In 1861, six years after Walt Whitman first published a volume titled *Leaves of Grass*, America erupted into civil war. Whitman the person responded to the war in a variety of ways, leaving Brooklyn to search for his injured brother and spending his days caring for wounded soldiers. Whitman’s poem also responded to the war. The structure and tone expanded, adapting to the new events in surprising ways even as the text remained *Leaves of Grass*. In 1945, Ezra Pound would be confined to a prison camp in Pisa, Italy, having been captured by Allied forces. Fifteen years before, Pound had published a *Draft of XXX Cantos*, one of the first collected volumes of his long poem. Like *Leaves of Grass*, *The Cantos* would transform themselves to process this new event. In 1948, Pound published *The Pisan Cantos*, deploying the resources of the earlier work to imaginatively engage his time in the prison camp, an event he could not have anticipated at the outset of the project. A third example: in 2005, Hurricane Katrina raged through the Mississippi delta, leaving New Orleans residents, particularly those who were black and poor, stranded in desperate conditions. Twenty-five years earlier, Nathaniel Mackey had begun two twinned long poems, “mu” and *Song of the Andoumboulou*, both of which represented postcolonial diaspora through the imagery of deadly and inhospitable seas. In *Nod House*, his 2012 addition to these works, scenes from the flooded Ninth Ward of New Orleans entered the poem, transforming the hostile waters of the earlier work. It was as if Mackey had been writing a Katrina poem since the 1980s.

Each of these poems responds to changes in its environment, a more or less empirical fact of literary history. But what constitutes the poetics of this adaptability? Is there a theoretical model that can more accurately describe how these poems change? This book is an attempt to answer these questions. Drawing on the interdisciplinary framework of systems theory, I argue that these texts exemplify “emergent poetics,” functioning as
complex adaptive systems. John Holland’s basic definition of emergence is a useful place to begin thinking about complex adaptive behavior. For Holland, emergence is “much coming from little”: the idea that small, local actions or actors can produce large, global, and unexpected effects. Emergence is visible in a variety of complex adaptive systems, including “ant colonies, networks of neurons, the immune system, the Internet, and the global economy.” In each of these systems, first-order actions produce unexpected second-order effects. These higher order patterns, in turn, redirect the behavior of the first order, transforming the system as a whole and shaping its encounters with the environment.

One of the most elegant illustrations of emergence is a flock of birds moving across a landscape. Made up of individual agents and guided by no central consciousness, the flock nevertheless exhibits a definite shape; at any given moment, the birds exist within a recognizable form. This form, however, is constantly fluctuating in response to both environmental and systemic shifts; more precisely, the system shifts with the environment. The birds encounter a tree or a sudden gust of wind, changing the trajectory or speed of their flight. This movement cascades through the entire flock, producing an emergent formation. We could say that the flock as a whole, through this continuously unfolding process, is interpreting a landscape in its form. The flock presents us with an emergent structure embedded within a changing world, change that, somewhat paradoxically, the flock itself, through its movement, is making visible. The flock’s performance across the sky reveals the world anew.

Akin to a flock of birds, emergent long poems develop through the ongoing activity of writing in real time. Poetic form, far from being determined in advance, arises as a dynamic second-order pattern out of first-order activities, prompting the poem to further evolution. Over the past decades, emergent systems have been theorized and studied in a range of disciplines, from biology to cognitive science. However, few critics have studied the long poem in these terms, as a textual practice capable of interpreting a changing world.

Writing in Real Time seeks to address that critical gap, combining systems theory with literary criticism. As I hope the following chapters demonstrate, the implications of such an approach are wide-ranging, providing insight into difficult, unwieldy long poems while also contributing to critical discussions of literary form, the relationship between form and history, and the creative agency of literature. Indeed, I would hazard a bolder claim: that literary texts may be a neglected yet crucial site for apprehending the concepts of scientific discourse, including systems theory.
Introduction

What makes a poem peculiarly “emergent”? I argue that emergent poems are characterized by several interacting elements. First, such texts enact provisional closure, creating a poetic form or structure (closure) designed specifically for engagement with the environment, capable of future rearticulations and transformations (provvisonality). In the poems I take up here, moments of provisional closure are often given a name, whether as “Canto,” “Draft,” “Song,” or “Letter.” Through provisional closure, the text establishes and then redefines itself in response to an ever-changing present. This provisional closure is shaped by way of feedback loops with the environment: as the poem interacts with its cultural, social, and historical world, the form of its provisional closure is adapted, and these modifications, in turn, produce new possibilities for engagement or structural coupling, whereby the operations of one system are entangled with another. To return to our analogy, the flock of birds is structurally coupled to the system of weather fronts and wind patterns. Similarly, the emergent text is structurally coupled to the life of the author, the conditions of composition and publication, the historical events that unexpectedly appear – in other words, an extensive network of relationships. These texts are further characterized by iteration, which is the deployment of single, repeatable, and yet variable structures, and recursion, wherein elements from one structure are self-referentially used as a model for generating subsequent structures. Through these processes, emergent effects arise: formal, thematic, and aesthetic properties that could not be anticipated by the poet nor predicted from the outset of the poem. Emergent poems thus generate surprises through their form while also registering surprises in their world.

The basic characteristics of emergent poetics are evident in the three examples with which I began. Whitman’s use of the bound volume, poetic cluster, or individual “leaf” functions as a mode of provisional closure, producing a formal space whose boundaries are constantly being negotiated and expanded in response to historical events like the Civil War. Whitman’s practice is also profoundly iterative and recursive. Each edition of Leaves of Grass is an iteration of the poetic system that in turn recursively expands that system into new historical and linguistic territory. Leaves of Grass repeats itself in order to register changes in its world. Similarly, Pound’s work illustrates the principle of a feedback loop. As a poetic practice, The Cantos establish an intertextual network that incorporates primary texts, paratexts, typography, speech, and marginalia. When confronted with the radically unfamiliar environment of the detention center at Pisa, the poem’s practice of textual appropriation is extended and modified, drawing the speech of Pound’s guards into the poem and shifting to
a more autobiographical register. As with Whitman, this iteration in The Cantos transforms the total field of the poem, enabling an unanticipated and yet continuous structure to unfold. A similar effect can be seen in Mackey’s Nod House, where the language of diasporic seas from the earlier volumes is extended to the new historical context of post-Katrina New Orleans. Suddenly, the earlier iterations of the poem, where castaways and shipwrecks indicated forced migration and slavery, take on a new meaning made visible by the poem itself. The poem’s vocabulary now bridges the past and the present, allowing an unexpected cultural memory to emerge through the complex adaptive process of poetic composition.

In what follows, I develop this conceptual framework of emergent poetics through readings of several long poems, all of which clearly enact an adaptive form through writing in real time. Alongside Whitman, Pound, and Mackey, I dedicate close attention to works by A. R. Ammons, Lyn Hejinian, Charles Olson, Rachel Blau DuPlessis, and Juliana Spahr, texts that clearly demonstrate the properties of complex adaptive systems. Alongside my primary case studies, I offer commentary on works by William Wordsworth, T. S. Eliot, Wallace Stevens, Robert Lowell, Ron Silliman, Derek Walcott, and M. NourbeSe Philip, demonstrating how emergent practices relate to other forms of long poetry. Approaching the long poem through the framework of emergence extends and complicates general concerns in modern and contemporary poetics with openness and closure, formal identity and social context. In many of the poems I consider here, one cannot cleanly separate formal adaptation from unexpected historical events because the poem’s provisional closure makes visible the new event within its environment. The poem’s form becomes the framework through which the environmental event is experienced as an event. Whitman set out to write America; Pound, the relationship between art and economics; Mackey, the cultural complexities of postdiasporic experience. The practice of writing the poem thus focuses attention, shaping the poet’s perception of the world and allowing the world, in turn, to shape the poem. As the scope of a particular subject matter changes (often through wars, disasters, revolutions, and other unexpected occurrences), so too must the structure of the poetic text. As a self-reflexive, self-organizing system, the poem extends its terms and reevaluates its initial aesthetics, providing continuity within change, as we will see with Whitman’s shifting definition of “democracy,” the expanding sense of Ammons’s “storm,” or Spahr’s self-reflective “I speak.”

The emergent poem, like T. S. Eliot’s notion of the “really new” work of art, retrospectively transforms everything that preceded it without abandoning those prior elements — indeed,
Introduction

without the earlier poetic moves, the later additions wouldn’t be possible at all, just as the individual birds are a necessary component of the entire flock.

A skeptic might object that the language and concerns of systems theory are an artificial imposition on poetry, an unnecessary proliferation of concepts foreign to literature. I would counter that long poems persistently reflect on the challenges of transformation within time, quite often anticipating the discourse of complex adaptive systems. Systems theory and the long poem may be not-so-distant cousins, sharing a family resemblance of concerns. For example, consider how A. R. Ammons draws time into form through the initiating act of provisional closure at the beginning of his self-consciously emergent Tape for the Turn of the Year. Here are Ammons’s opening lines:

6 Dec:
today I
decided to write
a long
thin
poem

Ammons’s initial artistic move is what Ted Gioia calls the “retrospective method” of artistic practice, which he heuristically contrasts with the “blueprint method.” Where architects typically create a blueprint as a model for the construction of the work, the improvising musician “may be unable to look ahead at what he is going to play.” Instead, “he can look behind at what he has just played [and] thus each new musical phrase can be shaped with relation to what has gone before.” For Gioia, the retrospective artist “can start his work with an almost random maneuver – a brush stroke on a canvas, an opening line, a musical motif – and then adapt his later moves to this initial gambit.” In Ammons’s case, the act of writing a long, thin poem becomes the “initial gambit” of provisional closure explicitly stated at the poem’s outset, to which he continually responds by way of time, generating a feedback loop between poem and environment. To be sure, the range of emergence in Tape is limited at the outset due to a material constraint: the poem is composed on a single roll of receipt tape fed into a typewriter, a strategy that guarantees the text will have a predetermined length. Still, formal decisions must continually be made in the process of writing, and so the poem constantly varies, as the occasion demands, between short lines, single words or phrases, adaptive spacing, and enjambment. The tape’s predetermined constraints may appear
to be a blueprint but are in fact closer to an initiating gesture. To blend the models, it is an adaptive structure responding to the unpredictable present.

Ammons calls this contingent interplay between environment, experience, artistic practice, and imagination “the stream,” placing faith in its processes over “facts,” “arrangements,” or “any shore”:

only the stream is reliable: get right up next to the break between what-is-to-be and what-has-been and dance like a bubble held underwater by water’s pouring into: (TTY 19)

The speaker’s immersion into the stream grounds his epistemological faith in that which is “reliable,” not least because time itself, figured as the stream, is presented as both an active force and a duration. Indeed, duration as the space between events, the “break between,” makes an artistic response possible because the stream’s flow produces the air bubble’s dancing motion, “dance” being the only word for artistic practice in the passage. We can read the bubble as the poet or reader integrated into the bubble-stream-water system, not least because Ammons admonishes himself and his reader to occupy the break: agency comes through the decision to inhabit time in a responsive, creative way. The resulting art, the “dance,” is generated by an external force pressing against and shaping the generally passive air bubble – the dancer, in this case, does not know where he will be moving next. Generally passive, yet not entirely so, for the bubble must also be resilient, maintaining its identity against the stream for the dance to emerge. We might say that the persistence of provisional closure in the poem makes time visible.

By offering emergence as a new framework for understanding the relationship between the “dance” and the “stream” in the long poem, Writing in Real Time also seeks to intervene in a larger critical debate about the nature of literary form. The modern long poem has always been treated as a formal misfit. Consequently, it should come as no surprise that most theoretical reflections on form start with more conventional examples, most often the lyric poem. We can see this neglect of the long poem and the privileging of the lyric in classic texts of New Criticism, structuralism,
Introduction

deconstruction, and Frankfort school criticism, but it is also an implicit value in the latest revival of critical interest in literary form. These “new formalisms” have come in many stripes, as Marjorie Levinson carefully argues in her 2007 review essay dedicated to the topic, and yet most have had little to say about the long poem. Levinson’s piece represents a broader critical moment, where literary scholars have been reevaluating (and revaluing) concepts like the literary, the formal, or, most recently, the descriptive. Within this moment we might place works like Derek Attridge’s The Singularity of Literature, Rita Felski’s Uses of Literature, and Gayatri Spivak’s An Aesthetic Education in the Era of Globalization, all of which attempt to rethink literary value, either on the grounds of the text’s irreducible singularity, in the multiple readerly responses that literary texts provoke, or in literature’s capacity for imaginative training. Such arguments share common cause with movements like Sharon Marcus and Stephen Best’s “surface reading,” itself affiliated with what has been called the “descriptive turn” in literary scholarship.

This latest reevaluation of form has not simply neglected the long poem – it originally offered very little new insight about form as such, as Levinson pointed out in 2007, with many critics relying more or less on form as a received concept. Recent work has revisited the matter of form, and some critics have begun to deploy frameworks like systems theory, complexity, and actor-network theory. But here, too, the focus often remains on the lyric. For example, Cary Wolfe’s analysis of Niklas Luhmann’s theory of poetic form, while sharing an intellectual family resemblance to the arguments I offer here, uses the lyrics of late Stevens to exemplify his argument. Similarly, Levinson’s recent work on recursion also seeks to respond to debates over the lyric. These interventions are not entirely surprising, given the developments in lyric studies, where scholars like Virginia Jackson argue that the lyric is a product of the theoretical models used to read it.

In such a critical climate, a reassessment of the long poem on the level of form seems timely. Whether valorized (Wolfe) or critically historicized (Jackson), the theory of form in literary criticism is more often than not a theory of lyric form. My purpose is not to dismiss lyrical models of form but simply to suggest that a different set of formal coordinates, like the long poem and the discourse of complex systems, might allow us to rearticulate these questions. Perhaps by beginning with the long poem, a practice caught up at the intersection of form and time, far removed from the lyric’s purported capacity to cross or transcend time, we may be able to read other literary forms, including the lyric, in a new light.
But my concern here is not simply formalist. The discourse of form is itself entangled with other issues, such as the concept of literary autonomy, one of the master narratives of modernist criticism. To be sure, complex adaptive textual systems are not unique to modernity – indeed, as I suggest in Chapter 5, emergent properties can be found in ancient literary practices, such as the Jewish textual tradition of midrash. Nevertheless, emergence is particularly useful for thinking about the critical commonplace of modernist art’s autonomy. A tradition of thought running from Immanuel Kant to Theodor Adorno has claimed formal self-sufficiency for modern art, freeing it from the demands of rhetoric, religion, pedagogy, or the market. However, autonomy always came at a cost, namely art’s ability to speak to that which is outside itself, and the most productive accounts of autonomy have struggled to reconcile autonomy with political or social meaning. Autonomy thus presents something of a dilemma: the aesthetic theories of the European Enlightenment may have freed art to its own devices, and yet, as a consequence, art was unable to entirely move beyond itself; its independence diminished its communicability.

This narrative of art’s autonomy is well known to the point of becoming an ideology, as Frederic Jameson has argued. In *A Singular Modernity*, Jameson claims that accounts of modernist autonomy emerged around World War II; the “classical moderns” themselves (Jameson’s term) understood their work in quite different terms. Jameson cites Clement Greenberg’s formalism as the exemplar of this ideology of autonomy; for Greenberg, modernist painting established autonomy through a self-reflective attention to the medium. Against this account, Jameson suggests that modernist writing was characterized less by the establishment of autonomy through self-reflection and more by the “experience of contingency,” “the shock of the existence of a real world of noisy and chaotic urban daylight.” In language that echoes theories of emergence, Jameson argues that high modernism was born not of a will to autonomy but through the adaptations that come from environmentally entangled form:

But was not Cubism already an attempt to confront such an experience, by multiplying the shards of form into which the old stable everyday object began to shatter? And does not every line of *Ulysses* bear witness to an ever-changing empirical reality which Joyce’s multiple forms (from *The Odyssey* parallel on down to chapter form and sentence structure themselves) are unable to master? What I want overhastily to argue here is that, in the moderns, such form is never given in advance: it is generated experimentally in the encounter, leading on into formations that could never have been predicted (and whose incomplete and interminable multiplicities the innumerable high modernisms amply display).
Picking up on Jameson’s “overhasty” argument, the following chapters trace a poetic practice that is born of those experimental encounters. Approaching the long poem as a complex, adaptive system supplements Jameson’s core insight, offering a more precise account of literary form as it engages experimentally with an unpredictable world.

In other words, emergence offers an alternative to standard accounts of modernist autonomy while also respecting the radical formal energy of the last two centuries and the “singularity,” as Derek Attridge puts it, of poetic practice. Instead of autonomy, “medium as content,” or negation, emergent texts offer provisional closure, structural coupling, and environmental entanglement, a distinctive openness that comes precisely from the work’s formal adaptation. Ultimately, the emergent long poem represents a literary wager, the risky bet that writing in real time could generate the capacity to interpret the world. The poets I examine in this book seek to develop a writing practice independent and structurally coupled, formally precise and hermeneutically rich, a uniquely poetic mode of immanent historiography. Emergent poetics is thus a literary practice that seeks to overcome autonomy’s threat of isolation, an artistic historiography of the present that eschews narrative mastery, and a mode of writing that shapes the subjectivity of poet and reader through the adaptive forms of an imagination fully embedded in time.

By drawing a link between the long poem and the broader experimental energies of modernism, experiments that encompass Picasso’s Cubism and Joyce’s *Ulysses*, I also want to suggest that complex, adaptive properties may be detected in a wide variety of literary practices and aesthetic fields. In the chapters that follow, I present the long poem as an essential case study in what could be a much more extensive critical project. Once we begin analyzing structural coupling, feedback loops, iteration, recursion, and emergence, new models of literary history may be possible. These concepts are much larger than a single textual tradition. By looking closely at one distinctively emergent literary practice, such as the long poem, *Writing in Real Time* points to a way of analyzing and understanding literature that, hopefully, will be of value to critics working in other domains.

Literary form, aesthetic autonomy, the role of literature within modernity: these are large, unwieldy problems. Approaching them at a high conceptual level runs the risk of abstracting one away from the rough ground of literary practice itself; the texture and challenges of the poems. Nevertheless, if the readings that follow are successful, I hope that this success is in part measured by their contribution to these methodological and theoretical issues, opening new vistas for reading and criticism. For now, let us
I The Strange Form of the Long Poem

The long poem does not exist. At least that was the claim made by Edgar Allan Poe in his 1850 essay “The Poetic Principle,” an argument that rested entirely on time’s relationship to human perception. For a text to count as a poem, according to Poe, it must “excite,” thus “elevating the soul,” and yet “all excitements are, through a psychal [sic] necessity, transient.”

The long poem exceeds the brief and transitory, and so it fails to achieve the status of poetry. Because Poe is primarily concerned with the capacity of poetic form to elevate the soul, his critique of the long poem implicitly becomes a critique of the long poem’s form within time – the long poem is too much form. We are not fully capable of perceiving the long poem’s form and thus not capable of experiencing it as pleasure; our emotional attention is overwhelmed. The realization that formal pleasure is dependent on our time- and space-bound senses can be found as early as Aristotle, who similarly argued that a creature of vast size could not be perceived as beautiful.

Aristotle’s point clarifies Poe’s argument. If the long poem has form, that form is inaccessible to us on the level of aesthetic pleasure. Perhaps Poe should have been more precise: it is as if the long poem does not exist... at least for us.

Poe’s argument inaugurated nearly two centuries of critical trouble with the form of the long poem. These formal problems have often been registered on the level of genre, with critics deploying various generic models to contain the long poem’s formal mutability. As I will demonstrate, this approach has proven to be of limited value; the long poem, to paraphrase Jacques Derrida, tends to be a work without a single genre. Consequently, genre trouble – and, by implication, form trouble – is evident in the two major clusters of literary criticism dedicated to the long poem. The first of these clusters is a series of studies published between the late 1970s and the early 1990s, written out of the critical consensus that The Cantos, William Carlos Williams’s Paterson, and The Maximus Poems, when coupled with works like Stevens’s “Notes Toward a Supreme Fiction,” H. D.’s Trilogy, Hart Crane’s The Bridge, or Eliot’s The Waste Land, constituted a tradition of modernist long poetry. A more recent group of criticism focuses on post–World War II long poetry, which is often (although not always) read in contrast to the modernist...