RECURSIVE ORIGINS
Recursive Origins
Writing at the Transition to Modernity

William Kuskin

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For

May
Let us wage a war on totality.
—Jean-François Lyotard, *The Postmodern Condition*

*Robert Johnson was like an orchestra all by himself. Some of his best stuff is almost Bach-like in construction. Unfortunately, he screwed up with the chicks and had a short life. But a brilliant burst of inspiration. He gave you a platform to work on, no doubt as he did to Muddy and the others guys we were listening to. What I found about the blues and music, tracing things back, was that nothing came from itself. As great as it is, this is not one stroke of genius. This cat was listening to somebody and it’s his variation on the theme. And so you suddenly realize that everybody’s connected here. This is not just that he’s fantastic and the rest are crap; they’re all interconnected. And the further you went back into music and time, and with the blues you go back to the ’20s, because you’re basically going through recorded music, you think thank God for recording. It’s the best thing that’s happened to us since writing.*
—Keith Richards, *Life*
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This is a time of transition. The characteristic has been famously ascribed to the Late Middle Ages, specifically to the years just before the advent of the so-called early modern period, when the technology of printing first began to develop. Perhaps it is true now as well, that we endure some great process of change, its outcome just beyond our horizon, linked inextricably to the development of some new form of the book and to some new process of reading we can now only just imagine. Or perhaps every generation inhabits the feeling that it has come to the end of one way of thinking but cannot quite see through
to the next, that the forms of the past suddenly offer no clear guidance for the future. In any case, the moment seems one of particular change for the humanities, which is increasingly beleaguered by budget cuts, demands for justification, calls to produce according to measures defined by other disciplines, and shifts in employment patterns. Regardless, two truths seems incontestable: first, that for literary studies this transition appears as a point of indecisiveness in which its cultural capital is depleted and its methodologies are in debate; second, that people need narrative and lyric in their lives, seek out objects representative of these forms, and strive to create their own, notwithstanding the cost in time or finances. The broadest thesis of this book is that we must see these two truths, transition and literature, as intertwined and we must recognize that our recourse lies in our very charge: literary history.

One problem concerns the story we tell of the past. Although literary scholars themselves are often bored by a linear narrative in the texts they study, literary history remains quite progressive, structured by a distinctly modernist understanding of originality that cedes much of the involuted complexity of the literary arts to a straightforward account punctuated by categorical distinctions that beggar their own relevance to the current situation. That literary history moves according to the tick of the clock and the turn of the calendar’s page, that it is largely subordinate to political, economic, and ecclesiastical history, that literary greatness remains a test of time distinct from the entertainment industry—these narrative topoi distance the literature of the past from the networks of engagement that define current social practice. Thus, I understand the period of transition we now suffer in literary studies to be due, at least in part, to a kind of intellectual conservatism in one of our major charges, literary history, that has distracted us from elaborating the imaginative processes implicit in artistic reference. Literature is fundamentally of the imagination; in recognizing this, we should also recognize that the telling of its history needn't be shackled to a linear narrative. Chronological progress punctuated by periodic break is not the only way to account for literary time.

Let us follow Keith Richards. We could do worse. This book’s second epigraph is a reminder intended to level the theoretical argument...
of the book overall. Richards can clearly lay some claim to originality in the story of late-twentieth-century popular music. He is also, apparently, quite a reader; whatever the final balance of roles with his coauthor James Fox, in his autobiography he is a reader who writes with a voice distinctive enough that he was honored with the 2011 Norman Mailer Prize for Distinguished Autobiography, an award presented to him by no less a luminary than former president Bill Clinton. Narrating the Rolling Stones’ formation early on in Life, Richards portrays himself with Brian Jones, huddled in a damp basement flat in Powis Square, as students of the blues. And so the passage sketches a blues canon (represented by Robert Johnson and Muddy Waters), which Richards authorizes as brilliant through a comparison to Bach. He tells, too, of discovering a narrative of the past (“the further you went back”) and of the relationship between the individual artist and collective tradition (“this cat was listening to somebody and it’s his variation on the theme”), and so comes to a powerful conclusion about music history: “this is not just that he’s fantastic and the rest are crap; they’re all interconnected.” The passage then turns to the process of listening itself, to praising the power of recording and of writing. Listening, reading, consciously tracing things back: these things startle us out of a kind of thinking in which greatness appears as defined by brilliance alone; indeed, they undermine the absolute nature of artistic measure that Richards initially sets out in the passage by emphasizing the importance of interconnectedness over absolute greatness.

In a sense, the passage can serve as an allegory for literary studies over the past twenty years. It narrates a movement from the argument for a pop canon, through the encounter with history and simultaneous deconstruction of the very individual greatness that underwrites canonicity itself, and finally, arrives at the powers of media. As with any provocative deconstruction, the reader is invited to turn the process back on the author himself. Reflecting on his ten-year stint as number 1 on New Musical Express’s watch list of Rock Stars Most Likely to Die, Richards hits this head-on:

I can’t untie the threads of how much I played up to the part that was written for me. I mean the skull ring and the broken tooth and the kohl. Is it half and half? I think in a way your persona,
your image, as it used to be known, is like a ball and chain. People think I’m still a goddamn junkie. It’s thirty years since I gave up the dope! Image is like a long shadow. Even when the sun goes down, you can see it. I think some of it is that there is so much pressure to be that person that you become it, maybe, to a certain point that you can bear. It’s impossible not to end up being a parody of what you thought you were.1

Life follows out the insight “that nothing came from itself” by realizing that Richards, too, is caught in the weaving of interconnection, both because he is a bluesman connected to all other bluesmen and because he is, somehow, woven from a distillation of rock and roll tropes imagined as a structure for the self by a force of desire greater than himself: “They imagined me,” he tells us a little further on; “they made me, the folks out there created this folk hero.”2 The same is true for Robert Johnson. “Robert Johnson was like an orchestra all by himself,” the earlier passage begins, and in that single line it condenses the entire discussion of the self and artistic history into a simile. Atomized across time, created by pressures so vast as to be only vaguely namable, potentially lost but for the technologies of record, the individual self appears bold and resplendent and full—like an orchestra—in art. In the passage itself, the orchestra harkens forward to that definitive measure of authority, to Bach, but it also locates all the threads of interconnectedness, all the many different voices of the collective, of the “folk,” as within Robert Johnson himself.

We know by following Richards’s narrative as it unfolds that Johnson cannot be unto himself. His scrappy discography and his experiences growing up in early-twentieth-century America leave us a fragmentary biography, but beyond it, in the moment of simile, we also know the exact opposite: Robert Johnson is fantastic. Of course, the simile is there for us at the start of the passage, but understanding it involves us in a process of tracing things back and forth, of moving from the narrative, through the meditation on art, and back to the lyric realization at its beginning. Such is Life. “A strange mystification,” Gilles Deleuze and Félix Guattari remark in A Thousand Plateaus (1987), “a book all the more total for being fragmented.”3
Both Richards and his book are groupings of fragments—a ring, a missing tooth, some eyeliner, memories, gossip, pages, tropes, narrative vignettes—that become unified as they loop back on themselves and project the greater totality of a life. The physical book is involved in this process of assembly as well. It is a substitute for the self that becomes unified as we reflect on it, even as it tells us this unity is only imagined—is it half and half?—and announces its joint authorship from the start.

At its core Recursive Origins is, as Douglas Hofstadter claims of his great book on recursion theory, an attempt to understand how the self comes to be from inanimate matter, from black ink and pages trapped in time. The reminder Keith Richards gives at the start is that “nothing came from itself. . . . They’re all interconnected.” The point is obvious, but only by stepping out of the narrative and looping back on it do we realize how completely the single trope “like an orchestra” stages the tensions between individual brilliance and collective participation, between vocal singularity and multiplicity, between temporal atomization and connectedness. Neither pole in the tension is final, so the more we recognize the totality, hear the orchestra, the more we realize the fragmentation of isolation, the lonely brilliance of being “all by himself.” So, too, for literary history. In Recursive Origins I argue that the dominant narratives of literary studies assert totalizing divisions that insist that things come from themselves. In contrast, I propose that we can best step outside of this narrative, that we can make war on totality, by recognizing that nothing comes from itself unless through a complex process of interconnectedness, of return on precedent, which is no origin at all. Within Richards’s reminder, then, lies my specific claim for the book: any committed reader possesses a sense of moving around a text, of return and reflection; indeed, the ability to trace back and forth within a text is what constitutes not only the subject of the reading but also the reader him or herself. By liberating our own reading practices from the categories of period and the grand illusions of origins, not only can we discover connections between books that generations of critics before us have overlooked but, ironically, we can also make new the imaginative process of reading within literary time. In short, by returning
to the exigency of literature, we discover both that we are always in transition, always in the tension between fragment and totality, and that our period, as singular as it may be, belongs to the greater whole of literary history.

Observing that one significant failing of literary history lies in its stark inability to negotiate the very birth of modernity at the beginning of the sixteenth century, I frame my thesis in this book through the so-called transition from the Middle Ages to the early modern period. For it is a commonplace assumption in literary criticism that the fifteenth century has little direct influence on the formation of the modern vernacular canon and that the transition from one century to the next is defined by a rupture that both occludes and sustains modernity: occludes because as long as criticism argues for a break, writing at the transition to modernity appears truly fantastic, one stroke of genius after the next; sustains because as long as we hold these two periods—the medieval and the modern—apart, we can continue business as usual, arguing for the unrivaled originality of the sixteenth century and for its consolidation of vernacular authorship and authority within the totality of the modern. Yet the literary book is a phenomenon so old as to be timeless, and, more locally, fifteenth-century writers thought deeply enough about what constitutes vernacular literary production to create and deploy the very hallmark of modernity, the printing press. Further, they theorized and historicized their labors within an ongoing textual culture spanning manuscript and print formats. Sixteenth-century writers encountered this thinking in the manuscripts and printed books proclaiming Geoffrey Chaucer’s, Thomas Hoccleve’s, John Lydgate’s, William Caxton’s, and John Skelton’s legacies. Indeed, the canonical figures of the sixteenth century are intense readers of the fifteenth and consciously look back through the editions available to them to its history and poetics as they shape their own. Rather than a literary history defined by a break, then, I suggest that fifteenth-century literary culture reproduces a number of intellectual structures for vernacular literary culture that themselves evolve out of chronologically earlier literature, and in doing so refines them; sixteenth-century writers knew these structures as an inheritance from the past and recur upon them in
their own writing. By returning to the very point of transition that
instigates modernity, and by recognizing it not as a break but as an
intertwined process of reading and rewriting, I hope to provide an al-
ternative model for conceiving of literary history overall.

I make this return largely through William Shakespeare because,
like Richards’s Bach, he stands as the measure by which all other his-
torical writers are judged as fantastic or crap. Shakespeare is the icon
of modernity. Shakespeare, and other major sixteenth-century writers
such as Philip Sidney and Edmund Spenser, have long been recog-
nized as making a grand return to the writing of the classical past.
Because the sweep of this return is imagined as so vast, it has over-
shadowed more local and immediate returns upon English writing,
suggesting a fundamental break in the chain of reading, so that the
sixteenth century appears original even in its return to earlier writing.
Shakespeare studies has always been intensely focused on the material
record, on what he read and how his writings were produced. Recent
work in the field has driven this interest to new insights on his au-
thorship and reception. As Lukas Erne points out in his afterword to
the recent collection *Shakespeare’s Book* (2008), “the current reconsid-
eration of Shakespeare’s authorial standing demonstrates the interre-
lated areas in Shakespeare studies which are all too often kept safely
apart: criticism, textual studies, bibliography, theatre history, reception
history, as well as biography.” One pragmatic goal of *Recursive Ori-
gins* is to add “literary history” to this list and thus to demonstrate
how reliant Shakespeare and his editors were upon what are now con-
sidered the least canonical of texts: the writings of Hoccleve, Lydgate,
Caxton, and the anonymous chroniclers of the mid-1400s. For it is a
demonstrable fact that Shakespeare read Caxton, recognized his voice,
and drew from his work.

Given that Shakespeare is free to move around time through
books, indeed that he looped back on the texts of the more recent
past in order to constitute that very past as within a temporal nar-
native, I suggest that other readers are as well. Each chapter there-
fore offers up examples of more local recursions in which the readers
of the sixteenth and seventeenth centuries produce themselves, their
authority, and their period through the fifteenth. As much as these
readers—Edmund Spenser, Philip Sidney, “E. K.,” John Stow, Thomas Pavier, John Heminge, and Henry Condell—are taken to define the revolutionary energies of the early modern period, yet are so clearly indebted to the writings of the generations before them, I suggest that modernity is far from a distinct historical category but is, in fact, profoundly contingent on the Middle Ages. Liberated from categories derived elsewhere—from political, religious, art, or media history—and from the fantasy of an ultimate escape from the past, literary history affords us a powerful way of constructing ourselves at various points in the flow of time. Thus, I hope to show in what follows that in a technical way by tracing things back we can see that nothing comes from itself, that everybody’s connected here, and that this connection occurs most demonstrably, as Richards points out, because of the technologies of memory—writing and recording. My thesis is that literary reading is a way of traveling successfully in time that is in no way diminished by changes in technology and that need not subordinate itself to historical categories. The past is rewritten by the present, which itself is built on the past, creating a recursive loop in how we read the past. Again, our recourse lies in our charge: literature and literary history are deeply interwoven, and in recognizing this, we also recognize our relevance as readers able to move across time.

If modernity and the Middle Ages are totalities created as temporal periods through the manipulation of the literary imagination, it makes sense to look for a governing principle within the technology of reading and writing, an algorithm expressive of the relationship between books and readers. I find this organizing structure in the concept of recursion. I take up recursion in some detail in chapter 1, but it is perhaps worth sketching my understanding of the concept here at the outset. “Recursion” is a term used across domains of knowledge—from computer science and artificial intelligence to theoretical and evolutionary linguistics to the humanities and the fine arts. In the arts, recursion is commonly taken to mean the return of a governing theme or an embedded repetition of the entire art object within itself, such as a picture of the whole picture within the same picture. Recursion is often difficult to separate from self-reference.
Most basically, the difference between the two is that self-reference is an instance of referral, while recursion is a dynamic process.

For example, M. C. Escher’s famous _Drawing Hands_ (1948; Figure I.1) is both self-referential and recursive: self-referential because it literally illustrates hands drawing themselves; recursive because it uses this self-reference to produce a representation about the nature of representation itself. The recursion, therefore, is produced not so much by the instance of self-reference within the picture as by the interplay between the art object and the viewer, which can only be described as the process of engagement—viewing or reading. In the same way, a line of computer code is not a dynamic process in and of itself so much as a significant part of a program that depends on a user’s (or another computer program’s) engagement to initiate it toward an output. In the case of _Drawing Hands_, the viewer is invited to pursue the tangled loop of the two hands to a larger statement about representation, one that teasingly implies that the artist is a component part of the production process he also governs. In this way, _Drawing Hands_ forces a reflection on the involute relationship between part and whole, execution and intention, object and meaning. For a computer program, the output appears more literal, some on-screen representation or electronic signal triggering additional programs. In _Drawing Hands_ the output is more ephemeral—the understanding that the artist, M. C. Escher, is somehow within and without the art object, dominating it and produced by it. Thus, for this book, I define recursion as a trope of return that produces representation through embedded self-reference.

My definition suggests at least three implications. Primarily, it defines recursion as a trope, an identifiable and formal turn (Greek: _tropos_, “a turn”). In chapter 1 I draw a connection between recursion and metonymy, in that both are tropes that associate part and whole, but more broadly, my definition of recursion as a trope is meant to underscore its formal quality across a variety of disciplines and its productive nature, its ability to turn a given linguistic construction into another figuration. Tropes produce representation, whether in computer algorithms, linguistic constructions, or art objects. In computer programming this representation is the result of the successful
execution of a set of procedural steps. In artificial intelligence and linguistics, it is the emergence of complexity, either as a seemingly autonomous intelligence or as linguistic statements, from a definable set of elements. In the arts, the distinction between the trope and the effect produced by the trope is much finer. This is an important point: few end users of a computer program appreciate the coded turns that create the final representation. In the arts, the turn on language is often part of the aesthetic goal, so that the final representation produced is often intentionally paradoxical.

Again, Escher’s *Drawing Hands* provides a useful example. For on the one hand, the recursive effect of *Drawing Hands* is its successful representation of the hands of the artist; on the other hand, it is the statement about the successful representation of these hands. The lithograph insists that these two hands—embodiment and

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Figure I.1. Recursion in the visual arts. M. C. Escher, *Drawing Hands* (Lithograph, 1948), © 2012 The M. C. Escher Company—Holland. All rights reserved. www.mcescher.com.
commentary—are inseparable and self-generative, yet on some profound level we recognize them as quite separate: one a clever representation of ink and paper, the other an idea about artistic creation delivered as a fleeting truth beyond the literal, generated not so much by the artist’s hands as by his imagination. Yet we also know that Escher is dead, and that the fact is that the ink and paper ultimately do generate whatever representation we perceive. This duality is only magnified when one takes into account the reprints of *Drawing Hands* in books and in the posters hanging in dorm rooms and engineers’ offices, each reprinting Escher’s original lithographic representation, itself a representation of the very process of representation. And even at all these layers of remove, *Drawing Hands* produces the sense that somehow the imagination of the man represented by the name M. C. Escher exists in each of these reproductions. *Drawing Hands* thus achieves representation as both a literal document and a figural statement, producing what I would call the fruitful paradox of recursion in the arts: that the literal and figural forms of art are simultaneously and separately part of the troping process that produces representation. That *Drawing Hands* is paradoxical might give us pause—after all, formal paradox is anathema for computing—but it should also remind us that from the perspective of producing a sense of figural meaning through self-reference, *Drawing Hands* is not paradoxical at all: it is efficient.

The manifold nature of *Drawing Hands*’ representative capability thus suggests the second implication of my definition: recursion calls attention to the media of transmission. For if *Drawing Hands* shows us anything, it shows us that material and figural forms operate together. This is clear in such a visual object, and it reminds us that script, type, and code are also visual signs and their physical display as numbers, letters, and punctuation actively shapes how they produce a representation. In chapters 3 and 4 I term the double—material and rhetorical—structure of literature “textual formalism” and suggest some of the tropes early printers use—typeface, the margin and header, the title page, dates, printer’s marks—to evoke meaning from the page. In this, I am in absolute agreement with Marshall McLuhan’s primary dictate, “the medium is the message,” or more
elaborately, “the ‘content’ of any medium is always another medium,” insofar as he recognizes that media has a representative force and that objects of representation always loop back on themselves, containing the past within them. Ultimately, however, McLuhan is deeply invested in the modern narrative; he insists that by making it new, by inventing some new display of words in prose, in verse, in machine language, we can throw off the past and so move from hot to cool, to infinity and no doubt beyond. The very term “recursion” suggests otherwise. (Re)cursion contains within it a return to writing, no matter the format. As much as “cursive” leads us back to the Latin curere, “to run,” its linguistic root points to an essential commonality for screen-based digital books and codex-based manuscript and print books alike: all are machines for compilation, for executing textual commands, for “running” the codes of language to a larger sense of meaning. There is no reason to be myopic. The book is a broad term that subsumes a variety of physical manifestations—tablet, roll, codex, digital display. Each kind of book provides a particular physical structure for the reader somewhat different from the next, but just so: no form is static; each is a vehicle for running the words of authors, scribes, printers, and programmers; and each contains a procedure for its use. Given this, my second point is that print does not simply remediate manuscript production in a teleological process by which one medium interpolates another, but that all forms of the book return on the human imagination’s primary ability to use language. Indeed, Noam Chomsky famously postulates that recursion is a linguistic principle that plumbs deeper than writing, deeper even than grammar, to organize human language at a root level. In treating the material and figural nature of representation, then, our emphasis should fall less on the notion of revolution between one particular form and the next across history than on the process of embedding—on recursion—in all textual systems, whether materialized on clay tablets, papyrus scrolls, manuscript or printed codices, computer screens, or the human imagination.

My third point returns us to Keith Richards’s essential insight: outside of the confines of a linear narrative of time, everything is interconnected. Recursion is a trope that allows us to understand these