I am proposing here is also analogous to the evocation of emotional responses by experimental induction of approximations of emotional facial expressions, such as the nonconscious smiling of holding an between the lips, by subliminal visual presentation of dynamic emotional facial expressions, and in the "chameleon effect" of nonconscious empathetic mimicking of the facial expressions of people a subject interacts with. See: Tanya L. Chartrand and John A. Bargh, "The Chalemeon Effect: The Perception-Behavior Link and Social Interaction," *Journal of Personality and Social Psychology* 76.6 (1999): 893-910; Paula M. Niedenthal, Markus Brauer, Jamin B. Halberstadt, and Ase H. Innes-Ker, "When Did Her Smile Drop? Facial Mimicry and the Influence of Emotional State on the Detection of Change in Emotional Expression," *Cognition and* Emotion 15.6 (2001): 853-64; Robert Soussigan, "Duchenne Smile, Emotional Experience, and Autonomic Reactivity: A Test of the Facial Feedback Hypothesis," *Emotion* 2.1 (2002): 52-74; Tara L. Kraft and Sarah D. Pressman, "Grin and Bear It: The Influence of Manipulated Facial Expression on the Stress Response," *Psychological Science* 23.11

(2012): 1372-8; Wataru Sato, Yasutaka Kubota, and Motomi Toichi, "Enhanced Subliminal Emotional Responses to Dynamic Facial Expressions," *Frontiers in Psychology* 5 (2014): 994.

[68] Speaker viewpoint also appears to involve increased activation in articulatory-auditory structures in the brain's right-hemisphere, which have been found to be more involved in processing verbal prosody and emotional speech (as well as music), compared to the homologous left-hemisphere regions. Sukhwinder S. Shergill, Ed T. Bullmore, Michael J. Brammer, S. C. R. Williams, Robin M. Murray, and Philip K. McGuire, "A Functional Study of Auditory Verbal Imagery," *Psychological Medicine* 31 (2001): 241-53.

[69] Alignment with the hearer viewpoint does not cancel the affective effects of articulatory simulation. Rather, neural simulation of speaking continues alongside the experientially foregrounded simulation of hearing, even as it is cognitively "partitioned" and "backgrounded" out of conscious attention. Despite this partitioning, the articulatory simulation continues to contribute to the "downstream" simulation of feelings and intentions. These feelings and intentions, evoked for the sake of simulating speech, may then be "de-partitioned," as it were, construed as belonging to the speaker, the hearer, and/or even the disabsorbed reader. In fact, one need not consciously imagine speaking a poem's discourse (or, indeed, hearing its voice) for articulatory and auditory simulation to influence one's experience and interpretation of the poem. The neurocognitive processes of vocal simulation make a difference even when they do not make vocal absorption happen. Alternatively, in the case that the reader is so invested in the viewpoint of an isolated reader-hearer that cognitive partitioning inhibits her articulatory simulation and its downstream affects, the resulting less-vivid voice can be integrated into interpretation as an apt ghostliness. In this way, the poem can recapture its potential failure at the level of experiential absorption, as well as at the level of truth-claims, stable reference frames, and realized persuasion to desire self-sacrifice.

[70] William Wordsworth, Preface, in *Lyrical Ballads: 1798 and 1800*, Wordsworth and Samuel Coleridge, ed. Michael Gamer and Dahlia Porter (Peterborough, Ontario: Broadview Editions, 2008), 180-3.

[71] The phrase "earnest grasping" may also function as articulatory symbolism for the named movement; that is, the forward-backward directional motion of the tongue in articulatory simulation (from the rhoticized back vowel /ɝ/ forward to /n/ and then /st/, back to /ɡɹ/, forward to /sp/, and finally back to /ŋ/) integrates with the motions of reaching out and pulling in in semantic and somatic simulation.

[72] Wordsworth foreshadows the anthropomorphization and imagery of Keats's prose-like poem when he writes of "the affinity betwixt and prose composition[:] They both speak by and to the same organs; the bodies in which both of them are clothed may be said to be of the same substance, their affections are kindred and almost identical, not necessarily differing even in degree; Poetry sheds no tears 'such as Angels weep,' but natural and human tears; she can boast of no celestial Ichor that distinguishes her vital juices from those of prose; the same human blood circulates through the veins of them both." Wordsworth, *Lyrical Ballads*, 180.

[73] Cf. Robert Frost's "The Road Not Taken," where the inevitability of having to have made a choice constitutes a formal irony, initial instabilities (TWO roads, two ROADS, or TWO ROADS diverged in a YELLow WOOD; AND sorry or and SORRy; i COULD not TRAVel BOTH or I could not TRAVel BOTH) leave the reader to wonder at "the difference" made by having chosen one or another rhythmic road through the poem.

[74] On the structural principle of penultimate variation and its function in producing a sense of closure, see Barbara Herrnstein Smith, *Poetic Closure: A Study of How Poems End* (Chicago: The University of Chicago Press, 1968).

[75] If read in a British accent in which "toWARDS" is disyllabic, lexical stress on the second syllable requires substitution of a pyrrhic spondee for the second and third iambs: "i HOLD it toWARDS YOU." However, pragmatic knowledge motivates stressing the preposition more than the anaphoric "you," such that the line is simulated "i HOLD it toWARDS you," constituting an iamb followed by an anapest followed by an unstressed extra syllable. For accents in which "towards" is monosyllabic this effect is preserved but moderated, as the final line comprises two regular iambs but again an unstressed ending syllable of a final unfinished foot: "i HOLD it TOWARDS you."
[76] This frame structure has parallels in perceptual and loco-temporal absorption: the initial and final focus on the hand itself and the frame-of-reference of its here-and-now.
[77] Cf. Klin and Drumm, "Seeing What They Read and Hearing What They Say." By way of contrast, consider poems where the sound patterning is so salient you have difficulty attending to the meaning of the words. The work of W. B. Yeats and Wallace Stevens often has this effect for me, though in the case of Stevens there is also often difficulty and/or indeterminacy in construing the meaning and imagery in themselves.
[78] Along with habituated reading practices, this inevitable final disabsorption from the speaker's viewpoint upon reaching the end of the text motivates adopting a hearer/audience viewpoint in reflective interpretation.
[79] Attention to the lineation of the text would also be diminished by absorption in visual simulation of the hand, as I discuss in my analysis of perceptual imagery in the second half of this chapter.
[80] On the antipictorialist "linguistic turnabout," see Ellen J. Esrock, *The Reader's Eye: Visual Imaging as Reader Response* (Baltimore, The Johns Hopkins University Press, 1994), 1-17.
[81] Jonathan Culler, "Apostrophe," *Diacritics* 7.4 (1977): 68-9.
[82] William Waters, "Poetic Address and Intimate Reading: The Offered Hand," *Literary Imagination* 2.2 (2000): 194, 197-8, 199.
[83] Shahidha K. Bari, *Keats and Philosophy: The Life of Sensations* (New York: Routledge, 2012), xix; cf. 1-12.
[84] Brooke Hopkins, "Keats and the Uncanny: 'This living hand'" *The Kenyon Review* 11.4 (1989): 37. The one other exception is Mark J. Bruhn, who positions Keats as an end-point in a historical transition from Milton's mobile narrative viewpointing to the Romantics' grounded place deixis, points not only to the deictic markers of loco-temporal presence and personal proximity in "This living hand" but also to the many "anatomical entities … haptic images … [and] kinesthetic invitations" as prompts for the reader to imagine the bodies being described. Mark J. Bruhn, "Place Deixis and the Schematics of Imagined Space" *Poetics Today* 26.3 (2005): 391.
[85] Keats, *Keats's Poetry and Prose*, 102.
[86] Alan Richardson, "Keats and the Glories of the Brain," *British Romanticism and the Science of the Mind* (Cambridge: Cambridge University Press, 2001), 116. See also Alan Richardson, "Keats and Romantic Science: Writing the Body," *Cambridge Companion to Keats*, ed. Susan Wolfson (Cambridge: Cambridge University Press, 2001), 230-45.
[87] "The relation of poetic imagery in the Romantic era to the visual sense, to the external—and internal—senses generally, and to the creative imagination turns out to be much more complex than most commentators have wished to acknowledge. To begin with, one finds widespread recognition of the dominance of the visual sense, but this recognition can lead to seemingly contradictory responses even for a single given Romantic author. The powerful vivacity of the visual sense can be accepted and exploited, with a correspondingly tight relation implied between the physical eye and the poetic imagination…. At the same time, … the Romantic poet may at times even lament the 'despotic' sway of the eye and summon the visionary imagination by recourse to a different sense, or

to an imageless 'spirit and a feeling' (quoting, once more, "Tintern Abbey"). Romantic writers may choose to defamiliarize sense experience, again in the interests of challenging the eye's habitual dominance, by conflating the senses through various synesthesias or by combining them in their use of multisensory imagery. Yet all the while the distinctions among the various senses persist and may even be exaggerated in passages that underscore and exploit the 'gaps' between the senses, disparities that become increasingly marked as well in the neurology and brain science of the era." Alan Richards, "The Romantic Image, the Mind's Eye, and the History of the Senses," *The Neural Sublime: Cognitive Theories and Romantic Texts* (Baltimore: Johns Hopkins University Press, 2010), 53-54 and passim.

[88] Benjamin K. Bergen, *Louder Than Words: The New Science of How the Mind Makes Meaning* (New York: Basic Books, 2012); Lawrence J. Taylor and Rolf A. Zwaan, "Action in Cognition: The Case of Language" *Language and Cognition* 1 (2009): 45-58; Lawrence W. Barsalou, "Grounded Cognition," *Annual Review of Psychology* 59 (2008): 617-45; Jerome A. Feldman, *From Molecule to Metaphor: A Neural Theory of Language* (Cambridge: The MIT Press, 2006); Benjamin K. Bergen and Nancy Chang, "Embodied Construction Grammar in Simulation-Based Language Understanding, in *Construction Grammar(s): Cognitive and Cross-Language Dimensions*, ed. J.-O. Östman and M. Fried (Johns Benjamins, 2005); Rolf A. Zwaan and Carol J. Madden, "Embodied Sentence Comprehension," in *Grounding Cognition: The Role of Perception and Action in Memory, Language, and Thinking*, ed. Diane Pecher and Rolf A. Zwaan (New York: Cambridge University Press, 2005), 224-45; Rolfe A. Zwaan, "The Immersed Experiencer: Toward an Embodied Theory of Language Comprehension," in *The Psychology of Learning and Motivation*, vol. 44, ed. Brian Ross (New York: Academic Press, 2004), 35-62.

[89] Antonio Damasio calls these stimulus-processing regions the "image space," and contrasts their conscious contents with the unconscious contents of the "dispositional space" in associational cortices. For a more detailed account of the multimodal organization of memory and its top down reactivation through hierarchical structures in somatosensory and motor cortices, see Damasio, *Self Comes to Mind: Constructing the Conscious Brain* (New York: Pantheon Books, 2010), 141-53 and passim.

[90] Such simulation is the difference between declarative memory, through which one can recall facts about a past experience, and episodic memory, the 'reliving' of the experience itself. See also: Yiva Ostby, Kristine B. Walhovd, Christian K. Tamnes, Hakon Grydeland, Lars Tjelta Westlye, Anders M. Fjell, "Mental Time Travel and Default-Mode Network Functional Connectivity in the Developing Brain," *Proceedings of the National Academy of Sciences* 109.42 (2012): 16800-804; R. Nathan Spreng, Raymond A. Mar, and Alice S. N. Kim, "The Common Neural Basis of Autobiographical Memory, Prospection, Navigation, Theory of Mind, and the Default Mode: A Quantitative Meta-Analysis," *Journal of Cognitive Neuroscience* 21.3 (2008): 489-510.

[91] On the concept of transparency, see: Henry Lanz, *The Physical Basis of Rime: An Essay on the Aesthetics of Sound* (Stanford: Stanford University Press, 1931); Charles Bernstein, "The Artifice of Absorption," in *A Poetics* (Cambridge: Harvard University Press, 1992), 9-89.

[92]Catherine Craver-Lemley and Martha E. Arterberry, "Imagery-Induced Interference on a Visual Detection Task," *Spatial Vision* 14.1 (2001): 101-19; Catherine Craver-Lemley and A. Reeves, "How Visual Imagery Interferes with Vision" *Psychological Review* 89 (1992): 633-49; Martha J. Farah, "Psychophysical evidence for a shared representational medium for visual images and percepts," *Journal of Experimental Psychology: General* 114.1 (1985): 91-103; Cheves West Perky, "An Experimental Study of Imagination," *American Journal of Psychology* 21.3 (1910): 422-52. This same conflict likely contributes to some readers' disregard towards imagery; when one's attention is focused on the text itself, it may be the visual simulations that get backgrounded out of consciousness. Poems that are new to a reader, or that otherwise solicit more visual attention, may therefore be less evocative of

visual imagery, while rereading familiar poems, or listening to / recalling a poem rather than reading it, may afford more visual imagery. Thus, while Alan Richardson highlights historical shifts in visualizing as a reading practice, differences in readerly visualization are also affected by particular readers' relations to particular texts, and to the challenges posed by unfamiliar historical and/or literary language, as well as by individual variation in "cognitive style" more generally. Richardson, "The Romantic Image, the Mind's Eye, and the History of the Senses," in *The Neural Sublime* (Baltimore: Johns Hopkins University Press, 2010), 54-7; Bergen, *Louder Than* Words, 161-74; Esrock, *The Reader's Eye*.

[93] Mark J. Bruhn makes this same point: "Lyric discourses … prototypically [collapse] represented and discourse situations into a single level. In this case, there is no compulsion to explicitly render (e.g., through stage directions or 'objective' description) the represented situation, because it is (assumed to be) immediately available as the situation-of-discourse." Bruhn, "Place Deixis and the Schematics of Imagined Space," 398. Bruhn further argues that the absorptive technique of deictically evoking the place-of-utterance *as present* was a shift in practice that occurred over the Romantic period (with Gray's "Elegy Written in a Country Churchyard" as a revolutionary turning point, and Keats's "material sublime" of embodied sensations as an end-point)—away from the "boundlessness, greatness, and (ultimately) sublimity" (404) of the visionary, propositional, and/or narrative modes of pre-Romantic lyric, where place is embedded *as described* by a mediating speaker. Heather Dubrow, in contrast, considers prototypical lyric to involve "a mimesis of mental space" rather than being "located in a mimesis of physical space," and so theorizes the construal of text as a speech act within a diegetic space as an "amalgam" of narrative and lyric. Heather Dubrow, "The Interplay of Narrative and Lyric: Competition, Cooperation, and the Case of the Anticipatory Amalgam," *Narrative* 14.3 (2006): 268. Bruhn's observation regarding literary history could be contextualized as coinciding with the rise of empiricism, the turn from reason, received truth, and/or visionary revelation (as in the neo-Platonic Shelley, on the side of a universal ideal) to experience (the medically-trained Keats). I would then propose that the increasing indeterminacy of deixis in post-Romantic lyric poetry can be related to the shifts in understandings of epistemology in modernity and postmodernity.

[94] In reading, for example, while the experience of a printed text might subjectively seem unmediated, visual processing involves a cascade of neural circuits that register the shapes, angles, and positions of the printed lines and their intersections, and then categorize those sets of features into graphemes (letters, bigrams, and punctuation marks), and those graphemes into word-roots, morphemes, and words, with context and top-down input helping to motivate these construals. See Dehaene, *Reading in the Brain*.

[95] Bergen, *Louder Than Words*.

[96] This is not to say that the qualities of the image will necessarily be definite or easy to articulate.

[97] Tad T. Brunyé, Tali Ditman, Caroline R. Mahoney, Jason S. Augustyn, and Holly A. Taylor, "When You and I Share Perspectives: Pronouns Modulate Perspective Taking During Narrative Comprehension," *Psychological Science* 20.1 (2009): 27-32.

[98] Michael P. Kaschak, Carol J. Madden, David J. Therriault, Richard H. Yaxley, Mark Aveyard, Adrienne A. Blanchard, and Rolf A Zwaan, "Perception of Motion Affects Language Processing" *Cognition* 94.3 (2005): B79-89; Rolf A. Zwaan, Carol J. Madden, Richard H. Yaxley, and Mark E. Aveyard, "Moving Words: Dynamic Representations in Language Comprehension," *Cognitive Science* 28 (2004): 611-19.

[99] Guillemette Bolens, *The Style of Gestures: Embodiment and Cognition in Literary Narrative* (Baltimore: The Johns Hopkins University Press, 2012); Bodo Winter and Benjamin Bergen, "Language

Comprehenders Represent Object Distance both Visually and Auditorily" *Language and Cognition* 4.1 (2012): 1-16; Kathryn B. Wheeler and Benjamin K. Bergen, "Meaning in the Palm of Your Hand," in *Empirical and Experimental Methods in Conceptual Structure, Discourse, and Language*, ed. Sally Rice and John Newman (Stanford: Center for the Study of Language and Information, 2010); D. Pecher, S. van Danzig, Rolf A. Zwaan, and R. Zeelenberg, "Language Comprehenders Retain Implied Shape and Orientation of Objects" *The Quarterly Journal of Experimental Psychology* 62 (2009): 1108-14; Benjamin Bergen, S. Lindsay, Teenie Matlock, and Srini Narayanan, "Spatial and Linguistic Aspects of Visual Imagery in Sentence Comprehension" *Cognitive Science* 31 (2007): 733-64; Anna M. Borghi, Arthur M. Glenberg, and Michael P. Kashak, "Putting Words in Perspective," *Memory & Cognition* 32.6 (2004): 863-73; Rolf A. Zwaan and Richard H. Yaxley, "Spatial Iconicity Affects Semantic-Relatedness Judgments" *Psychonomic Bulletin &* Review 10 (2003): 954-8; Rolf A. Zwaan, Robert A. Stanfield, and Richard H. Yaxley, "Language Comprehenders Mentally Represent the Shapes of Objects," *Psychological Science* 13.2 (2002): 168-71.

[100] A study by Vianna and colleagues suggests that more vivid imagery may be more restricted to the brain, while less vivid imagery correlated with stronger bodily reactions; E. P. M. Vianna, N. Naqvi; A. Bechara, and D. Tranel, "Does Vivid Emotional Imagery depend on Body Signals?" *International Journal of Psychophysiology* 72.1 (2009): 46-50. Vincent D. Costa, Peter J. Lang, Dean Sabatinelli, Francesco Versace, and Margaret M. Bradley, "Emotional Imagery: Assessing Pleasure and Arousal in the Brain's Reward Circuitry" *Human Brain Mapping* 31 (2010); Dean Sabatinelli, Peter J. Lang, Margaret M. Bradley, and Tobias Flaisch, "The Neural Basis of Narrative Imagery: Emotion and Action," *Progress in Brain Research* 156 (2006); Young H. Sohn, Nguyet Dang, and Mark Hallett, "Suppression of Corticospinal Excitability during Negative Motor Imagery," *Journal of Neurophysiology* 90.4 (2003): 2303-09; Ilse Van Diest, Winnie Winters, Stephan Devriese, Elke Vercamst, Jiangna Han, K. P. Van de Woestijne, and Omer Van den Bergh, "Hyperventilation beyond Fight/Flight: Respiratory Responses during Emotional Imagery," *Pscyhophysiology* 38.6 (2001): 961-8; Kazuo Oishi, Tatsuya Kasai, and Takashi Maeshima, "Autonomic Response Specificity during Motor Imagery," *Journal of Physiological Anthropology and Applied Human Science* 19.6 (2000): 255-61; Luciano Fadiga, Giovanni Buccino, Laila Craighero, Leonardo Fogassi, Vittorio Gallese, and Giovanni Pavesi, "Corticospinal Excitability is Specifically Modulated by Motor Imagery: A Magnetic Stimulation Study," *Neuropsychologia* 37.2 (1999): 147–58; Paolo M. Rossini, Simone Rossi, Patrizio Pasqualetti, Franca Tecchio, "Corticospinal Excitability Modulation to Hand Muscles during Movement Imagery," *Cerebral Cortex* 9.2 (1999): 161-7; Mark R. Dadds, Dana Bovbjerg, William H. Redd, and Tim R. H. Cutmore, "Imagery in Human Classical Conditioning," *Psychological Bulletin*, 122.1 (1997): 89-103; Jean Decety, Marc Jeannerod, D. Durozard, and G. Baverel, "Central Activation of Autonomic Effectors during Mental Simulation of Motor Actions in Man," *Journal of Physiology* 461.1 (1993): 549-63; Gregory A. Miller, Daniel N. Levin, Michael J. Kozak, Edwin W. Cook, 3rd, Alvin McLean, Jr., and Peter J. Lang, "Individual Differences in Imagery and the Psychophysiology of Emotion," *Cognition and Emotion* 1.4 (1987): 367-90; John R. Suler, "Imagery Ability and the Experience of Affect by Free Associative Imagery," *Journal of Mental Imagery* 9.1 (1985): 101-10; Peter J. Lang, Michael J. Kozak, Gregory A. Miller, Daniel N. Levin, and Alvin McLean, Jr., "Emotional Imagery: Conceptual Structure and Pattern of Somato-Visceral Response," *Psychophysiology* 17.2 (1980): 179-92.

[101] Samuel T. Moulton and Stephen Kosslyn, "Imagining Predictions: Mental Imagery as Mental Emulation," *Philosophical Transactions of the Royal Society, Series B, Biological Sciences* 264 (2009): 1273-80.

[102] The "curse of knowledge" refers to an egocentric cognitive bias, where subjects typically vastly overestimate the likelihood of others having knowledge or experience that the subject has, even

when the subject knows others' access to that knowledge/experience is limited. See: Vera Tobin, "Cognitive Bias and the Poetics of Surprise," *Language and Literature* 18.2 (2009): 155-72; Susan A. J. Birch and Paul Bloom, "The Curse of Knowledge in Reasoning About False Beliefs," *Psychological Science* 18.5 (2007): 382-6. See also: Norman A. Holland, "*Don Quixote* and the Neuroscience of Metafiction," in *Cognitive Literary Studies: Current Themes and New Directions*, ed. Isabel Jaén and Julien Jacques Simon (Austin: University of Texas Press, 2012), 73-88; and the principle of "presupposition float" in mental spaces theory: Gilles Fauconnier, *Mappings in Thought and Language* (Cambridge: Cambridge University Press, 1997), 60-4. Gilles Fauconnier, *Mental Spaces: Aspects of Meaning Construction in Natural Language* (Cambridge: MIT Press, 1985), 82-108.

[103] Richard H. Yaxley and Rolf A. Zwaan, "Simulating Visibility during Language Comprehension," *Cognition* 105.1 (2007): 229-36.

[104] Scarry, *Dreaming by the Book*.

[105] Rolf Reber, Norbert Schwarz, and Piotr Winkielman, "Processing Fluency and Aesthetic Pleasure: Is Beauty in the Perceiver's Processing Experience?" *Personality and Social Psychology Review* 8.4 (2004). See also: G. Gabrielle Starr, *Feeling Beauty: The Neuroscience of Aesthetic Experience* (Cambridge: The MIT Press, 2013); Colin Martindale, "The Pleasures of Thought: A Theory of Cognitive Hedonics" *Journal of Mind and Behavior* 5 (1984): 49-80. The aptness described here might also be construed as a kind of empathy with the persona, for whom the reader as an addressee is as immediately present or distantly dreamed as the persona/writer is for her.

[106] Bergen et al., "Spatial and Linguistic Aspects"; Roger Johansson, Jana Holsanova, and Kenneth Holmqvist, "Pictures and Spoken Descriptions Elicit Similar Eye Movements During Mental Imagery, Both in Light and in Complete Darkness," *Cognitive Science* 30.6 (2006): 1053-79; Volker Blanz, Michael J. Tarr, and Heinrich H. Bülthoff, "What Object Attributes Determine Canonical Views?" *Perception* 28.5 (1999): 575-99; Florin Cutzu and Shimon Edelman, "Canonical Views in Object Representation and Recognition," *Vision Research* 34.22 (1994): 3037-56; S. E. Palmer, E. Rosch, and P. Chase, "Canonical Perspective and the Perception of Objects," in *Attention and Performance* vol. 9, ed. J. Long and A. Baddeley (Hillsdale, NJ: Erlbaum, 1981), 135-51.

[107] Edmund Husserl, "Differences Between the Visual and Tactual Realms," in *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, Second Book: Studies in the Phenomenology of Constitution*, trans. Richard Rojcewicz and André Schuwer (Dordrect, The Netherlands: Kluwer Academic, 1989), 155-9.

[108] Jean Decety and Jennifer A. Stevens, "Action Representation and Its Role in Social Interaction," in *Handbook of Imagination and Mental Simulation*, ed. Keight D. Markman, William M. P. Klein, and Julie A. Suhr (New York: Taylor and Francis, 2009), 3-20; Shaun Gallagher, *How the Body Shapes the Mind* (Oxford: Clarendon, 2005); Shaun Gallagher and Jonathan Cole, "Body Image and Body Schema in a Deafferented Subject," in *Body and Flesh: A Philosophical Reader*, ed. Donn Welton (Malden, MA: Blackwell, 1998), 132-47; Jonathan Cole and Jacques Paillard, "Living without Touch and Peripheral Information about Body Position and Movement: Studies with Deafferented Subject," in in *The Body and the Self*, ed. José Luis Bermúdez, Anthony Marcel, and Naomi Eilan (Cambridge: MIT Press, 1995), 245-66; Shaun Gallagher, "Body Schema and Intentionality," in *The Body and the Self*, ed. Bermúdez, Marcel, and Eilan, 225-44.

[109] Floris P. de Lange, Peter Hagoort, and Ivan Toni, "Neural Topography and Content of Movement Representations," *Journal of Cognitive Neuroscience* 17.1 (2005): 97-112; Katja Stefan, Leonardo G. Cohen, Julie Duque, Riccardo Mazzocchio, Pablo Celnik, Lumy Sawaki, Leslie Ungerleider, and Joseph Classen, "Formation of a Motor Memory Action Observation," *Journal of Neuroscience* 25.41 (2005): 9339-46; Giacomo Rizzolatti and Laila Craighero, "The Mirror-Neuron

System," *Annual Review of Neuroscience* 27 (2004): 169-92; Giacomo Rizzolatti, Leonardo Fogassi, and Vittorio Gallese, "Neurophysiological Mechanisms Underlying the Understanding and Imitation of Action," *Nature Reviews Neuroscience* 2.9 (2001): 661-70; Carlo A. Porro, Maria Pia Francescato, Valentina Cettolo, Matthew E. Diamond, Patrizia Baraldi, Chiava Zulani, Massimo Bazzocchi, and Pietro E. di Prampero, "Primary Motor and Sensory Cortex Activation during Motor Performance and Motor Imagery: A Functional Magnetic Resonance Imaging Study," *Journal of Neuroscience* 16.23 (1996): 7688-98; Scott T. Grafton, Michael A. Arbib, Luciano Fadiga, and Giacomo Rizzolatti, "Localization of Grasp Representation in Humans by PET 2: Observation Compared with Imagination," *Experimental Brain Research* 112.1 (1996): 103-11; P. T. Fox, J. V. Pardo, S. E. Petersen, and M. E. Raichle, "Supplementary Motor and Premotor Responses to Actual and Imagined Hand Movements with Positron Emission Topography," *Neuroscience Abstracts* 13 (1987): 1433.

[110] Joe Cambray, "Towards the Feeling of Emergence," *Journal of Analytical Psychology* 51.1 (2006): 1-20; Jean Decety and Philip L. Jackson. "The Functional Architecture of Human Empathy," *Behavioral and Cognitive Neuroscience Reviews* 3.2 (2004): 71-100; Sarah-Jane Blakemore and Jean Decety, "From the Perception of Action to the Understanding of Intention," *Nature Reviews Neuroscience* 2 (2001): 561-7.

[111] Michael Schaefer, Hans-Jochen Heinze, and Michael Rotte, "Embodied Empathy for Tactile Events: Interindividual Differences and Vicarious Somatosensory Responses during Touch Observation," *Neuroimage* 60.2 (2012): 952-7; Christian Keysers, Jon H. Kaas, and Valeria Gazzola, "Somatosensation in Social Perception," *Nature Reviews Neuroscience* 11 (2010): 417-28; Christian Keysers and Valeria Gazzola, "Expanding the Mirror: Vicarious Activity for Actions, Emotions, and Sensations," *Current Opinion in Neurobiology* 19, 666-71; Sjoerd J. H. Ebisch, Mauro G. Perrucci, Antonio Ferretti, Cosimo Del Gratta, Gian Luca Romani, and Vittorio Gallese, "The *Sense* of Touch: Embodied Simulation in a Visuotactile Mirroring Mechanism for Observed Animate or Inanimate Touch," *Journal of Cognitive Neuroscience* 20.9 (2008): 1611-23; Alessio Avenanti, Domenica Bueti, Gaspare Galati, and Salvatore M. Aglioti, "Transcranial Magnetic Stimulation Highlights the Sensorimotor Side of Empathy for Pain," *Nature Neuroscience* 8.7 (2005): 955-60; Christian Keysers, Bruno Wicker, Valeria Gazzola, Jean-Luc Anton, Leonardo Fogassi, and Vittorio Gallese, "A Touching Sight: SII/PV Activation during the Observation and Experience of Touch," *Neuron* 42 (2004): 335-46; Seung-Schik Yoo, Daniel K. Freeman, James J. McCarthy, and Ferenc A. Jolesz, "Neural Substrates of Tactile Imagery: A Functional MRI Study," *NeuroReport* 14.4 (2003): 581-5.

[112] These systems are also involved in vocal simulation of metrical speech, as G. Gabrielle Starr has discussed. Starr, "Multisensory Imagery," in *Introduction to Cognitive Cultural Studies*, ed. Lisa Zunshine (Baltimore: Johns Hopkins University Press, 2014), 280-4. Benjamin Bergen and Kathryn Wheeler, "Grammatical Aspect and Mental Simulation" *Brain and Language* 112.3 (2010): 150-8; G. Buccino, L. Riggio, G. Melli, F. Binkofski, V. Gallese, and G. Rizzolatti, "Listening to Action-Related Sentences Modulates the Activity of the Motor System: A Combined TMS and Behavioral Study," *Cognitive Brain Research* 24 (2005): 355-63; Joseph W. Kable, Irene P. Kan, Ashley Wilson, Sharon L. Thompson-Schill, and Anjan Chatterjee, "Conceptual Representations of Action in the Lateral Temporal Cortex." *Journal of Cognitive Neuroscience* 17.12 (2005): 1855-70; Olaf Hauk, Ingrid Johnsrude, and Friedemann Pulvermüller, "Somatotopic Representation of Action Words in Human Motor and Premotor Cortex," *Neuron* 41.2 (2004): 301-7; Arthur M. Glenberg and Michael P. Kaschak, "Grounding Language in Action," *Psychonomic Bulletin & Review* 9.3 (2002): 558-65; Friedemann Pulvermüller, Max Haerle, and Friedhelm Hummel, "Walking or Talking? Behavioral and Neurophysiological Correlates of Action Verb Processing," *Brain and Language* 78 (2001): 143-68.

[113] Bolens, *The Style of Gestures*.
[114] Michael J. Bannisy and Jamie Ward, "Mechanisms of Self-Other Representations and Vicarious Experiences of Touch in Mirror-Touch Synesthesia," *Frontiers in Human Neuroscience* 7 (2013): 112; Henning Holle, Michael J. Banissy, Thomas Wright, Natalie Bowling, and Jamie Ward, "'That's Not a Real Body': Identifying Stimulus Qualities that Modulate Synaesthetic Experiences of Touch," *Consciousness and Cognition* 20.3 (2011): 720-6; Michael J. Bannisy, Roi Cohen Kadosh, Gerrit W. Maus, Vincent Walsh, and Jamie Ward, "Prevalence, Characteristics, and a Neurocognitive Model of Mirror-Touch Synesthesia," *Experimental Brain Research* 198.2-3 (2009): 261-72; S.-J. Blakemore, D. Bristow, G. Bird, C. Frith, and J. Ward, "Somatosensory Activations during the Observation of Touch and a Case of Vision-Touch Synaesthesia," *Brain* 128.7 (2005): 1571-83.
[115] There are two complications to this principle. First: in the case of touch between two bodies, the perspective may be doubled, such that the reader inhabits both toucher and touchee as experiencing the same sensation. Second: even though somatic simulation takes a first-person perspective, the perspective of the overall construal, as motivated by pronouns, for example, may strengthen or weaken the somatic simulation, presumably through integrative reinforcement or conflicting inhibition. Indeed, it appears that taking an observer perspective on an action strengthens visual simulation and weakens motor simulation, while taking the agent perspective strengthens motor simulation and weakens visual simulation. Tali Ditman, Tad T. Brunyé, Caroline R. Mahoney, and Holly A. Taylor, "Simulating an Enactment Effect: Pronouns Guide Action Simulation during Narrative Comprehension," *Cognition* 115 (2010): 172-8; Jennifer A. Stevens, "Interference Effects Demonstrate Distinct Roles for Visual and Motor Imagery during the Mental Representation of Human Action," *Cognition* 95 (2005): 329-50; Stephen M. Kosslyn, William L. Thompson, M. Wraga, and Nathaniel M. Alpert, "Imagining Rotation by Endogenous versus Exogenous Forces: Distinct Neural Mechanisms," *NeuroReport* 12.11 (2001): 2519-25.
[116] On multimodal perception and mental imagery, see: S. C. Prather, John R. Votaw, and K. Sathian, "Task-Specific Recruitment of Dorsal and Ventral Visual Areas During Tactile Perception," *Neuropsychologia* 42 (2004): 1079-87; Minming Zhang, Valerie D. Weisser, Randall Stilla, S. C. Prather, and K. Sathian, "Multisensory Cortical Processing of Object Shape and Its Relation to Mental Imagery," *Cognitive, Affective, & Behavioral Neuroscience* 4.2 (2004): 251-9; Rainer Goebel, Darius Khorram-Sefat, Lars Muckli, Hans Hacker, and Wolf Singer, "The Constructive Nature of Vision: Direct Evidence from Functional Magnetic Resonance Imaging Studies of Apparent Motion and Motion Imagery," *European Journal of Neuroscience* 10.5 (1998): 1563-73.
[117] Giacomo Rizzolatti, Luigi Cattaneo, Maddalena Fabbri-Destro, and Stefano Rozzi, "Cortical Mechanisms Underlying the Organization of Goal-Directed Actions and Mirror Neuron-Based Action Understanding," *Physiological Reviews* 94 (2014): 655-706; Steffen Werner, Christina Saade, and Gerd Lüer, "Relations between the Mental Representation of Extrapersonal Space and Spatial Behavior," in *Spatial Cognition: An Interdisciplinary Approach to Representing and Processing Spatial Knowledge*, ed. Christian Freska, Christopher Habel, and Karl. F. Wander (Berlin: Springer, 1998): 111.
[118] Experiments using rats found evidence that silence is represented by neural circuits distinct from those that represent noise. Ben Scholl, Xiang Gao, and Michael Wehr, "Nonoverlapping Sets of Synapses Drive On Responses and Off Responses in Auditory Cortex," *Neuron* 65.3 (2010): 412-21. For more on auditory simulation, see: Tad T. Brunyé, Tali Ditman, Caroline R. Mahoney, Eliza K. Walters, and Holly A. Taylor, "You Heart It Here First: Readers Mentally Simulate Described Sounds," *Acta Psychologica* 135 (2010): 209-15; Saskia Van Dantzig, Diane Pecher, René Zeelenberg, and Lawrence W. Barsalou, "Perceptual Processing Affects Conceptual Processing," *Cognitive Science*

32.3 (2008): 579-90; Nicolas Vermeulen, Olivier Corneille, and Paula M. Niedenthal, "Sensory Load Incurs Conceptual Processing Costs," *Cognition* 109 (2008): 287-94.

[119] This shift from the persona's to the addressee's perspective may also be motivated by antipathy towards death, as experiments have found a tendency for unpleasant scenarios to motivate observer rather than participant perspective. Lisa K. Libby and Richard P. Eibach, "Looking Back in Time: Self-Concept Change Affects Visual Perspective in Autobiographical Memory," *Journal of Personality and Social Psychology* 82 (2002): 167-79. Lisa K. Libby and Richard P. Eibach, "How the Self Affects and Reflects the Content and Subjective Experience of Autobiographical Memory," in *The Self*, ed. Constantine Sedikides and Steven J. Spencer, 75-91 (New York: Psychology Press, 2007). The shifts in perspective that I've tracked may thus evoke and/or express shifting relations of likening and liking/dislike.

[120] In the same way that visual imagery and the visual text compete for attention, vocal simulation in linguistic processing is in conflict with imagery of described sounds, such that focusing on one is likely to background the other. To circumvent this conflict, poets sometimes use onomatopoeic iconicity, where phonemic structures of the discourse can be construed as also representing diegetic sounds.

[121] Sohn, Dang, and Hallet, "Suppression of Corticospinal Excitability" (2003); Oishi, Kasai, and Maeshima, "Autonomic Response Specificity," (2000); Fadiga et al., "Corticospinal Excitability" (1999); Rossini et al., "Corticospinal Excitability Modulation," (1999); Decety et al., "Central Activation" (1993).

[122] Bergen and Wheeler, "Grammatical Aspect and Mental Simulation"; Feldman, *From Molecule to Metaphor*, 163-82; Srini Narayanan, *KARMA: Knowledge-based Action Representations for Metaphor and Aspect*, PhD Thesis, University of California, Berkeley, 1997.

[123] Benjamin Bergen and Jerome Feldman, "Embodied Concept Learning," in *Handbook of Cognitive Science: An Embodied Approach*, ed. Paco Calvo and Toni Gomila, (San Diego: Elsevier, 2008): 313-331.

[124] George Lakoff and Mark Johnson, *Philosophy in the Flesh: The Embodied Mind and its Challenge to Western Thought* (New York: Basic Books, 1999), 195-8.

[125] Leonard Talmy, "Force Dynamics in Language and Cognition," in *Toward a Cognitive Semantics*, vol. 1: *Concept Structuring Systems* (Cambridge: MIT Press, 2000).

[126] Entrainment, a rhythmic coordination in the neural control of movement, may also be evoked by the regular iambic rhythm, and yield its own effect of pleasure, as G. Gabrielle Starr has suggests in "Aesthetics and Impossible Embodiment: Stevens, Imagery, and Disorientation," *Wallace Stevens Journal* 39.2 (2015): 160. Ulrike Domahs, Elise Klein, Walter Huber, and Frank Domahs, "Good, Bad and Ugly Word Stress—fMRI Evidence for Foot Structure Driven Processing of Prosodic Violations," *Brain and Language* 125.3 (2013): 272-82; Sylvie Nozaradan, Isabelle Peretz, Marcus Missal, and André Mouraux, "Tagging the Neuronal Entrainment to Beat and Meter," *Journal of Neuroscience* 31.28 (2011): 10234-40; Jessica Phillips-Silver, C. Athena Aktipis, and Gregory A. Bryant, "The Ecology of Entrainment: Foundations of Coordinated Rhythmic Movement." *Music Perception* 28.1 (2010): 3-14; Kathrin Rothermich, Maren Schmidt-Kassow, Michael Schwartze, and Sonja A. Kotz, "Event-related Potential Responses to Metric Violations: Rules versus Meaning," *Neuroreport* 21.8 (2010): 580-84.

[127] I hypothesize that these somatic qualities of the deep semantics of verbs contribute to the affective liveliness (or its lack) in non-diegetic, largely imageless, and/or anti-absorptive avant-garde poetries, such as those of Gertrude Stein, Language Writing, etc.

[128] Bergen, *Louder Than Words*, 121-50; Rolf A. Zwaan and Lawrence J. Taylor, "Seeing, Acting, Understanding: Motor Resonance in Language Comprehension," *Journal of Experimental Psychology: General* 135.1 (2006): 1-11; David J. Townsend and Thomas G. Bever, *Sentence Comprehension: The Integration of Habits and Rules* (Cambridge: MIT Press, 2001).

Conclusion

The Intricacies and Effects of Imagined Experience

This dissertation has theorized poems as imagined experiences that are composed of multimodal neural simulations within the reader's brain. I have labored to show that the space of imagination, when understood in this way, has even more dimensions, formal parameters, and aesthetic qualities than the space of the text. As I have addressed each dimension of absorption—semantic, affective, personal, loco-temporal, vocal, and perceptual—in turn over the course of my recursive analysis of "This living hand," I would now like briefly to revisit their interplay. Though this interplay occurs in the organic system of the brain, it should not be assumed that imagined experience exhibits 'organic unity.' Rather, because simulations involve partitioning, incremental processing, and recursive revision, running in parallel in different component systems and modalities, even as cognitive processing constrains and optimization principles motivate 'best fit' integration, coherences may be temporary and partial, with retrospective understanding re-construing, simplifying, or omitting some aspects of the reading experience. Imagination is this real, multidimensional, improvisational, dynamic process. Despite the complexity involved in analyzing poetic experience at the neurocognitive level, it is possible to describe some of the ways the various dimensions of imagining combine in constituting canonical lyric effects.

John Keats's "This living hand" exhibits lyric compression and "hyperbolic" meaningfulness in its evocation of complex situations, implications, and affects.[1] I have described such compression as less an encoding of meaning in linguistic and formal structure than an artful use of underspecific structures to motivate multiple affordances in simulation. That is, the lyric poem is like a playscript, except that its realization is produced in the theater of the imagination rather than on a stage. Where Keats's text refers only to a literal hand, the reader's background knowledge includes general metonymies and metaphors that integrate to yield a particular understanding of that hand as representing the persona's affection and/or aggression, the addressee's guilty conscience and/or the chance to repay their interpersonal debt, and the text itself as something once living that has died but may be revived. The reader's own affective systems are involved in simulating the implied desire, fear, loss, grief, guilt, wishfulness, and/or relief, entailing an empathetic involvement 'feeling with' the persona and/or addressee, even as the reader may partition and attribute the complexes of those feelings to those textual persons. Vocal and perceptual simulations function as additional processes in which affective qualities and manners are realized, further elaborating the reader's experience of impassioned address, embodied confrontation, and compelling figuration, contributing to her semantic and affective construals as the voice, hand, and bodies come to life in imagination. At the same time, the personal and loco-temporal dimensions afford further variations in relating the text's persons to Keats and/or Fanny Brawne in the past, the reader in the present, and/or personae in a fictional space. Each of these variations in relating the multiple subjectivities, times, and worlds evoked by the poem to external contexts, and dynamic shifts in the alignment of the reader's viewpoint within that complex of perspectives, interacts with the semantic and affective possibilities, integrating the components into a variety of interpretations and experiences—an earnest love poem, a pathos-inducing prophecy of grief, a manipulative guilt trip, a novel literary performance of the *carpe diem*, a desperate wish to transcend mortality, a gift of lyric communion across time, or a meta-lyric figuration of the paradoxical agency of writing. By reading the poem with negative capability and experientially exploring these options, the potential simplification of each can be complicated, composing a way of happening that comprises multiple meanings. This complex way of happening, as a set of cognitive interconnections, can then afford multiple values as equipment for living in

future contexts, such as romantic and non-romantic relationships, confrontations with mortality, and reading or writing lyric poems.

Keats's poem's effects of lyric presence are similarly multi-dimensional and can be combined in additive ways. The present tense and proximal deictics motivate a loco-temporal construal of the persona and addressee as co-present. In turn, the hypothetical spaces of the tomb and haunting afford an alternative route for absorption in the written, rather than spoken, construal, such that the future times of the addressee and/or reader may be integrated with the counterfactual scenario. This counterfactual-construed-as-future may then collapse into the here-and-now of the discourse due to the anaphora of the last clause's "it" as it ambiguously refers to the dead and/or living hand. Even if the lyric event is construed as occurring in the past, vocal and perceptual simulation create a sense of the past voice and hand as present to the reader, such that she is imaginatively transported to that past by its sensory presence. The imagined voice (simulated with rich qualities from the viewpoints of the speaker and/or hearer), the imagined visual imagery (simulated from the perspectives of both the persona and addressee), and the imagined physical sensations and actions (which involve simulationally inhabiting the bodies of each) together create a multimodal experience that is far more vivid and complex than a merely scriptive presence (equivalent to 'John Keats is here'). Similarly, as activation spreads from evoked emotion frames' semantic components to their affective components, the feelings expressed by the text are not only recognized but presently felt. Any lack of vividness in this imagery can be integrated as a ghostliness that fits the temporal/ontological distance that is entailed in construing the poem as re-presenting past events, and/or as a voice or hand from beyond the grave. Through their qualitative vividness and first-person/second-person parameters—as well as their absorptive demands on attention, which background the reader's actual situation and even the visual text—these multidimensional simulations involve the reader as a virtual participant in the lyric event.

Such involvement beyond overhearing/overreading also underlies the experiences of lyric intimacy evoked by "This living hand," as the reader participates in the persona's and addressee's mutual regard, concern, and (apparent) knowledge. As with lyric presence, the experience of lyric intimacy especially depends upon the negatively capable imagining afforded by reading a written text. Where performance of the poem actualizes one's perspective as either its speaker or a hearer, in silent reading the reader simulates both speaking and hearing, and her vocal viewpoint can dynamically shift back and forth between the perspectives. The poem's imagery also evokes the persona's and the addressee's perceptions of each other, with opposing perspectives at times motivated in different modalities, such that the reader simulationally inhabits both, her experiential viewpoint and focus alternating in a figure/ground oscillation. The evoked affects feature social emotions relating the two personae, while some of the feelings, such as affection, fear, loss, and wishfulness, are attributable to both, constituting a sense of access to each's interiority. By evoking multiple subjectivity spaces—the persona's earnest affection, hypothetical posthumous aggression, and resurrected satisfaction; the addressee's hypothetical hauntedness, desire for self-sacrifice, and calmed conscience—all of which concern the others, the poem's semantic and personal dimensions structure these perspectival oscillations and shared simulations as projective and/or empathetically-receptive relationships. The reader may displace from her own self-concept to align with Keats and/or Brawne construed as the poem's intimates, or she may identify herself with the persona or addressee role, imagining addressing an other of her own desire or feeling personally hailed by the poem. Though it's possible to construe the event from a suspicious perspective (maintaining distinctions between the persona's 'true' subjectivity and professed feelings, and between the addressee's persona-projected subjectivity and 'real' responses), the cognitive load of the complexity and the absorptive effects of the many simulations draw the reader into imagining the assertions as truths. Such integration of the evoked simulations into the 'real' subjectivities casts the persona's

prophecy and the addressee's self-subordinating sympathy as an intimate relationship of mutual knowledge and accurate empathy.

I've called "This living hand" a meta-lyric to describe the affordance of construal of the poem (alternatively or simultaneously) as speech and as writing. This explicit duality illustrates the significant implicit contributions that multimodal simulation makes to the meaning and experiential qualities of poems *even when they are interpreted solely as writing*. One may semantically and loco-temporally understand Keats's poem as a manuscript written in the past—and yet still experience that writing as expressing the affective qualities elaborated in vocal and perceptual simulations, and as directing its address at the reader individually as surely as if his ghost handed the manuscript to her. Again, such multiplicity and negative capability in construal is specifically afforded by the reader's encounter with the poem as a written rather than spoken text. Throwing the reader upon the open-endedness of the construal of personal and loco-temporal relations, parameters of perspective in vocal, perceptual, and affective simulations, and qualities of tone and manner as well, the underspecification prototypical of lyric creates the conditions for alternative viewpointings and imaginative exploration. Because perspectives and qualities are not determined by an actual situation, nor by the text, the reader can displace from her present circumstances and suspend her beliefs to experience multiple possible ways of happening and being.

These insights into the aesthetic dynamics of lyric also illuminate the pragmatic values of less-prototypically-lyric contemporary poems. As I discussed in analyzing various polyvocal poems in chapter 4, imaginative displacement from one's own racial identity into other perspectives can provide experiential practice in cross-race empathizing that may develop into the semantic knowledge of second sight. Rankine's, Hayden's, and Hughes's poems leverage imagined perspective-taking in order to move readers through the multiple perspectives of the black double consciousness, white false consciousness, and critical second sight. Practice affiliating with racial others and disaffiliating from persons of one's own race can also help to habituate a prismatic consciousness that does not take race as a dominant principle of identification but rather expects diversity within racial groups and readily relates to individuals and sub-groups with a sense of cross-racial solidarity. Though I focused on the dimensions of personal and affective absorption in my discussion, I hope that, after chapter 5, it is clear that viewpointing in vocal and perceptual simulation are also integral to the dynamics of perspective-taking in these poems and others like them. Through the negative capability of simulation, the virtual space of imagination becomes a classroom for learning about the racial imaginary and for working on ways of experiencing and responding to racial happenings in one's actual social life.

In my account in chapter 2 of poems that represent ecosystemic cause-and-effect relationships, I focused on the use of lyric compression to integrate disparate frames of knowledge into an understanding of the interrelations between human/cultural behaviors and 'natural' processes. Again, after chapter 5's exposition on perceptual absorption, I would like to reiterate the function of specific perceptual and bodily images in these poems. Hillman's "Moaning Action at the Gas Pump" cultivates associations not just between the semantic ideas of pumping gas, oil spills, wild birds and grasses and manatees, and the affective circuits of mourning, but builds neural connections between, for example, the recognition-circuits for those objects in the "what pathway" of the brain's visual system, and the execution schemas in the motor-control system for pumping gas and for moaning.[2] Snyder's "Burning the Small Dead" makes the thermodynamic transformations of the material of stars into mountains and trees seem as transient and insubstantial as we perceive fire and wind to be, and affords the construal of human life and cultural history as at once part of those awe-inducing multi-scale processes and just as empty of permanence or transcendent meaning. Roberson's "To See the Earth Before the End of the World" uses imagery of plane, train, and boat crashes to enable us to feel, bodily as well as affectively, the already-gathered momentum and

potentially-catastrophic consequences-to-come of global warming. These multidimensional experiences thus create an ecological consciousness that motivates conscientiousness, less by making readers more informed than by helping them to be more experientially aware of and affectively responsive to the complex causal dynamics of the world they dwell within.

This discussion of pragmatic values calls for further elaboration on my claim in the introduction that poems function as a 'weak rhetoric' of prompted practice imagining in particular ways. A neurocognitive perspective calls for the agency of poems and readers to be understood through the frames of systemic causation that I addressed in my analysis of "ecological" poems. Though the temporal sequence of writing as a process of transmission is simple—a writer produces a text that affords later reading—reading as a process of experience-construction involves complex interactions between the causal factors of the text and the current structure and state of the reader's cognitive field, including not only linguistic and general knowledge but also knowledge of the text's contexts and any expectations and intentions that the reader brings to the reading. The determinate text does not fully specify meaning but rather, as "This living hand" figures, depends on readers' agency in submitting their attention and applying their powers of imagination and inference to the underspecific motivations of the text. The reader's construction of a construal from the text's motivations is not a language-determined matter of 'decoding,' but rather a dynamic, emergent process co-motivated by the reader's cognitive field. This individual cognitive field has a complex intersubjectivity and temporality, having been constructed by the reader's experience past—her personal trajectory of exposure to the sociocultural cognitive field, as well as to the broader environment. The reader's experience past and experience present also mediate her intentions and their contributions to this process, as one wills according to the ways one's cognitive structure channels responses to internal and external stimuli. Neither the text nor the reader act independently—they only interact, and those interactions are inflected by the reader's past interactions, as they will themselves inflect her future interactions. This is what imagination is: beyond authorial creativity and reader reception, it is a medium and means by which readers can change their minds through virtual experience and practice for praxis.

Among the effects of experience past are various knowledges. Knowledge of intersubjective linguistic norms may afford reflective differentiation between component responses that are based in personal experience and those that may be expected to be shared by other readers. The general knowledge that a poem is an intentionally created object enters into one's reading, to motivate attention, simulation, and interpretation in the first place, and furthermore affords specific viewpointing options in which textual features can be read as expressive results of the writer's antecedent states, as communicative representations of the writer's thoughts, as artistic realizations of the writer's crafting of a form, as strategic techniques in the writer's attempts to create some specific effect, etc. If the reader has knowledge of specific historical contexts, those external frames may inform her construal through extended integration; but we should remember that these effects will depend not only on whether the reader possesses such knowledge, but also on what of that background knowledge the text itself evokes, or what of it is evoked by the reader's habituated and/or instructed reading practices. Ultimately, though, even meanings that are understood as historical, authorial, or objective are simulationally constituted within the reader's own neural system, such that they involve the reader's own subjectivity in relations to and inhabitations of the poem's contents. That is, precisely because the reader's own brain must construct her interpretation of its meaning, that meaning can comprise not only a memory that can be known, recalled, and reflected upon, but a way of happening that may subsequently serve as equipment for living. A poem's rhetorical effects are weak because a text affords rather than causes modifications to a reader's dispositions, which dispositions in turn do not determine behavior, but influence how behavior emerges contingent upon external contexts as well as internal structures. Thus, textual

vectors are mediated by yet also modify the individual reader's cognitive field, which contains the imprints of but can also alter the aggregate cognitive field. Poetry doesn't make sociocultural events happen, but the effects of its happening in readers' brains can spread beyond those readers through what they then make happen in the world.

Notes

[1] On hyperbole as a quality typical of lyric, see Jonathan Culler, *Theory of the Lyric* (Cambridge: Harvard University Press, 2015), 37-38 and passim.
[2] Benjamin K. Bergen, *Louder Than Words: The New Science of How the Mind Makes Meaning* (New York: Basic Books, 2012), 51-53, 73-92.