Empirical Approaches to Studying Literary Readers:

The State of the Discipline

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What is literary reading, and is it possible to distinguish it from other kinds of reading? I have two reasons for beginning with this question. First, it evokes some central controversies over reading that have occurred in the last two or three decades that remain unresolved; and, second, such controversies suggest the need for experimental methods studying acts of reading by real readers. Given the rejection of literariness by recent literary theorists, these two questions are critical for the future of literary studies. Terry Eagleton in 1983 expressed a now common view: there can be “no ‘essence’ of literature whatsoever. . . . any writing may be read ‘poetically’.” Thus given the right frame we would read a railway timetable as literature. It follows, says Eagleton, that

Anything can be literature, and anything which is regarded as unalterably and unquestionably literature – Shakespeare, for example – can cease to be literature. Any belief that the study of literature is the study of a stable, well-definable entity, as entomology is the study of insects, can be abandoned as a chimera.¹

While empirical study of literature does not allow us to refute this claim definitively, it does, as I will show, enable us to call it into question and show when and it what ways literariness as a distinctive experience seems to be occurring for readers. Thus experimental work does not enable us to put such controversies behind us: on the contrary, they are an important component of what motivates such work.

The paradigms within which literature is typically studied and taught, however, have ruled against the experimental approach. Thus in 1981 Jonathan Culler argued:

there is little need to concern oneself with the design of experiments, for several reasons. First, there already exist more than enough
interpretations with which to begin. By consulting the interpretations which literary history records for any major work, one discovers a spectrum of interpretive possibilities of greater interest and diversity than a survey of undergraduates could provide.²

No doubt the study of published interpretations has its own merit, but it is a poor answer to the question of how texts are actually read. Filtered out of printed interpretations are details of how a reader arrived at her understanding of the text; printed accounts are also likely to be subject to distortions and repressions of various kinds that misrepresent the act of reading. Above all, what is usually given in print is an interpretation, but this is not necessarily what a reader reading “non-professionally” is aiming to produce; thus a reliance on printed interpretations for a study of literary reading has little ecological validity.

Experimental study of non-professional literary reading has been occurring for some thirty years.³ Embracing a range of cultural, social, and psychological questions, it raises many of the questions that historians of reading have been studying, albeit from a different perspective. In particular it has centered on tracing the effects on readers of specific aspects of the reading process, such as the influence of features of literary style, the effects of empathy in reading narrative, or the impact of significant reading experiences on a reader’s memory and self-concept. Often, experimental methods involve laboratory conditions in which acts of reading can be controlled and monitored; two or more conditions for reading may be compared (a literary text might be manipulated to examine, for instance, the effects of versions containing either free indirect discourse or third person discourse). Typically, the readers studied will be drawn from the student population, but some studies draw on readers from the general population, or compare inexperienced with more experienced
readers (beginning students with faculty, for example). To carry out such studies demands some familiarity with experimental design and statistical analysis, but – as I aim to show below – the issues raised and the basic features of the methods being used can readily be understood by any scholar interested in questions about reading. More specifically, the questions raised by empirical study are relevant to our understanding of readers of the past as well as in the present.

In the opening of his now classic paper, “First Steps Towards a History of Reading,” Robert Darnton raises a central question about reading. As we look back at past acts of reading, acts “that we share with our ancestors,” we confront a problem: such reading is both familiar and foreign. “We may enjoy the illusion of stepping outside of time in order to make contact with authors who lived centuries ago,” but “our relation to those texts cannot be the same as that of readers in the past.” Given that the “new” book history is concerned with understanding individual acts of reading, how are we to assess the historical evidence of reading without imposing on it our own modern presuppositions? In this paper I will suggest that we can turn to the empirical study of reading (specifically, literary reading) for an independent source of information on certain processes of reading that may occur in any period. While such processes support acts of interpretation that are necessarily inflected by history, that is, by a reader’s particular identity and cultural situation, the processes themselves are constituted by the cognitive and affective equipment that we possess in common with our ancestors. But rather than be limited to theoretical considerations about how the mind works, I will show in some detail how it is possible to develop a specific hypothesis about reading, perhaps based on a study of historical evidence, and investigate it empirically with actual readers. The empirical studies I describe range from a focus on the formal features of texts and their influence on readers, to
some ways in which reading has an impact on the reader’s sense of self. This
approach, I suggest, provides a more secure basis for distinguishing the familiar from
the foreign as we examine acts of reading from the past.

First, however, I will discuss some preliminary questions about what it means
to read. I will ask whether interpretation is a primary aim of readers; to what extent
reading depends on the acquisition of conventions; and if literary reading can be
distinguished from other kinds of reading. Only then will I show how the study of
actual readers using experimental methods enables us to arrive at some tentative
conclusions about the processes involved in reading.

The question of interpretation is a troubled one. Susan Sontag argued in 1964
that interpretation is an instrumental approach that “violates art. It makes art into an
article for use, for arrangement into a mental scheme of categories.” Interpretation,
she added, “is the revenge of the intellect upon art”. Yet it still seems to be the case,
as Stanley Fish asserted over twenty years ago, that “like it or not, interpretation is the
only game in town.” Similarly, Gerald Graff argued that “the act of paraphrasing or
transforming into other terms is a ‘normal and unavoidable aspect of the reading
process’”; Roland Barthes claimed that “to read is to struggle to name, to subject the
sentences of the text to a semantic transformation.” According to Stephen Mailloux,
“literary texts and their meanings are never prior to the employment of interpretive
conventions; they are always its results. Texts do not cause interpretations,
interpretations constitute texts.” Whether readers outside the classroom normally
generate interpretations is, of course, an empirical question.

In his essay on reading, Michel de Certeau opposes such institutional
insistence on interpretation. The text as “a sort of strong-box full of meaning,” he
says, “is obviously not based on the productivity of the reader, but on the social
institution that overdetermines his relation with the text.” This, he adds, “interposes a frontier between the text and its readers that can be crossed only if one has a passport delivered by these official interpreters.” If only “sanctioned” readings are recognized, of course, there can be no interest in studying the multiple readings of real readers (students, the common reader). As Jonathan Culler puts it, caricaturing such an enterprise, it is not required “that one should rush out armed with questionnaires to interview the reader in the street.”

Empirical research on reading, then, offers itself as a way of finding out what occurs during ordinary literary reading, and it can be regarded as an essential step to reconsidering our approach to literature, in particular, towards reconsidering the emphasis given to interpretation. Towards this end, we can begin by asking what else readers might be doing.

Here, for example, are two rather different accounts of how readers behave, that we might term the unruly and the encoded respectively. According to Roger Chartier, “reading, by definition, is rebellious and vagabond” – readers “read between the lines” and “subvert the lessons imposed on them.” The greatest literary works, Chartier claims, “especially the greatest works – have no stable, universal, fixed meanings. They are invested with plural and mobile significations that are constructed in the encounter between a proposal and a reception.” Reading, he adds, “easily shakes off all constraints.”

A more orderly view of reading is given by Pierre Bourdieu: “A work of art has meaning and interest only for someone who possesses the cultural competence, that is, the code, into which it is encoded.” Similarly, Jonathan Culler argues that “To read is always to read in relation to other texts, in relation to the codes that are the products of these texts and go to make up a culture.” Peter Rabinowitz in Before Reading claims that literary reading is not just
“a logical consequence of knowledge of the linguistic system and its written signs. It is, rather, a separately learned, *conventional* activity” dependent on the acquisition of literary competence. In other words, conventions “precede the text and make discovery possible in the first place.” So we must choose: either wayward readers “despoiling the wealth of Egypt,” in de Certeau’s words; or diligent readers acting out the conventions of reading acquired during their education. Notice, however, that in neither case is any power attributed to the text: the text being read, says de Certeau, “is ordered in accord with codes of perception that it does not control.” Are literary texts really as malleable as that? Or is there some order that does not derive from convention?

But this would be to defend the notion that literary texts possess some distinctive properties, as the Russian Formalists proposed. One of the first theorists to argue that poetic and ordinary language cannot be distinguished in this way was Mary Louise Pratt in her 1977 book on *Literary Discourse*. Here she claims that if we examine the everyday speech community we will find “that neither the formal nor the functional distinctiveness that the Formalists attributed to literature has any factual basis.” But to examine the formal aspects of literary texts using text or discourse analysis is to use methods that may be indifferent to the effects of literary reading, as recent accounts of the cognitive approach to literature demonstrate. Peter Stockwell, for example, has declared in a recent book focused in part on discourse analysis, that “It is a principle of cognitive poetics that the same cognitive mechanisms apply to literary reading as to all other interaction.” But are there aspects of reading that cannot be accounted for by cognitive poetics? Or by the speech act theory that Pratt goes on to propose?
Readers of the past have certainly thought that literary reading was distinctive and that it had the capacity to influence them in significant ways. Robert Darnton has described the enormous influence that Rousseau’s novel *Julie, ou la Nouvelle Héloïse* had on its readers. In the many letters that Rousseau had from readers, says Darnton, “They wanted to tell him how they identified with his characters, how they, too, had loved, sinned, suffered, and resolved to be virtuous again in the midst of a wicked and uncomprehending world”; one reader relates how he identified with each character in turn. Darnton tells us that this kind of reading is “unthinkable today.” Yet it also occurs beyond the eighteenth century. In the “new” book history, as David Hall and others have called it, Darnton’s is an early study (he published it in 1984). In 1992 Rose raised the question “How do texts change the minds and lives of common (i.e., nonprofessional) readers?” and pointed out that “hardly anyone has systematically attacked [this] basic question” since Richard Altick first raised it in *The English Common Reader*. Rose, in his recent book, *The Intellectual Life of the English Working Classes*, is able to answer the question with an abundance of archival evidence, going to the journals, letters, and autobiographies of numerous working class readers who left accounts of how their reading influenced them, often quite profoundly.

One of the most striking features of many of Rose’s examples is that, contrary to the claims of Culler or Rabinowitz, they seem to involve initial acts of literary reading that could not have depended on prior induction into the conventions or codes of literature. Readers who are barely literate from a few years of primary schooling, later discover a volume of Homer on an old bookstall, or are lent a novel by Dickens, and testify that the reading changed their lives. Patrick Macgill, an Irish farm labourer, at the age of eighteen in 1908 is working on the railways as a platelayer in
Glasgow. In his autobiographical novel *Children of the Dead End*, he reports picking up a leaf torn from an exercise book on which were written a couple of verses. “While hardly understanding their import, the words went to my heart. They expressed thoughts of my own, thoughts lying so deeply that I was not able to explain or express them.”

He went on to read Victor Hugo, Carlyle, and Ruskin.

Evidently, arguments about the nature of reading cut both ways, revealing basic contradictions in our understanding of what reading is and how to assess its significance. If the act of reading is central to our work as scholars, then it appears that important work remains towards clarifying the field. Here is the value of experimental method that allows us to assay certain theoretical questions about the meaning of literary reading and its effects on readers. Such work is informed by theoretical and historical discussions of reading of the kind I have been reviewing: to take the empirical turn is not to put aside such scholarship, nor to reduce inquiry to a form of naïve positivism that takes the reality of its experimental constructs for granted or has resort to pure psychologism.

A basic principle of empirical work on literary reading is laid out in a recent book, *Psychonarratology*, by Marisa Bortolussi and Peter Dixon. They distinguish text and reader in the interaction that we call reading: that is, the researcher must “draw a careful distinction between the text and its formal description on one hand, and the reader and the reading process on the other.”

Textual features are defined as any aspect of a text that can be objectively identified. The reading process involves reader’s constructions, such as mental representations, changes in attitude or belief, or affective reactions. The identification of textual features is not always as objective as Bortolussi and Dixon suggest, since it can depend upon the aptitude or interests of the analyst. But one frequently noticed feature of literary texts is their style, so we might
begin by asking how we identify style and how we investigate whether readers are influenced by stylistic features. Certainly, some of the inexperienced readers described by Jonathan Rose appear to have been sensitive to style. For example, Richard Hillyer the son of a cowman describes reading Tennyson as a boy: “The coloured words flashed out and entranced my fancy. They drew pictures in the mind. Words became magical, incantations, abracadabra which called up spirits.”

Similarly, Dorothy Burnham aged 11 finds a poem by Yeats: “The magical words chanted themselves in my head like a litany.” J. R. Clynes, a full-time worker in a factory at Oldham at the age of twelve, discovers poetry and then goes out of his way to buy a dictionary. “Some of the words I loved, and these I wrote down far more often than I need have done, because of the pleasure they were to the eye, and the caress of the syllables to the ear. Each time the roll and rush of them delighted me more.”

If readers like these find style striking, we can ask whether this response is typical of other readers at other times; if so, what specific stylistic features are readers responding to, and what are the components of their response. I will describe two studies that attempted to do this. The first is Willie van Peer in *Stylistics and Psychology*, a book-length study of response to foregrounding; the second will be a study of my own with my collaborator Don Kuiken.

Van Peer selected six short poems of 8 to 13 lines in length, ranging from Wordsworth to Roethke. He gave each line in each poem a detailed stylistic analysis to determine what features contributed to foregrounding, that is, features that make certain words or phrases more noticeable or striking. He analysed features at the level of sound, syntax, and semantics, and included two kinds of foregrounding termed deviation or parallelism respectively (that is, either features unexpected in their
context, or features that are repeated unusually); and features that can be selected either because they vary from internal norms established by the poem (internal deviation) or from contemporary norms of language use (external deviation). In this second case, foregrounding is either determinate deviation, which is constituted by departure from a rule or convention, or statistical deviation, which is departure from what one would expect in normal, everyday language use.

For examples of these categories, here is the first verse of one of van Peer’s selected poems by Emily Dickinson:

The Brain – is wider than the Sky –

For – put them side by side –

The one the other will contain

With ease – and You – beside.

Internal deviation is shown by the promotion of You, given a capital letter although it is not a proper noun. Determinate deviation is shown by the first dash that creates a pause after “Brain,” separating subject and predicate. Statistical deviation occurs with the repetition of the “I” sound (four occurrences) in the first two lines. The occurrence of assonance or alliteration can also be seen as parallelism, thus we find repeated “i” sounds in lines 3 and 4. Features at the syntactic and semantic levels are counted as well as the phonetic features, as shown in Figure 1, a section of Van Peer’s summary representation of his analysis.

Insert Figure 1

Such an analysis represents an attempt to arrive at an objective view of textual features, as called for by Bortolussi and Dixon. Since van Peer is an accomplished
stylistician and linguist, we can probably trust the analyses he provides, although it is not certain that another analyst would arrive at exactly the same results.

In the final step of the analysis, all the features identified as contributing to foregrounding at each level are counted, enabling van Peer to arrive at a ranking of the 12 lines of this poem from the most to the least foregrounded. In the first verse, for example, the ranking assigned to the four lines is, in order, 2, 11, 10, and 8. The implication is that readers will find the first line among the most striking in the poem and the middle two lines among the least striking.

To test this hypothesis van Peer derived several empirical variables from the theory of foregrounding. He postulated that, if foregrounded features stand out, they should be more memorable for readers. Secondly, readers will find lines containing many foregrounded features more striking in comparison with lines containing few such features. Examination of these sub-hypotheses required several experiments with groups of readers. For the memory test, readers were presented with one of the poems and asked to read it carefully twice. They were then presented with another version of the poem in which selected words had been deleted which readers were asked to recall and write in. The deleted words were taken equally from lines high and low in foregrounding. For the strikingness test, readers were asked to read the poem through then go back and underline those parts of the text that they found most striking, whether single words, phrases, or whole lines. The readers chosen for these studies were drawn from three different populations of students (at a British university): 1) those who had had initial training in stylistics and were familiar with the theory of foregrounding; 2) those who had taken courses in literature but had no exposure to stylistics; and 3) students who had no recent academic training in literature, being mainly science students. The choice of three different groups of
readers is intended to test the generalizability of the theory of foregrounding. Does response to foregrounding depend on previous training in literature or on the induction of a specific attitude towards poetry? If so, then response to foregrounding would be an example of literary competence, of prior familiarity with the codes and conventions appropriate to literary reading. If this view is correct, then we can expect some attenuation of response as the student readers examined come from those groups with less training in literature.

The design of such experiments in reading can be described quite simply. We identify a textual feature that we hypothesize will influence reading in some way; at the same time, we select a specific aspect of the reading process that we expect to reflect that influence. The textual feature is the independent variable; the aspect of reading in question is the dependent variable. We are predicting that textual features and reader responses will covary in a systematic way. Here the selection of certain lines of several poems as highly foregrounded is the independent or text variable, and readers’ ability to remember words from a poem, or their selection of certain words as striking constitutes the dependent variable. Since reading is a subjective activity, and we can expect other influences on memory or judgements of strikingness to be at work, a group of readers is required for each experiment so that variations due to individual differences between readers are likely to be minimized. In addition, prior to the experiment, we set a certain specific expectation about how strong the evidence must be in order for us to conclude that it supports the hypothesis, that is, a level of significance. If the evidence is not strong enough, then we have to say that the null hypothesis cannot be rejected: in other words, whatever is causing the readers’ responses we cannot, on this occasion, claim that it is being caused by the textual variables we have identified. Given the expectation of some theorists that the
behaviour of readers is quite arbitrary, it might be thought improbable that we would find any regularities among readers under such experimental conditions. But this is just what van Peer did find.

His experiment on readers’ memory for foregrounded words employed four poems. For three out of the four poems, words from the foregrounded lines were correctly recalled markedly more often than words from the background lines. For instance, readers of the Dickinson poem recalled a total of 154 foregrounded words compared with 102 backgrounded words. A statistical test showed that this result had a less than one percent probability of occurring by chance, thus the result for this poem supports the prediction: foregrounded words are more memorable. However, van Peer used four poems for this experiment, and while the results from three out of the four poems supported the prediction, for one of the poems it turned out that words from the backgrounded lines were remembered more frequently. On these grounds, van Peer feels obliged to reject the hypothesis: three out of four cases is not a strong enough result. In his discussion he points out other possible influences on memory that may have militated against the effect of foregrounding, such as the well-known phenomenon that concrete words are easier to recall than abstract words; possibly too, rhyme words are easier to recall. This study, then, although it seems promising, is vitiated by the occurrence of too many other influencing variables that could not be controlled.

In his second study van Peer was more successful. Here the reader’s task was to underline all passages that they found striking. Again, four poems were employed, and in each poem readers underlined foregrounded words and phrases markedly more frequently than backgrounded words. For all four poems this result statistically had a less than one percent probability of occurring by chance. Thus we can conclude that
the hypothesis that foregrounded passages will be judged striking by readers is supported. Van Peer carried out several other tests of foregrounding with readers that I have not mentioned, after which he returned to the question of literary competence. The results from the successful experiments, such as that for strikingness, were re-examined for differences between the three groups of students, who, you will recall, varied in their levels of training in and experience of literature. No systematic differences were found. All three groups performed in the different experimental conditions in virtually the same way; thus, van Peer concludes, response to foregrounding is not dependent on literary training of the kind found in university courses.

How far we could extend this generalization remains for future study. If the responses to foregrounding shown by such readers as Hillyer or Burnham when they were children is representative, we would be able to conclude that foregrounding is recognized by readers regardless of literary training. Thus the literary effects created by foregrounding should be available to any reader with a basic competence in the language. We cannot say this yet, since the relevant experimental studies have not been done. We would need to work with groups of children readers of various ages, and to extend the approach to literatures and readers from several other cultures including, if possible, oral cultures in which foregrounding is heard not mediated through writing. The studies of oral poetry by Ruth Finnegan suggest that this would be a rewarding line of research, given her analyses of poetic diction in a number of examples. At the same time, we could extend the line of inquiry that Ellen Dissanayake and I began recently in our study of babtalk, in which we pointed to the central role of foregrounded features in a mother’s discourse with her infant. We need to know more about the development of language by young children, during
which they generate and appear to enjoy foregrounded features of their own\textsuperscript{33} as well as those of their siblings or caretakers. A wider research program of this kind would, if our preliminary findings are replicated, place literary experience on a firmer footing, suggesting that it is an inherent feature of human culture.

Given the perspective that van Peer opened up I was interested in seeing if similar findings would also be obtained in response to narrative prose, and if so what additional indications of foregrounding we might find in readers’ responses. In this work I collaborated with my Canadian colleague Don Kuiken.\textsuperscript{34} We took three modernist short stories, “The Trout” by Sean O’Faolain, “The Wrong House” by Katherine Mansfield, and “A Summing Up” by Virginia Woolf. Each story was about 1200 words in length, and took some ten to fifteen minutes to read. The stories were divided into segments, each approximately one sentence in length, and I and two graduate student assistants made analyses of foregrounding in each segment of the stories. Given the length of the texts, our analyses were not as detailed or systematic as van Peer. We each worked separately at first, but when we compared our results we found there was a high degree of similarity between us. We recorded foregrounded features at three levels: phonetic, syntactic, and semantic. The example in Table 1 from the opening lines of “The Trout” shows the kind of features we were finding as we did this.

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Feature & Analysis \\
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Table 1 & \\
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\caption{Example of foregrounded features in "The Trout"}
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In addition, by combining the three different levels of foregrounding, we built an index of overall foregrounding. Our work showed that foregrounding varied considerably across the segments of the stories. We could thus expect to find, as van
Peer had done, variations in readers’ responses corresponding to the degree of foregrounding they encountered, segment by segment.

For each of our first two studies we asked 60 readers to participate. These were volunteers recruited from senior English literature classes. All readers read the story first at their normal reading speed: readers paced themselves through the text by pressing the space bar to reveal the next segment. In this way we were able to collect the time it took readers to read each segment – the computer timed this for us in milliseconds. Second, readers were asked to read the story again, but this time to give a rating to each segment. For example, 15 readers provided ratings for strikingness; another 15 rated for feeling, that is, to what extent each segment “arouses feeling in you as a reader.” Other groups rated for importance, or for discussion value; and in the second study, for imagery. Thus we had several possible components of readers’ responses to examine in relation to the foregrounding in the stories.

Our first prediction was that the more highly foregrounded a segment, the longer it would take to read (controlling, of course, for segment length). As Victor Shklovsky put it, the technique of art is “to increase the difficulty and length of perception,”35 which is to say, the more complex effects created by foregrounding cause readers to linger or hesitate a little. This was strongly confirmed by our findings: taking the mean reading times per segment of all 60 readers, there was a highly significant correlation of reading times with our foregrounding index in each story. For “The Trout” this result had a less than one tenth of one percent probability of occurring by chance; for “The Wrong House” and “A Summing Up” the result had a less than two percent probability of occurring by chance. The variance in reading speed seems a basic concomitant of foregrounding: the extra time readers take
indicates the need for more processing; foregrounding places a greater demand on readers’ understanding.

In addition to this main finding, we also found, as expected, that readers rating for strikingness gave higher ratings the more foregrounded the segment. This confirms van Peer’s work, while using a different instrument and working with a different literary genre (not to mention readers who were a decade and a continent apart from the readers van Peer worked with). But we were also interested in learning what other components of the response to foregrounding might be significant. Thus we were intrigued to find that the ratings for feeling also covaried systematically with foregrounding: the more foregrounding, the more feeling readers reported. As I will mention, we considered this new finding on foregrounding to be of much theoretical interest. Other ratings, for discussion value, or importance, turned out to have no consistent relation to foregrounding.

Given the effectiveness of our experimental design, we extended the research to two additional studies based on the Mansfield and the Woolf stories. We were interested in another of van Peer’s findings, that the literary competence of readers appeared to have no bearing on the response to foregrounding. For this purpose we chose readers who lacked the literary experience, training, and perspective of the readers in our first two studies. Readers were students recruited from an Introductory Psychology class. We checked our assumptions about these readers by administering a reading questionnaire: this showed that participants in these studies had rarely read literature except when required to do so in a school or university course. In these studies readers were asked to rate either strikingness or feeling. The results confirmed our expectations: the main findings were replicated, with reading times and ratings for strikingness and feeling all covarying systematically with foregrounding. Thus in our
experiment too, a lower degree of literary competence (and interest in literature) seemed to have no major effect. The only difference we noticed was that these readers were more cautious in their ratings, giving lower ratings on average than their colleagues from literature courses. Their pace of reading, on the other hand, was the same as the literature students, suggesting comparable levels of general reading skill.

These findings together with those of van Peer thus challenge what we might term the conventionalist understanding of literature, espoused by a range of literary theorists such as Jonathan Culler, Barbara Herrnstein Smith, and Stanley Fish. Recognition of foregrounding, that is, the treatment of a text as literary, depends on a reader's linguistic competence, not on literary experience or training. At the same time, the foregrounding studies I have described do not establish a unique or distinctive category of *literary* response, although they provide one promising bridge towards such a phenomenon. The response to foregrounding has some intriguing components, as our study showed, but we are not yet in a position to challenge claims such as this of Smith’s, that “there are no functions performed by artworks that may be specified as generically unique.” What we need to show next is that the encounter with foregrounded features plays a formative role in the understanding processes of the reader (while this is unlikely to be the only influence: text genre, narrative features, etc., will also play a major role, according to context).

However, I can point to some evidence that takes us several steps in this direction. While in our foregrounding studies readers were asked to provide a rating for every segment of the story for strikingness, when readers were left to choose for themselves what segments they found striking, readers rather consistently chose passages that are high in foregrounding. This suggests that beyond the basic comprehension processes that support any act of reading, literary readers are drawn in
particular to foregrounded passages as focal points as they begin to generate an understanding. Here it is important also to remember the finding that foregrounding arouses feeling. We have also proposed that, since foregrounding challenges conventional conceptual understanding, feeling provides an alternative framework for exploring potential meanings: a metaphor, or a passage with alliteration, may evoke the experiential resources of the reader and prompt alternative conceptual frameworks downstream of the foregrounded moment, enabling the reader to develop the kind of new insights for which we tend to value literary texts. In several studies we have described the properties of feeling that give us reason to think it may perform such a role, such as the self-referential role of feeling, and the power of feeling to relate experiences across conventional conceptual boundaries.

I will describe one more type of experiment, however, in which we have studied what we call expressive enactment. Readers of literary texts often appear to draw more explicitly and frequently on their active personal feelings: a literary text may speak to the individual through its resonances with that individual’s experience. To learn more about such resonance and what it means for the reader, however, we turn to the think-aloud method. Readers are asked to make comments on the passages in a text that they have found striking: they are encouraged to mention any thoughts, feelings, however apparently unimportant. Their comments are later transcribed for analysis. We have used several different texts in such studies, including Coleridge’s “The Rime of the Ancient Mariner” and Mansfield’s “The Wrong House,” and we have usually collected the comments of at least thirty readers, including student readers and, sometimes, readers we have solicited from the general public outside the university. The comments of some readers remain at a fairly mundane level, as though the text has evoked no marked feeling in them. But in others we can find a
personal resonance to some aspect of the text, and a series of comments that point to
important shifts in feeling during the course of reading.

Here is one example from responses we elicited to “The Ancient Mariner.”
Participants were asked to nominate five passages they had found striking and
comment on them. One reader (C14) for passage #2 chose “Day after day, day after
day, / We stuck, nor breath nor motion; / As idle as a painted ship / Upon a painted
ocean.” The reader comments (in part): “I empathize with this, as I’ve experienced
this ‘day after day,’ going through life day after day, not sure what’s going to happen.
It’s a real sense of hopelessness, there’s water everywhere but there’s none to drink.”
For passage #4 he chose “All fixed on me their stony eyes, / That in the Moon did
glitter. / The pang, the curse, with which they died, / Had never passed away: / I could
not draw my eyes from theirs, / Nor turn them up to pray.” Now he comments,
“Again, a feeling of entrapment you get, because . . . like what he’s doing to the
Wedding-Guest, these dead men did to him, he could not draw his eyes from theirs,
he’s completely trapped. He can’t escape it. That I think we all experience when
we’re getting a lecture or a criticism, it’s like you know you have to listen, you can’t
turn away, however uncomfortable or painful it may be for you to hear it.” For his
final passage, #5, he chooses: “Since then, at an uncertain hour, / That agony returns: / And
till my ghastly tale is told, / This heart with me burns.” He comments: “It says,
‘the agony returns.’ I’ve experienced this to some extent in the sense that when you
have a problem and you avoid it, and it may go away but it’s always, it’s within you.
And so it’ll pop up at unexpected times and we’re forced to deal with it again and
again and again. At least this is what’s happening with the Mariner, he feels he needs
to tell this to people, almost like telling it will relieve his conscience to some extent.”
In each comment, we can notice how the reader’s own experience is not only evoked by the poem, but tends to converge with that of the Mariner. He is able to re-express some central ideas from the poem in terms of his own, parallel experience, which seems to become increasingly challenging across each commentary. First is the “hopelessness” of “day by day”; then the sharper challenge of “a feeling of entrapment” that “we all get” when being criticized. But finally the problem is located within, it’s always “within you.” Particularly interesting is the emergence of the pronoun “you,” as in this last phrase, which we have found occurring when the identity of the reader appears to merge with that of the character (here, the Mariner). The reader, in other words, enacts the predicament portrayed in the poem, experiencing the meaning and implications of the feelings at issue as he does so. This reader’s comment is an example of what we have called a metaphor of identification: as we put it in a recent study, there is “evidence of blurred boundaries between the reader and narrator, as though they were temporarily identified as members of the same class.”41 This contrasts with a simile of identification, when the reader compares some personal experience with an experience portrayed in the text but seems to keep the two experiences distinct.

It is noticeable that his encounter with the Mariner’s experience enables this reader to express and develop feelings of entrapment (the “day by day,” the recurring problem). While the reading of this particular poem is perhaps more likely to arouse negative feelings in a reader, we believe that literature more generally may enable readers to realize and negotiate negative feelings that, under most circumstances, would be repressed – such feelings are often socially unacceptable. Reading enables us to re-experience and acknowledge negative feelings while locating them in a novel perspective where they can be considered critically by the reader, perhaps allowing
the reader to gain insight into them and greater control. Not all readers we have
studied respond in such a way: in studies of this design (involving selection of striking
passages and think-aloud responses) we find about one quarter of readers’ comments
demonstrate what we have called expressive enactment. But this no doubt depends
not only on the reader (where personality issues may be at work) but also on the text,
and how appropriate it is at that particular moment in the reader’s life.

In terms of empirical studies, this last type of study I have been describing is
not experimental, in the sense that we start with a specific set of textual features and a
hypothesis about how readers will respond to them, as was the case with
foregrounding. Such a study calls, instead, for a process of discovery through which
we can track the conceptual and emotional development of readers’ responses across
the course of a text, arriving at a profile of types of reading activities in which
reader’s interests and personalities are likely to play a part. While we can learn about
the role of textual features in such a study, our primary aim is to understand the
processes by which readers’ responses unfold, what types of response are implicated,
and where the reader’s overall sense of a text comes from. We are also, of course,
interested in examining how far the processes we have been studying are distinctive to
literary texts and the formal structures through which they appear to direct and shape
the reader’s response.

I have taken time to describe three empirical studies in some detail. These
represent only a small corner of a quite extensive field, and one that seems to have
been growing steadily over the last ten to fifteen years. Research has been taking
place on a wide range of topics. In discourse processing, for example (the study of
the role of text structures on reading), scholars have looked at the role of argument
structures or the kinds of inferences made during reading. Expert-novice distinctions
between readers have been examined: do readers trained in literary study (such as faculty members in literature) typically read differently from novice readers (such as students in high school)? Another recent focus has been the role of cultural differences in reading, such as how far it is necessary that readers understand details in a text specific to a local culture. Studies of the moral effects of literary reading have looked at whether reading a text by an author from an immigrant culture increases tolerance among majority-culture readers. A quite different type of study examines the effects of phonetic variations in texts, asking whether sound patterns have a detectable influence on readers.42

While empirical studies of literature put us firmly back in touch with real readers, one important question that arises is, what is the relevance of empirical studies for the mainstream literary disciplines. I should emphasize first that empirical studies is not itself a coherent discipline: it is, rather, an eclectic mixture of several disciplines, with workers in different fields drawing at times on approaches from psychology, neuropsychology, sociology, anthropology, linguistics, media studies, cultural studies, and, needless to say, several kinds of literary theory. This list is, of course, also true of many types of research in mainstream literary studies. But what distinguishes empirical studies, as the name suggests, is a serious commitment to the examination of reading and the testing of hypotheses about reading with real readers; and this differentiates it clearly from the reader response studies of the last thirty years, from Stanley Fish to Wolfang Iser. But the present moment may be propitious for empirical studies to catch the attention of literary scholars. If literary studies is now “after theory,” we might want to consider whether empirical studies of readers and reading provide new landmarks for a more socially responsible and ecologically
valid form of scholarship. I outline briefly what some of the questions for research might be – I will mention four.

First: What is literary? An ambivalence over or the rejection of literariness has influenced a number of scholars of reading, whether empirical or mainstream. To assume that methods of literary analysis drawn from sociology, linguistics, or cognitive science will be adequate for all needs forecloses the possibility of establishing what may be distinctive to the experience of literature. Whether literature can be distinguished is, properly, an empirical question. If “high” literature, as we might call it, calls upon characteristically different modes of reading, then it should be possible to demonstrate this (without, of course, disparaging the role of readers when reading other texts such as popular fiction, which has its own values). Given the weight of empirical evidence now available (which includes the studies by Van Peer and Miall and Kuiken that I reviewed earlier), the claims of Terry Eagleton and other theorists that dismiss literariness as an illusion now begin to seem untenable. We would never know this, of course, unless we studied real acts of reading by ordinary readers (something that Eagleton and his colleagues have refrained from doing).

Second: Delimiting the literary. A separate question is how literature stands in relation to other forms of language, other media, such as video games, movies, or advertising. Since younger readers in particular are now likely to be exposed to such media from an early age, we must ask what influence these media may have on the skills or aptitudes involved in literary reading. (So far little research has been done on the literary aspects of other media.) Little is known about how ordinary readers choose their reading, what different kinds of media they choose, how they respond to it, how it compares in their view with other forms of leisure activity such as video
gaming or going to the movies, what difference it makes to their lives, and what
cultural or historical processes impact the activity of reading. Better information on
this is important in its own right, but might also enable us to develop a more effective
classroom environment for literary studies.

Third: Normative assumptions. We must ask whether our studies of literature
embed hidden assumptions about the kind of reading we think should be occurring.
Should we, or even can we, avoid such assumptions? For example, in the
phenomenological work I described, in which we compared similes and metaphors of
identification, it is tempting to pay closer attention to readers demonstrating
metaphors of identification since these appear to involve a more radical commitment
of the self to the text being read. But is this to argue that such readings are to be
preferred? This issue raises larger questions about the place of literary reading in
society that are ethnically and historically inflected, and that call for wider study than
literary scholars have typically given it. It would call into question the hermeneutics
of suspicion that currently frames most academic literary interpretation.

Fourth: Studies of reading, whether historical or empirical, require a wider
sense of the cognitive processes with which evolution has equipped us.
Developments in cultural analysis by evolutionary psychologists suggest that the
evolutionary determinants of literary reading can now be seriously considered as a
framework for understanding its present significance. What underlying, species-
specific proclivities have led to the emergence of a literary culture in every human
society in the world? Findings on this issue would lend stability and direction to our
studies of literary reading, whether focused on contemporary or historical readers.

I would certainly not suggest that all literary scholars should turn to empirical
methods of study. Rather, I suggest that an acquaintance with the methods and results
of empirical study could act as a guiding perspective grounding future scholarship, enabling us to situate our findings within the realities of the process of literary reading, including how reading has changed historically and will change in future. To restore contact with the reading of real readers will validate our discipline and provide it, once again, with a living context. That this is urgently needed is suggested by a remark of Stephen Greenblatt. Commenting recently on a survey conducted by the MLA about the public’s perception of literature and language teachers, he said that the results were sobering: “most Americans . . . do not begin to recognize the absolute centrality of literature and language in their lives”; in addition, referring to literary scholars like himself, “in the public perception, it is as if we were cut off from the rest of the world, locked in our own special, self-regarding realm.” Empirical studies, I suggest, has the key to unlock the door of that prison house.
Notes. Symbols used here are: ..... Phonology; _____ Grammar; large box, Semantics.

Types of foregrounding device: small box, parallelism; small circle, internal deviation; X, determinate deviation; small triangle, statistical deviation.

Figure 1. Reproduced by permission from Willie van Peer, *Stylistics and Psychology: Investigations of Foregrounding* (London: Croom Helm, 1986), 77.
TABLE 1. Foregrounding analysis of four segments of *The Trout*

<table>
<thead>
<tr>
<th>Segment</th>
<th>Phonetic</th>
<th>Grammat.</th>
<th>Semantic</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. One of the first places Julia always ran to when they arrived in G--- was The Dark Walk.</td>
<td>k x 2; l x 3; n x 3; w x 4</td>
<td>G---</td>
<td>Caps:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>D- W-</td>
</tr>
<tr>
<td>2. It is a laurel walk, very old, almost gone wild, a lofty midnight tunnel of smooth, sinewy branches.</td>
<td>l x 7; m x 3; n x 5; s x 3; w x 2</td>
<td>3 sub phrases</td>
<td>met: midnight sinewy</td>
</tr>
<tr>
<td>3. Underfoot the tough brown leaves are never dry enough to crackle: there is always a suggestion of damp and cool trickle.</td>
<td>ckle x 2; ough x 2; c x 3; d x 2; n x 3; r x 4; t x 4; u x 4; z x 4; cons: crackle/trickle</td>
<td>balance phrase struct; w/o: under-foot</td>
<td>met: suggestion; oppos: dry/damp</td>
</tr>
<tr>
<td>4. She raced right into it.</td>
<td>r x 2; t x 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTES. Metrical foregrounding: adjacent stresses are shown in boldface. In the Phonetic column a letter or morpheme followed by a number indicates alliteration or assonance. Abbreviations: cons: consonance; sub: subordinate; struct: structure; w/o: reversal of usual word order; Caps: capitalization; met: metaphor; oppos: semantic opposition.

Notes


3 The main scholarly association in this area is the International Society for the Empirical Study of Literature and Media (IGEL), founded by Siegfried J. Schmidt; the first conference was held in 1987. See: [http://www.arts.ualberta.ca/igel/](http://www.arts.ualberta.ca/igel/). The earliest publications in the area by such authors as Schmidt, Norbert Groeben, and Colin Martindale date from the 1970s.


6 Stanley Fish, *Is There a Text In This Class? The Authority of Interpretive Communities* (Cambridge, MA: Harvard University Press, 1980), 355.

7 Cited in Peter Rabinowitz, *Before Reading: Narrative Conventions and the Politics of Interpretation* (Columbus: Ohio State University Press, 1998), 17.


12 This may include a range of activities other than reading, as Leah Price points out: “Reading: The State of the Discipline,” Book History 7 (2004): 303-320, especially 305-6.


15 Culler, Pursuit, 11-12.

16 Rabinowitz, 27.

17 De Certeau, 170.


19 Peter Stockwell, Cognitive Poetics (London: Routledge, 2002), 94. Stockwell’s book claims to demonstrate how cognitive processes, such as the deployment of prototypes, the figure/ground contrast, deixis, or schemata, shape the act of reading. Like a number of scholars in this field, however, Stockwell depends on an interpretive method and makes no attempt to verify his proposals empirically.


24 Patrick Macgill, *Children of the Dead End* (Toronto: Musson, 1914), 137.


37 Smith, 35.


41 Ibid, 187.
