For my parents
The novel, likewise, began in the rhetoric of the 1890s to occupy an uneasy middle ground between technologized strenuousness and pre-technological exhaustion and lassitude. For reading physiologists, it was prime ground upon which to experiment with new capacities for rapid consumption. For Gissing, it was a form threatening to become both a condensed, accelerated caricature of itself, a doomed competitor of the chatty newspaper, and a form that, in its persistent slowness, could find a cultural home only as an occasion for dreamy, vacant mental abstraction, for the occasional tired intervals in a world of quick scanning. Seeing too quickly, or not really seeing at all (‘gazing idly at the page’); the alternatives of speed-reading and alexia, which for Gissing constituted the stark binary of late-nineteenth-century literary consumption, offer no real way out. Either alternative, it becomes clear, means the eventual minoritizing of the novel; ‘adjust and accelerate, or die’ means, for Gissing, ‘adjust and accelerate, and die’. In this sense, the ambivalence of Gissing’s relation to the novel, the mixed hatred and affection that animates New Grub Street and his later fiction, can be seen as a depressive-position state, one that desired to protect the novel from the depredations of its consumers, from the increasingly distorting ways it was being read in a culture of speed. In many ways, that depressive position has lingered for readers, writers, and critics of novels, to our own day.

of reading by hand was Javel’s primary reason for suggesting a range of orthographic reforms to the Braille system; his concern was less for the range of texts available in Braille than for the disabilities of the blind in a culture of acceleration.

Coda: I. A. Richards and the End of Physiological Novel Theory

These damned 400-page novels take such a lot of time, and they are very rarely worth it. 31 hours for twopence!

Richards in a letter to Mansfield Forbes, August 1919

The strange story of the Victorian physiology of the novel—as that of physiological aesthetics generally—has a final, brief moment of efflorescence and withering. That moment occurred in a single place, the University of Cambridge, and in a small span of time, between the initial formation in 1917 of what would become the English Tripos and the publication in 1924 of I. A. Richards’s Principles of Literary Criticism. Those years saw the foundation of the academic study of literature along lines receptive to a physiological inquiry into reading, cognition, and literary form, as well as to fiction in general; they also saw Richards, eventually the most well known of Cambridge’s early literary theorists, invent a form of physiological criticism that could not, and cared not to, study the novel. The story of how the study of English dissociated itself from both Anglo-Saxon philology and the discipline of Classics has been told in many different ways, but the main outlines are clear: in the unsettled wartime atmosphere of Cambridge, four men primarily—Sir Arthur Quiller-Couch, second holder of the recently founded chair of English; H. M. Chadwick, Professor of Anglo-Saxon; the belletrist A. C. Benson; and Mansfield Forbes, fellow in history, teacher of Old English, and magnetic attractor of young literary and scholarly talent—informally devised a plan whereby the study of English literature would be detached from the Medieval and Modern Language Tripos into its own Honours course of study.¹ Crucially, it was Forbes who insisted that lectures on the contemporary novel be given in this new academic

¹ For three different accounts of these formative years in the discipline of English studies at Cambridge, see Hugh Carey, Mansfield Forbes and his Cambridge (Cambridge: Cambridge University Press, 1984); F. R. Leavis, English Literature in Our Time and the University (London: Chatto & Windus, 1969); and E. M. W. Tillyard, The Muse Unchained: An Intimate Account of the Revolutions of English Studies at Cambridge (London: Bowes & Bowes, 1958). While each
pursuit, and who, in the spring of 1919, recruited Richards to give those initial lectures.

To an observer versed in Victorian novel physiology, the choice was not as strange as it would later seem, given Richards's subsequent aversion to fiction. Since taking his degree in Moral Sciences in 1915, and barred from participation in the war because of recurrent tuberculosis, Richards had struggled to find an outlet for his intellectual energy. Ultimately he returned to Cambridge in 1918 to do two things: to study and read physiology at the Cavendish Laboratory, and to begin writing two novels which were never completed and whose fragments do not survive. Richards, that is, as these formative years for English literary studies, was occupied in a characteristically Victorian activity: cross-fertilizing inquiries into fictional form and physiological theory. His version of this activity was of course updated, replacing the worn names of Bain, Maudsley, and Lewes with Charles Sherrington's *The Integrative Action of the Nervous System* (1906), William James, and G. E. Moore. As he would put it half a century later: 'I was someone really saturated in psychology and neurology making up a book about the literary approaches. That was a bit of luck really. Two quite different concerns crossing at a crucial point.'

The initial fruits of that crossing appear, although only in hints and detached musings, in Richards's letters to Forbes in the spring of 1919. Having been engaged to teach two courses—one called 'The Principles of Literary Criticism', the other 'The Contemporary Novel'—Richards was clearly thinking through, in the serious thinking through of novel studies, critical theory, and his reading in physiology and neurology. In May he hinted to Forbes that he had 'a doctrine of Types of Novel, which at last has come out of the mangle ready for wear, very quickly and straight'; in mid-1920 he wrote that he had completed 'the introductory chapter of the book on 'The Novel' which I was writing; with a few addenda it has got the main thing which I say stated'. Neither Richards's lectures nor his book on the novel have survived; all that remains of this period of his development is a reading list—comprising Hardy, Conrad, Joyce, Bennett, Moore, Wells, and Lawrence—that illustrates version is essentially a celebration of the discipline's formal origin, Leavis's version is the most anxious to make Richards's contribution, and physiological aesthetics, an unhappy accident of the time, rather than a key element of the early English Tripos. Richards's interest in literature, Leavis insists, was 'not intense and was never developed'; and *Principles of Literary Criticism* is attacked for the 'insistent pretension' of its 'pseudo-scientific pseudo-psychological' claims. See Leavis, *English Literature*, 16–17.


Richards's notion of the 'contemporary' novel of 1919. Even without much textual evidence from this period, however, the nature of Richards's critical thinking at this time is clear, and it is unmistakably Victorian. It is, first, a study of the novel through its current avatars; it is not a history of the genre. It is also a study based in recent physiologies of response—in other words, it is a communication theory of genre. This is the tradition of Lewes, Bain, Dallas, and others, unexpectedly reappearing in postwar Cambridge, reinvented for an academic rather than a journalistic or belletristic pursuit. Seen this way, Richards—at least at this point in his career—could with justice be called the last Victorian novel theorist.

In fact, the reading that Richards pursued in these years seems to have been far more rooted in Victorian physiology than any biographer has previously noted, or that Richards himself was willing to admit. While Richards gave due homage in his later years to William James and Charles Sherrington, and the influence of G. E. Moore's philosophical psychology is clear, his published writings from the 1920s contain ample traces of an earlier tradition. Within *Principles of Literary Criticism* one can find citations from Vernon Lee, Gustav Fechner, Théodule Ribot, and Edmund Gurney, while his later *Practical Criticism* (1929) mentions Alexander Bain, whose *Emotions and the Will*—so crucial a text for Victorian physiologies of the novel—Richards had clearly studied. Even if these citations are often dismissive or critical (particularly those of Lee), they demonstrate that Victorian physiologists and physiological aestheticians were still, at least until 1920, part of the background that a serious student of physiological aesthetics needed to possess. It is not the case, in other words, that Richards leapt from Coleridge to Sherrington; he used Victorian theorists as well, in order to construct his guiding notion in the 1920s, that—as Paul Fry has recently put it—the soul is neurological.

Furthermore, his embryonic theory of the novel, written as lectures for the equally embryonic English Tripos, was, it seems, formed along the disciplinary lines that Victorian critics had already pursued.

Given these facts, why did Richards never finish or publish his 'book on 'The Novel'', the book that might have pushed physiological novel theory into the twentieth century? And why, when the eventual outcome of his early English Tripos courses—*Principles of Literary Criticism*—appeared, did it contain no trace of this novel theory? The absence of the novel within
Principles of Literary Criticism suggests that at some point between 1919 and 1924 Richards found his physiological or neurological approach to literature inapplicable to the novel, or that his distaste for the novel grew strong enough that he refused to write on fiction. A third possibility is even more likely: that the reasons for his distaste coalesced neatly with the reasons why the novel failed to fit his physiology. A look at some early comments to Forbes, along with a consideration of the places in Principles where the novel makes its presence felt in a ghastly manner, suggests that this third possibility is correct, and that one fact above all—the length of the novel form—motivated both Richards’s dislike for it and his inability to treat it theoretically. This most obvious or banal of facts, the one that had driven so much Victorian novel theory—the size of the novel, its increasing bulk, its implicit demand for more and more of our time, spread out over days and weeks—is for Richards the fundamental stumbling block.

Even in 1919, while constructing his syllabus and his theory of the novel, his complaints are consistent. To Forbes he writes: 'That brings me to the Novels. They are going to be a bother. So many of those which one cannot help mentioning are just tiring things dropbysly blown out. The novel in its typical form, Beresford, Cannon, Smith, Sidgwick, Walpole, Bennett, George, is a diseased thing.' His comments about 'dammed 400-page novels' are only partly the lament of a time-pressed instructor constructing a course from scratch; they are also recognitions that the scale of the novel, and the scale of his preferred critical mode, are incommensurable. This scale difference, and the theoretical issues it raises, is perhaps the only salient difference from those of his Victorian predecessors only in his greater forthrightness. The famous opening line of Principles—'A book is a machine to think with'—is elaborated later on:

It is no less absurd to suppose that a competent reader sits down to read for the sake of pleasure, than to suppose that a mathematician sets out to solve an equation with a view to the pleasure its solution will afford him. The pleasure in both cases may, of course, be very great. But the pleasure, however great it may be, is no more the aim of the activity in the course of which it arises than, for example, the noise

7 Richards, Selected Letters, 8.

made by a motorcycle—useful though it is as an indication of the way the machine is running—is the reason in the normal case for its having been started.

The aim of literary machinery, as Richards argues, is instead a 'modification' of our experiences, a modification created by 'a diffused reaction in the organs of the body brought about through the sympathetic nervous system', or by 'extensive changes in the visceral and vascular systems'. In intent and vocabulary these assertions are in essential agreement with mid-Victorian novel physiologies. They imply that a study of the physicality of reader response and a neurologically based epistemology of how reading occurs are essential for any developed critical account of literature. As Richards puts it, 'enough is known for an analysis of the mental events which make up the reading of a poem to be attempted. And such an analysis is a primary necessity for criticism' (p. 74).

'A poem': this is the crucial adjustment in Richards’s approach that signals his significant break with the Victorian theorists whom he elsewhere echoes so closely. The key-note of Richards’s deployment of physiology is his caution, particularly as to scale: 'Only the simplest human activities are at present amenable to laboratory methods. Aestheticians have therefore been compelled to begin with as simple a form of “aesthetic choice” as can be devised. In practice, line-lengths and elementary forms, single notes and phrases, single colours and simple collocations, nonsense syllables, metronomic beats, skeleton rhythms and metres and similar simplifications have alone been open to investigation' (p. 4). Any more temporally protracted aesthetic experience—in fact, any more prolonged experience at all—quickly becomes, for Richards, too complex to investigate, too resistant to the kinds of isolations and experimental controls that science needs. As an illustration of this methodological limit, Richards turns to music:

Every element in a form, whether it be a musical form or any other, is capable of exciting a very intricate and widespread response. Usually the response is of a minimal order and escapes introspection. Thus a single note or a uniform colour has for most people hardly any observable effect beyond its sensory characteristics. When it occurs along with other elements the form which they together make up may have striking consequences in emotion and attitude... The separate responses which each element in isolation would tend to excite are so connected with one another that their combination is, for our present knowledge, incalculable in its effects. Two stimuli which, when separated by one interval of time or space, would merely cause one another, with another interval produce an effect which is far beyond anything which either alone could produce. And the combined response when they are suitably arranged may be of quite another kind than that of either. (p. 138)

8 L. A. Richards, Principles of Literary Criticism (London: Routledge, 2001), 88. Subsequent citations are given parenthetically in the text.
The theoretical terrain here is familiarly Victorian: the notion of a temporal form that is not simply additive but either logarithmic or wavellite in its effects; the concept of 'intervals' which are as important as events in any consideration of temporal form; the problem of how to assess stimuli both in themselves and in the context of a shifting, accumulative process of stimuli. It is the problem that preoccupied Victorian theorists; it is the problem that Percy Lubbock would solve, in 1921, by recourse to a readily memory that transforms time into spatial arrangements. For Richards, however, it remains insoluble, at least in the temporally elongated examples of prose fiction and musical composition. As a result, Principles of Literary Criticism turns for examples to the shortest instances: Richard's centerpiece reading is of one line of verse ('Arcadia, Night, a Cloud, Pan, and the Moon'), a line without even any necessary syntactic directionality—the words could be transposed without loss of sense or effect—and thus without time. Richards's diagram of the line's effect is patently atemporal: 'Nor are temporal relations intended,' he explains (p. 106). This is, as one of Richard's chapter titles names it, the 'impass of musical theory'.

It is also, of course, the impass of longer literary forms. In one of the very few references to prose in Principles, Richards asserts that prose produces a 'very much vaguer and more indeterminate expectancy than verse' (p. 123). In this too he does not disagree with his Victorian predecessors; the very vagueness and dispersal of prose effects are the motivations behind the wave metaphors of Lewis and Bain, and that vagueness licensed a series of investigations into states of mental abstraction: drift, inattention, unconscious cerebration, accelerated comprehension. The Victorian physiologies used by the period's novel critics were, on the whole, friendlier to notions of diffused or vague affect than those employed by Richards. Sherrington's physiology was based upon the notion of the 'common path', or the coordination of reflexes in a single direction, a coordination called 'attention' as opposed to 'interference' in his 1906 magnum opus:

Experienced teleologically, the common path, although economically subservient for many and various purposes, is adapted to serve but one purpose at a time. Hence it is a co-ordinating mechanism and prevents confusion by restricting the use of the organ, its minister, to but one action at a time. . . . The resultant singleness of action from moment to moment is a keystone in the construction of the individual whose unity it is the specific office of the nervous system to perfect. The interference of unlike reflexes and the alliance of like reflexes in their action upon their common paths seem to lie at the very root of the great psychical process of attention.”


As we have seen, attention is an ambiguous and not always positive phenomenon in Victorian physiologies; it is limited, fragile, partial. In Sherrington's physiology it is central, the very purpose of mental operations, and those neural effects that combat it—reverie, distraction, competition of multiple stimuli—are only 'interference'. We pass, in other words, from a psychology friendly to multi-plot prose fiction to one best adapted to lyric condensation. The consequences of Sherrington's revision of Bain are everywhere palpable in Richard's choice of literary subjects and the scale of his readings. His Science and Poetry (1926) produces a reading of Wordsworth's 'Westminster Bridge' sonnet as paradigmatic because of its brevity; it is only 'an experience, ten minutes of a person's life'.10 Three years later, Practical Criticism's famous 'protocols' modeled reading on the basis of short, contextually isolated verse passages. The title of Richard's 1942 handbook, How to Read a Page: A Course in Efficient Reading with an Introduction to a Hundred Great Words, sufficiently expresses its investment in small-scale reading practices.

The consequences of Richard's reading of Sherrington for the new discipline of literary studies were just as profound. Modes of reading that fell short of full, 'integrated' attention were elaborately taxonomized and criticized in Practical Criticism, under such terms as 'illegitimate expectation', 'irrelevant association', and, more colloquially, 'swoon-reading', as with readers 'content to loll at ease swinging softly in the hammock of the rhythm, satisfied to find at last something that sounded like poetry', or 'rapid persuals', against which Richard's counseled a consciously exaggerated slowness.11 Full attention became the sine qua non of the New Criticism, and subsequent schools of theory supposedly in combat with New Critical presuppositions have paradoxically maintained the status of attention in their otherwise different approaches. Sherringtonian physiology was far less rapidly abandoned in literary criticism than it was within neurology. With its triumph in Richards—and, given Richards's extraordinary influence in the middle decades of the twentieth century, in literary studies as a whole—it came to underwrite critical schools whose practitioners had no real interest in physiology or neurology. Only recently has this continued influence been recognized; as Andrew Elfenbein phrased it recently, 'Academic literary criticism institutionalized and continues to be fostered by many of the specific cognitive strategies and standards demanded by Richards.'12

What, then, of the novel, that form that Richards first tried to theorize and then abandoned? At the end of Practical Criticism, Richards gestures to a standard tropes of Victorian criticism—the similarity of novel and machine, the novel's status as a technology—in order to separate literary criticism from a host of interrelated concepts, including 'information', diffused consciousness, wide circulations of ideas, and (by implication) prose fiction.

It is arguable that mechanical inventions, with their social effects, and a too sudden diffusion of indigestible ideas, are disturbing throughout the world the whole order of human mentality, that our minds are, as it were, becoming of an inferior shape—thin, brittle and patchy, rather than controllable and coherent. It is possible that the burden of information and consciousness that a growing mind now has to carry may be too much for its natural strength. If it is not too much already, it may soon become so, for the situation is likely to grow worse before it is better. Therefore, if there be any means by which we may artificially strengthen our minds' capacity to order themselves, we must avail ourselves of them. And of all possible means, Poetry, the unique, lingustic instrument by which our minds have ordered their thoughts, emotions, desires...in the past, seems to be the most serviceable.  

At the very least, such a passage serves to remind us that Richards was the supervisor of the dissertation that became Q. D. Leavis's Fiction and the Reading Public, the century's most sustained attack upon prose fiction's cognitive and social effects. Yet it also provides an ironic conclusion to a history of physiological theories of the novel. What began in the nineteenth century as a way to consider, perhaps even celebrate, the technology of fiction, its widespread appeal and undeniable success, its way of finding temporal rhythms adapted to industrial existence, became in Richards's time yet another way of condemning fiction for its vitiating effects upon modern consciousness. The Victorian engagement with physiology and fiction was, in its own way, an engagement with the social—an attempt to understand what, in a machine age, 'the social' might look like, how consciousness operated in such an age and in such a society, and how (and why) the novel reflected and catered to the kinds of cognition demanded by new social facts. Richards's Sherringtonian physiological aesthetics refused a logic of engagement, and instead sought an antidote, a cure, a retreat, and set up literary critics as physicians for diseased modern cognitions. It is a temptation that continues to this day, wherein newer textual media and newer inventions than Richards knew are consistently posed as diseases for which a more purely 'literary' cure must be found. Sometimes, as this book has shown, the novel returns as the cure rather than the disease. Both approaches, however, do a disservice to the real, complicated engagements that the novel has had with social norms of cognition. Perhaps a renewed study of the physical, psychological, even neural effects of reading different literary forms in different ways might free us from the urge to attach ethical weight to cognitive categories; perhaps it might free literary critics from the burden of being the unappointed guardians of human attention; perhaps it might make us better understand why, even in our own time, the novel has become the preeminent modern literary form. It would certainly force us to acknowledge the real and productive place of drift, inattention, rhythm, and speed in our consumption of novels, and the complex ways in which reverie and attention oscillate to produce that curious and curiously compelling act we call reading a novel.

13 Richards, Practical Criticism, 301.