# Why Fiction May Be Twice as True as Fact: Fiction as Cognitive and Emotional Simulation

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Although fiction treats themes of psychological importance, it has been excluded from psychology because it is seen as involving flawed empirical method. But fiction is not empirical truth. It is simulation that runs on minds of readers just as computer simulations run on computers. In any simulation, coherence truths have priority over correspondences. Moreover, in the simulations of fiction, personal truths can be explored that allow readers to experience emotions—their own emotions—and understand aspects of them that are obscure, in relation to contexts in which the emotions arise.

Fiction means something made, even something made up. As compared with things found, such as the data of science, people are suspicious of it. This suspicion leaks into common usage: Fiction has come to mean falsehood.

The work from which has sprung much literary criticism, and some psychology of reading and writing, is Aristotle's *Poetics* (trans. 1970). In it poetry, like fiction, meant something made, covering all literary works including drama. In what follows, I use the term fiction rather than poetry, but with the same inclusive sense. This article can be thought of as arguing for a new relevance of the *Poetics* in modern psychology.

The *Poetics* combined literary criticism and psychology; indeed, it assumed an easy relationship between the two.<sup>1</sup> In modern times, however, psychology has become empirical science. As such, it seems to offer no serious role for fictional literature. Narrative accounts of human behavior by any single observer, without regard to sampling or the subjective bias of any

individual perspective and without methods that allow generalizability, fail to meet even minimal standards for empirical psychology. And if to such defects is added the admission that fiction is a difficult-to-disentangle mixture of what has been observed, remembered, and imagined by an author, then the predicament of fiction in psychology seems hopeless indeed (see Oatley, 1992).

Consider, for instance, Carlson and Hatfield's (1992) textbook on emotions, in which excerpts from novels are used and in which, every 10 pages or so, a literary quotation is offered, set off from the text (e.g., "The ancestor of every action is a thought, Ralph Waldo Emerson"; p. 80). According to the authors, they used artistic and literary "reference points [meaning illustrations] ... to add liveliness and a human aspect to the scientific presentation" (p. x). Carlson and Hatfield correctly caught the psychologist's usual sense of the issue, which is that it may be regrettable that scientific psychology is often dry, and therefore, as a concession to students, some illustrations are allowed. Note, however, that beyond this, no role for fictional literature in psychology is envisaged.

The assumption that fiction is largely irrelevant to serious psychology was difficult to counter until Gerrig's (1998) book. He showed that fiction is easily accommodated by ordinary

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<sup>&</sup>lt;sup>1</sup> To help bring psychology closer to literary criticism, I present much of the argument in this article not in the form of inference from empirical data but as literary quotation, from which I hope certain phenomenological effects may be experienced.

cognitive processes such as inferring from incomplete evidence. His is a subtle argument, one that reaches thought-provoking conclusions. He proposed that, for psychologists interested in language, fiction is of interest because it has the same status that illusions have for psychologists interested in perception. Because of its clear nonveridicality, fiction can help to demonstrate cognitive processes that underlie both fictional and nonfictional understanding. Gerrig concluded, correctly I believe, that both fiction and veridical understanding are based on schematic construction.<sup>2</sup>

The primary psychological discovery of the constructive nature of narrative understanding was due to Bartlett (1932). He showed that when people read a story, their comprehension and remembering of it are not faithful renderings. They are based on idiosyncratic and societal schemas available to the reader; these schemas assimilate salient details and the emotional tone of a story and can then, if remembering is required, generate a construction of it that is more or less inaccurate. With Bartlett's finding, one can see that it is not just that stories are made up; in people's understanding of them, they suffer uncontrolled changes and a further drift toward the inaccuracy with which fiction is associated. In a postmodern context, another aspect of this finding is that fictional stories are polysemous. People necessarily make different interpretations of them.

The abilities of cognitive construction of human beings have, of course, led to philosophical suggestions that social psychology might properly be based on social construction (e.g., Gergen, 1994). It is not my purpose to make such a case here, but my proposals are easily assimilated to this movement.

Although Gerrig was persuasive in demonstrating processes such as schematic construction that are common to both fiction and veridical understanding, the tenor of his argument about the truth value of fiction remains one of suspicion. He and his colleagues (Prentice, Gerrig, & Bailis, 1997) included, in their introduction to an experimental article, the observation that in *The Lyre of Orpheus* the novelist Robertson Davies has a character talking about fetal alcohol syndrome, but with the facts wrong. Their experiments were empirical demonstrations that readers encountering assertions in fiction tend simply to accept them.

They found that, as compared with participants reading a fictional passage who had firsthand knowledge of its setting, participants who did not have such firsthand knowledge tended to believe information that was false. The problem with fiction, according to Gerrig-and according to the conclusions of these experiments—is not that of explaining what Coleridge called the "willing suspension of disbelief" (Gerrig, 1998, p. 6), which implies that some special effort or some special psychological process is necessary to explain how fiction works. The problem is quite the opposite. It is nonfiction, with its primary representative science, that requires special effort. Fiction lowers barriers to assimilation; all too easily, it can undermine the effortful processes of science. One can imagine that Gerrig would have thought Coleridge more correct to have written that science requires the willing suspension of facile belief.

At the conclusion of his book, Gerrig suggested that fictions may, nonetheless, be useful in intermediate stages of thought, because they are cancelled when valid results are reached. He speculated that, perhaps, "information from fictions . . . has provided a positive balance of utility over the period in which our mental processes were shaped" (Gerrig, 1998, p. 237). So, despite the interest of his argument that fiction is supported by the same cognitive processes as ordinary comprehension, in the end Gerrig too separated fiction—untrue and potentially misleading—from psychology, with its effortful procedures for reaching valid empirical conclusions.

In this article, I argue that such separation has been a loss to both fields, and I make an alternative proposal. Fiction is dismissed in this kind of way only if it is understood as defective empirical description. I accept Gerrig's conclusion that fiction is to be understood by means of the ordinary processes of cognition, but I propose a conception within which fiction could have a wider place in modern psychology. Modern psychology as science has allied itself

<sup>&</sup>lt;sup>2</sup> Gerrig's (1998) proposal that fiction is a kind of cognitive illusion seems not to be readily compatible with his idea that fiction might be useful as an intermediate stage in valid thought. I do not believe, for instance, that any comparable argument for the utility of illusions has been put forth by perceptual psychologists. Perceptual illusions are regarded as having no intrinsic functions and as by-products of normal processes.

with only one kind of truth: truth as empirical correspondence. This kind of truth is necessary but not sufficient. If psychology is to be fully psychology, there must be consideration of two other kinds of truth as well: truth as coherence within complex structures and truth as personal relevance (see Table 1).

Empirical psychology obeys criteria of the first type of truth. Fiction fails this criterion but can meet the other two. One could say, then, that fiction can be twice as true as fact.

The proposals that fiction can fulfill the criteria of truth as coherence (as in simulations) and truth as personal insight both give a central role to emotions, so before putting these proposals forward, let me offer a word about this role. Bruner (1986) has argued that narrative is that mode of thinking in which human agents with goals conceive plans that meet vicissitudes. He compared it with the paradigmatic mode, which is used to reason about scientific matters. (This is the more effortful mode mentioned earlier, which requires suspension of too-facile belief and careful use of different kinds of inference in coordinated sequences [Oatley, 1996].)

Not all narrative is fiction. Aristotle made this distinction: History is about the particular, about what has happened, whereas poetry (fiction) is about the universal, about what can happen. One could add that empirical psychology, with its convention of past-tense descriptions of data that have been gathered, can be grouped with history.

A further distinction of psychological interest is that (as many people have pointed out) whereas nonfiction is primarily informational, fiction is concerned with the emotions. Vicissitudes tend to elicit emotions. Thus, one could add to Bruner's proposal the following: Fic-

Table 1
Types of Truth, Methods to Approach Them, and Criteria for Their Recognition

Туре	Method	Criterion
Correspondence	Empirical	Valid discovery of facts, reliability, practical usefulness
Coherence	Simulation	Production of emergent effects without ad hoc intervention
Personal	Reflection	Recognition, insight

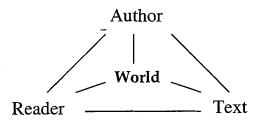


Figure 1. Diagram of the relations among author, world, reader, and text, after an idea of Abrams (1953, p. 6).

tional narrative is that mode of thought about what is possible for human beings in which protagonists, on meeting vicissitudes, experience emotions.

A typical fictional narrative is based on the following schema (Rumelhart, 1975): agent with goals and a plan that typically involve other agents → vicissitude → emotion, which maps onto Aristotle's proposal that a story has a beginning, a middle, and an end. Moreover, because the concern here is with a psychology not only of writers and texts but of readers too, I should note, as Aristotle did, that in fiction emotions tend to be experienced by the reader.

#### Mimesis: Relation of the Text to the World

My first proposal concerns the relation of literary works of art to the world. Abrams (1953) offered a schema of literary criticism during the last 2,300 years (see Figure 1) that clarifies this question. The relation in question is indicated by the link between "text" and "world." The question of how writing can relate to the world has been a concern of literary critics from Aristotle onward, and the writing of this article is itself an indication that the problem has not been fully solved.

The term used by Aristotle to describe the relation of world to text was *mimesis*. It was the central concept of the *Poetics*. Over the time during which such matters have been written about in English, the term has almost universally been taken to mean imitation or representation. Shakespeare's version was that drama holds "as 'twere the mirror up to nature" (*Hamlet*, III, ii, 1. 22 [Methuen]). To Philip Sidney (1595/1986), a poet who was Shakespeare's contemporary, *mimesis* meant "a representing, counterfeiting, or figuring forth" (p. 114), and English transla-

tions for the succeeding 400 years have followed the same tradition.

The first experiments in photography occurred about 200 years ago. There followed other copying technologies, such as film, audio recording, and video recording, that not only produced images that endure but can imitate more faithfully than can any human. So, unintentionally, the idea of art as a faithful representation of nature was finished.

Historically, literary criticism did not remain fixated on this problem. During the Renaissance, for instance, rhetorical issues became more prominent, as indicated by the link in Figure 1 between author and reader, with its question of how the author addresses the reader via the text. About 250 years ago, the era of romanticism in literature began. This involved a further shift of interest to the link, in Figure 1, between author and text, of how the writer produces the work of literary art. In the last 30 years or so, although generally still within the romantic period, the focus has shifted again, now to the link between reader and text, to the questions of reader response and how readers interpret a text.

Important in discussions of the romantic approach to literature was Wordsworth (1802/1984), who explained the relation of writer to text:

Poetry is the spontaneous overflow of powerful feelings: it takes its origin from emotion recollected in tranquility: the emotion is contemplated till by a species of reaction the tranquility disappears, and an emotion, kindred to that which was before the subject of contemplation, is gradually produced, and does itself actually exist in the mind. (p. 611)

And so, it seemed, with the romantic conception, the problem of art as mimesis might have been made to go away. Perhaps the most articulate philosopher of this romantic theory of art was Collingwood (1938). He accepted that mimesis equaled representation and saw this as the mark of the technical. He went on to argue that one needs a representation when one is working to a plan: representation equals blueprint. In fiction, the idea of writing technically is that of formula: to achieve a predetermined end of arousing specific emotions in the reader, such as anxiety in a thriller or tender feelings in a romantic love story. When people see deliberate elicitation of specific emotions in other societies, they call it magic, which they tend to regard as pseudoscience. But this is wrong, according to Collingwood. Magic is legitimate social activity; it can-be seen in the shaping of preference by advertisement, in a skilled speaker arousing an audience, and in mass-market paperbacks and movies. Such emotionalmagical—effects are not pseudoscience but pseudo-art. Art proper is the creative expression of an emotion in a particular medium such as words. Because emotions are responses to the problematic and to the unanticipated vicissitudes of life, they basically demand creative responses, as Averill and Nunley (1992) have persuasively argued. By definition, being creative cannot be done to formula in relation to any representation or to determine any specific effect. It is for this reason that Collingwood, with the typical understanding of mimesis as representation, rejected Aristotle's Poetics as technical hints for hacks and thereby finessed the problem of what relation the work of art might have to the world. With art proper, he argued, there is only the creative expression of emotions, and there is no issue of representation.

Despite this, the question of the relation of words to world did not go away. Also, despite the limitations of science and the naggings of postmodernism, science can bring words and other symbols into correspondence with things in the world, but this needs the complex and effortful procedures discussed earlier.

Let me now, however, offer two accounts of mimesis that, although related in part to the romantic solution, involve two interconnected ideas that do not deny an important relation between world and text but propose a relation other than mere representation. One is in the humanist tradition, and the other is from cognitive science. Both show how one can think of art as illuminating or clarifying the problematics of human action in relation to the emotions.

### Fiction as Dream and as Imagination: A Humanist Metaphor

In "The Art of Fiction," Henry James (1884/1951) wrote in favor of representation: A novel, he wrote, is "a direct impression of life." Robert Louis Stevenson (1884/1992b) made a reply, saying it was no such thing. The novel is an abstraction. One cannot do without the idea of a perfect circle, but it exists only in the abstract realm of geometry. One cannot do without the idea of character, but one encounters

it in pure form only in fiction. Stevenson (1884/1992b) went on:

Life is monstrous, infinite, illogical, abrupt and poignant; a work of art, in comparison, is neat, finite, self-contained, rational, flowing, and emasculate. Life imposes by brute energy, like inarticulate thunder; art catches the ear, among the far louder noises of experience, like an air artificially made by a discreet musician. (p. 182)

In 1888, Stevenson, continuing to ponder the issue, wrote the following:

The past is all of one texture—whether feigned or suffered—whether acted out in three dimensions or only witnessed in that small theatre of the brain which we keep brightly lighted all night long, after the jets are down, and darkness and sleep reign undisturbed in the remainder of the body. (1888/1992a, p. 189)

Fascination with dreams was common for writers of the romantic era. The following is from a French contemporary of James and Stevenson, Hippolite Taine (1882):

So our ordinary perception is an inward dream which happens to correspond to things outside; and, instead of saying that a hallucination is a perception that is false, we must say that perception is a hallucination that is of the truth. (p. 13, my translation)

(Departing for a moment from the humanist metaphor, Taine's theory of perception restates Helmholtz's [1866/1962]. It has been restated again in recent connectionist theory that the mechanism of visual perception depends on a kind of constructive dreaming [Hinton, Dayan, Frey, & Neal, 1995].)

Gardner (1984) has used the same idea: What a novel does for a reader, he stated, is to provoke a certain kind of dream. Think of it like this: Close your eyes and then, instead of your experience being guided by signals from the visual system, think of the novelist whispering in your ear to offer purely verbal materials to start up, construct, and sustain the dream. Gerrig (1998), in his book on the psychology of experiencing narrative worlds, came to a comparable conclusion; he proposed the metaphor of "being transported" (p. 2) by the book to another time and place.

Imagination has been perhaps the favorite way of understanding poetry in the romantic period: being able to glimpse the infinite through a strongly imagined nature poem, for instance, or being able to glimpse the nature of unconscious forces acting on one in gothic novels of the same era (Miall, 1997). For

psychologists, the idea of imagination relates easily to that of constructivism. Because most people have the experience of creating dream sequences from memories, day residues, preoccupations, and more obscure sources, the dream metaphor, although including the idea of imagination, brings the constructive potential of mind more strongly into focus.

Human mental life depends strongly on constructive abilities. What human minds do generally is to make models that parallel the workings of the world (Craik, 1943). Language is thick with ideas of this function: simile, metaphor, schema, parallel, analogy, theory, hypothesis, explanation, model, and so on. The dream is just one example of the constructive machinery running to create worlds in particular ways or for particular purposes.

Abrams (1953) has proposed that the writer of fiction be thought of primarily as drawing attention to things. The metaphor of the dream of imagination shows how attention is indeed directed. A text guides one in dreaming this dream and not some other dream. Abrams suggested that, for the metaphor of the mirror, one substitute the metaphor of the lamp that illuminates and clarifies. This lamp lights the "small theatre of the brain."

# Fiction as Simulation: A Metaphor From Cognitive Science

One can counterpoise to James's idea of the novel as "a direct impression of life" another metaphor that was not available until recently (Oatley, 1992): A play or novel runs on the minds of the audience or reader as a computer simulation runs on a computer. Just as computer simulation has augmented theories of language, perception, problem solving, and connectionist learning, so fiction as simulation illuminates the problem of human action and emotions. With the metaphor of mimesis as simulation, however anachronistic it may seem, one can reread Poetics and see that something like this was what Aristotle really meant. He stated that correspondences are inessential; great drama is often in poetic verse, although no one ever spoke verse in real life. Aristotle asked what it is that makes a play moving. It is the plot, which is "the heart and soul, as it were, of tragedy . . . [it] simulates persons primarily for the sake of their action" (my translation, in italics, of mimesis).

What tragic drama achieves is a focus on essentials of human action. Nonessentials are excluded. As Aristotle put it: "A poetic mimesis, then, ought to be . . . unified and complete, and the component events ought to be so firmly compacted that if any one of them is shifted to another place, or removed, the whole is loosened up and dislocated."

Dream and simulation are both metaphors of the constructive activities that support fiction. Metaphors draw attention to some facet of experience and carry it over to something new or to something difficult to understand. Dreaming is familiar to most people, programming computers only to a few; thus, as a metaphor, simulation works well only for a minority. It has been important in cognitive psychology, however, so I press it further.

If art were representation, then literary art would simply figure forth or imitate a world and actions within it. But since the Russian formalists, two separable aspects of narrative have been recognized, the fabula (events of the story world) and the siuzhet (the aesthetic working of the plot). Following Brewer and Lichtenstein (1981), I label these aspects the event structure and the discourse structure. Thus, the writer must (a) provide an event structure, which psychologists can recognize as the material to be constructed into a mental model (Johnson-Laird, 1983) or situation model that, of course, does have aspects of representation (semantics), and (b) guide the reader by means of a discourse structure that includes speech acts (pragmatics) and cues to the reader as to how this model is to be constructed and run.

The parallel of narrative with simulation is made stronger by the fact that two comparable streams of information are also essential to any computer simulation. Consider, for instance, this fragment of a program I wrote, following Sharples, Hogg, Hutchison, Torrance, and Young (1989) in the language Pop 11, as a prototype for students to augment in an artificial intelligence course. The program simulates a conversation partner who can answer questions about the best route from anywhere to anywhere else in the downtown Toronto public transit system. In this fragment, two variables are declared by the command "vars." Then these variables ("travtime" and "changetime") are given values. Next comes the start of the declaration of a procedure, "setup ()," built on a database that is

a list of subway and streetcar stations in Toronto, each joined by "connects" to indicate which station directly connects with which other.

```
vars travtime, changetime;
2 → travtime; 5 → changetime;
define setup ();
[[[BloorSubway spadina] connects [BloorSubway st
george]]
[[BloorSubway st george] connects [BloorSubway
bay]]
[[BloorSubway bay] connects [BloorSubway bloor
yonge]]
etcetera.
```

In this simulation, one stream of information is a mode that exhibits correspondences with the world and that could be empirically verified or disconfirmed. Some of this information can be seen in the database over which the program computes within the procedure "setup ()": names of lines (e.g., "BloorSubway") and stations (e.g., "st george") that correspond to names of lines and stations in the real Toronto. But the other stream of information has its reality only in the computer world. It activates processes to make the simulation run (e.g., declaration of variables and definition of a procedure).

For a writer of fiction, it would be no good simply offering something like "event + event + event"; he or she must also offer cues and means for running the simulation. For instance, in writing a suspense story, there are three basic elements: (a) Get the reader attached to a likable protagonist, (b) create a believable threat to this character, and (c) have the threat originating from some person or agency toward whom the reader will feel antagonistic (Vorderer, 1996). At the start, a few pages may cover weeks or years of event structure. Once the threat is established, one can devote many pages to each hour of event structure. As this suspenseful version of the simulation runs, the reader feels duly anxious and continues to turn the pages until he or she can feel the relief of safety again.

The writer invites the reader to enter, Alicelike, through the looking glass and into the imagined story world. This is like entering a particular kind of social interaction, as Goffman (1961) has proposed, through a semipermeable membrane within which is a world with its own history and its own conventions from which meanings are constructed.

### Why Fiction Is Not Faithful Correspondence

Equipped with the idea of simulation, let us consider more closely why imitation is such an inadequate translation of mimesis, why a faithful copy such as an audio recording of a conversation could never be part of literature (well, hardly ever). This section also shows what is missing from correspondences and what must be provided to make them comprehensible to humans.

The following is a transcript of part of a purposeful conversation. A complex new photocopier had been delivered to a psychology department, so Charles Button, Stephen Draper, and I took the opportunity to record some conversations. Our only input was to give another member of our department (who, in this depiction, is given the name of Xavier) the goal of finding someone (Yolande) to show him how to use the copier. Apart from inserting this goal into his mind, everything else flowed naturally; nothing was contrived.

Xavier: Could you show me how to do the photocopying?

Yolande: Double sided?

Xavier: Eh. Yer. I want to do, to do double sided.

Yolande: Uhm, I don't know, some or . . .

Xavier: Sorry, what do you do here? [points to buttons] Yolande: This one. [selects button "Duplex 2"] But, eh, some turn the other way round. You must have it.

Writers avoid imitating all aspects of such conversations: "Eh. Yer ... uhm," needless repetitions ("to do, to do"), and lapses of grammar. Note, moreover, that after the first three utterances, this real conversation is largely incomprehensible from a transcript, although it was not to the participants. Let me write it as it might occur in a novel. I have preserved as many words from the transcription as I could, and I have made each paragraph correspond to each utterance in the transcript.

"Could you show me how to do the photocopying?" asked Xavier.

Yolande knew that Xavier must be able to do straightforward copying; he must want to do something more, perhaps learn advanced features of this irritating machine, recently delivered to the Psychology Department, which she had spent a good deal of time learning how to operate. Xavier only had one piece of paper: Maybe he wanted her to use it to show how the machine did different kinds of copying. "You want to do double sided?" she asked.

"Yes, I want to do double sided," said Xavier.

"It's more complicated than you might think."

"Sorry. What do you do here?" asked Xavier. He wanted to get started.

"You press this button, but usually you have to think about how many copies you want, and whether you have got single- or double-sided originals, and sometimes you have to worry about whether the copy on the second side will come out the right way round."

Note how the simulated (novelistic) version does not really imitate. Instead, I showed—as Aristotle stated—those essentials of human action that do not appear in behavioral copies such as tape recordings. These include characters' goals and interpretations. Also, I had to create a discourse structure to help the reader construct a working event model.

Recently, Scheff (1997) proposed a new methodology for the social sciences. He argued that records such as transcripts of conversation need to be studied in great detail as biologists study single specimens. The "specimens" are interpreted under the illumination of theories up to the widest level of generality. The process reminds one of literary criticism, in which a text is given context that enables it to be better understood. In two chapters of his book, Scheff indeed works with literary examples, a Shakespeare play and Jane Austen's novels. He works in a comparable way with transcripts of conversations of children and with telegrams between national leaders during the preliminaries to World War I. The conversations come to be understood as negotiations in the sustaining of self, with its possibilities of intimacy and the threat of shame.

To help one construct one's mental models of the world under consideration, Scheff's interpretations are equivalent to the novelist's guidance about how to understand events in the world. They are equivalent, too, to the stream of information in programs that guides a computer in running a simulation. In recounting empirical studies in psychology, one follows a similar convention: Methods and results sections would be difficult for a reader to understand if it were the first time the genre of the empirical psychological study had been encountered, and they can sometimes be hard to understand even for experienced psychologists. They are, therefore, given the context of introduction and discussion sections to suggest interpretive frameworks.

Thus, not only do many imitative representations require explication, but fiction does not

really imitate. It does not even copy conversation, which many assert to be the form of life most indigenous to fiction.

As a further example, consider one of the world's greatest novelists, Tolstoy, and a conversation from the novel that many consider his greatest, *Anna Karenina*. The following excerpt involves the novel's central moments: Anna and her husband are watching a cavalry officers' race when a rider falls.

The officer brought the news that the rider was unhurt but that the horse had broken its back.

On hearing this Anna quickly sat down and hid her face behind her fan. Karenin saw that she was crying, and that she was unable to keep back either her tears or her sobs that were making her bosom heave. He stepped forward so as to screen her, giving her time to recover. "For the third time I offer you my arm," he said. (Tolstoy, 1877/1901, p. 210)

#### Then, in the carriage on the way home:

"Perhaps I was mistaken," said he. "In that case I beg your pardon."

"No, you were not mistaken," she said slowly, looking despairingly into his cold face. "You were not mistaken. I was, and can not help being, in despair. I listen to you, but I am thinking of him. I love him, I am his mistress, I cannot endure you; I am afraid of you, and I hate you." (Tolstoy, 1877/1901, p. 212)

What is wrong with this? Empirically, almost everything. It presupposes an observer either with supernatural qualities or with a tape recorder hidden in the carriage. In any case, the whole passage is too stagy; people do not talk like this. The whole thing is made up. It is obviously better written than ordinary people could manage, but it has scant relation to real conversation.

If you want to know the correspondence or truth of what goes on between married people in conflict, you bring a proper sample of married couples into the laboratory, as Gottman and Levenson (1992) have done. You have each person complete psychological instruments to measure marital satisfaction. You wire them up to polygraphs and videotape them to record speech and facial expressions. You ask them to talk with each other, first about a neutral subject and then about a topic of conflict between them. To obtain records of subjective emotions, you show each participant the video the next day and have the participant indicate what he or she was feeling at each point.

The point is this: Many, perhaps most, transcriptions would not be intelligible on their

own. There are two routes. Either transcription must be accompanied by interpretative analysis (e.g., of the kind offered by Scheff or Gottman and Levenson) so that the reader can understand it, or, if utterances are to be understood smoothly by the reader at the time of reading, they must be altered (fictionalized). They may then become parts of a simulation in which meanings can become comprehensible. Fiction provides context to understand the elliptical. It offers the context of characters' goals and plans. It gives a sense of how actions lead to vicissitudes. It allows, too, the reader to experience something of emotions that can arise. All of these elements are omitted from a faithful, empirically unexceptionable copy of real life.

In fiction based on simulation it is important, of course, to have some imitative correspondence with the real world; some aspects are represented in the event model, just as the names of subway stations were represented in my simulated conversation partner. Without such correspondence, fiction founders. But piece-by-piece correspondence is in the service of coherence within the larger structure and of the relationship with the reader.

# Dream and Simulation as Alternative Metaphors of Construction

Dream and simulation are alternative metaphors; one rather than the other is likely to be preferred by each reader. The essence of both is that mental life is constructive: The machinery of cognitive construction, the reader's share, is within every one.

For the literary experience of fiction, the Japanese drama form Bunraku (Inoura & Kawatake, 1981) offers a slightly surprising glimpse of human constructive abilities. In Bunraku, the characters are represented by puppets that are about two-thirds life size. Each is activated by three puppeteers, who appear on stage dressed in black cowls. The chief puppeteer holds the puppet's torso, manipulating its right arm and expressions of its face. One assistant manipulates its left arm and the other its legs. The words of the play are poetry read by a narrator who is sitting in full sight at the side of the stage with an open book. For these dramas, stage settings are colorful and striking, and the plays are accompanied by music.

The elements of this drama form, described in this way-actions represented by artificial puppets, partly hidden forces that control them depicted by visible puppeteers, the metrical poetry read by a narrator, and the music-could all seem utterly disparate and incomprehensibly strange formal devices. But the Bunraku form became popular during a period of rapid urbanization in which Japan was emerging from feudalism and undergoing a humanistic renaissance comparable to the European Renaissance. The plays include themes of power, revenge, and adultery and were written for this form by great poets, including Chikamatsu, "the Japanese Shakespeare." The audiences integrate the seemingly disparate elements, constructing and creating for themselves a seamless, moving experience.

Westerners think of themselves as preferring realism in drama. But, lest the idea of integrating the disparate elements of Bunraku seems strained, note that film, that seemingly most realistic form, is usually made with several cameras in the same scene. Some cameras zoom, others track smoothly on rails, and yet others may be located high in the air. Shots are edited to form sequences that no human observer could ever experience. The editing is designed not to imitate what a real human observer might ever see but to give the impression of being in exactly the right place, at the right moment, to follow a plot. The staging and editing are the equivalent of the discourse structure of a literary text, the housekeeping of a program that allows the simulation to run.

#### Personal Properties of Fiction

The first proposal of this article is that fiction is a kind of simulation that serves as a coherence form of truth. The second is that fiction can be involving; it can serve as a personal truth and give rise to insight. Although nonfiction such as science can be interesting, it is not generally part of its function to touch its readers in a personal way.

Larsen and Seilman (1988) argued that whereas perception could conceivably be explained in such terms as extracting invariants, the generation of meanings from black and white marks on a page can be explained only in terms of readers' constructive activities. They

investigated this further by what they called the method of self-probed retrospection. They had readers mark either a fictional or an expository text (each of about 3,000 words) when a memory occurred during reading. The readers then went back to identify and classify the memories. The authors found that twice as many memories in which the reader was personally involved as an actor (as compared with an observer of reported events) occurred with the fictional text as with the expository one. They argued that this kind of reminding provides the basis of a personal resonance between themes of a story and those of the reader's life.

It seems likely that the provenance of fiction is the ordinary conversation (turning things over together) in which humans have taken part in all known societies. Such conversation is most frequently about what people have done, what they are up to, and what the personal implications of such doings might be. Thus, Dunbar (1993) found that, in conversations in a college refectory, approximately 70% of the talk (slightly more when women were speaking and slightly less when men were) involved personal relationships, personal experiences, and social plans. It is natural to suppose that fiction derives from this kind of (mostly historical) narrative to include what one can imagine people doing. Such narratives, of both the conversational and fictional kind, are not just common; they are at the center of social life.

What is the function of such narrative? Dunbar (1996) has argued that conversation about oneself and others has a function of socioemotional bonding. As such, it occupies the role of grooming in other primates. Under this proposal, the sharing of fictional narrative, starting from the stories that parents tell children, will be as bonding as the recounting of remembered events. The private reading of novels is less immediately intimate but retains some of the sense of social connection.

Rimé (e.g., 1995) has found that whenever an emotion is remembered a few hours after it occurred, it is likely to be confided to someone else. Confiding such everyday emotions and turning them over with others may be comparable to experiencing emotions in fiction in ways that allow one to reflect on them from the new perspectives of the stories' circumstances. Both of these modes, therefore, may help self-understanding.

But fiction has yet other functions. Fiction in the form of myths and cultural themes contributes to the forming of societies and individuals' identities within them. When intense emotions are elicited by intense adversities, societies typically offer their members ways of dealing with these disrupting elements. Most indigenous forms of narrative therapy and healing, for instance, have cultural functions of reintegrating disordered individuals and disturbing experiences with communal beliefs and practices. In the same vein, Spence (1982) has argued that, in psychoanalysis, analysand and analyst jointly create a narrative that replaces the analysand's symptomatic account. It is not an empirically verifiable history of the analysand's life. It is a form of art, and its therapeutic value depends on this. One of the most important suggestions made in this area is that certain rituals, as well as certain kinds of drama and other fictional forms. achieve their principal therapeutic value for emotions that have been too overwhelming for people to assimilate in ordinary life. These narrative forms prompt individuals to recall such devastating emotional circumstances and come to terms with them (Scheff, 1979; I discuss Scheff's hypothesis in more detail later).

# Emotional Involvement in the Genre of Tragedy

It can be seen from the classical Greek theater, how personal involvement in certain kinds of narratives can help members of an audience understand the problematic in social life and integrate understandings with existing models of self and other. By general consent, the most momentous literary discovery of Aeschylus and Sophocles in their tragedies was that human action, no longer directed by gods, often produced unforeseen results. If there was a time when gods directed human action, those gods, of course, had perfect mental models and unlimited agency. They were, in other words, omniscient and omnipotent, and therefore all turned out as intended. Such a time can be glimpsed in Homer's Iliad (trans. 1987). The psychological insight is that if now humans live in a world in which they choose many of their own actions. then their mental models are usually imperfect and invariably incomplete, whereas their agency is limited by the constraints of embodiment. So-necessarily-although they start with aspirations (goals) and although they contrive plans, people's actions can have consequences they do not foresee (vicissitudes). As authors of these actions, people experience their consequences and must take responsibility for them, suffering the changed personal circumstances and their accompanying mental states (emotions).

In Aeschylus's (trans. 1966) cycle of plays, the Oresteia, the gods have an intermediate existence between those powers whose plans were responsible for all human action and suffering (as in the *Iliad*) and their seeming absence from modern life. In the final play of the trilogy, their roles as aspects of human psychology become clear. Vengeful anger is personified as the "furies" who appear as a chorus that can pursue and drive people in ways that are individually as well as societally destructive. They pursue Orestes for having killed his mother. But the voice of civic justice is personified as Athena. The furies' power is no longer untrammeled. They must plead their case in a judicial process. Orestes says that his mother, Clytemnestra, slew his father and that the outrage of this and the compelling will of Apollo drove him to matricide. In the play, responsibility for resolving this impossible and angry crisis moves beyond family vendetta. Angry vengeance becomes a part (not the whole) of the resolution and must enter a relation with civic wisdom.

The members of the original audiences for such plays sat not in the privacy of cinema darkness but in full sight of their neighbors, beside them and across the other side of the semicircular seating area. Such plays were not just social occasions; they were occasions of social engagement, enactment, and integration.

In Sophocles's King Oedipus (Aristotle's example of the perfect tragedy; trans. 1947), the idea of human knowledge being limited is explored in a yet more personal way. The implication is that one must limit too one's arrogance. Oedipus had come as a prince from Corinth, to save Thebes by solving the riddle of the deadly Sphinx that menaced the city. He was received by the Thebans with joy, became their king, and married Jocasta, widow of Laius, the former king. At the start of the play, the city is again in affliction. Jocasta's brother says it is caused by the pollution of harboring the killer of Laius. Oedipus forms the goal of again saving the city. He will find the murderer, and he starts

a plan to do so. The play is full of metaphors of seeing and blindness, of gods knowing and foretelling the future, of humans rejecting this knowledge and longing to shape their own fate, thinking they know but being ignorant.

What Oedipus does not know is that he had been adopted by the king of Corinth and that he himself killed Laius in a skirmish on his journey to Thebes. As both searcher and suspect, he gradually uncovers the secrets of his own birth, of his having been put out to die, pinioned by his ankles on a hillside, by a shepherd-servant of Laius, to escape the oracle that Laius's son would kill his father and marry his mother. As the narrative of his own guilt is pieced together, as finally the shepherd is summoned and tells that he was unable to condemn the infant Oedipus to death, the full discovery occurs. Oedipus, in frenzy, calls for a sword and goes to find Jocasta: "Where is that wife, no wife of mine." As the revelations began to be pieced together, when she heard the shepherd was to be questioned, she recognized the terrible truth, which had been hidden from her too. The chorus recounts how she fled to her bed chamber, locking the doors, crying to Laius in despair, and hanging herself. Oedipus burst through the doors.

The King saw too, and with heart-rending groans Untied the rope, and laid her on the ground. But worse was yet to see. Her dress was pinned With golden brooches, which the King snatched out And thrust, from full arm's length, into his eyes—Eyes that should see no longer his shame, his guilt.

On rereading this play (for perhaps the fourth or fifth time) for the writing of this article, I found myself once again moved, found tears in my eyes. It is not the psychological description of a process that is moving. It is its content that gives meaning to the tragic vision of human life and leads to the play's famous closing words of acceptance but with a certain subdued dignity in the shared human condition.

Then learn that mortal man must always look to his ending,

And none can be called happy until that day when he carries

His happiness down to the grave in peace.

The nature of the personal involvement here and, I would argue, in other literary fiction is emotional. Not only do the characters experience emotions as they meet vicissitudes, but

typically members of an audience, or readers, also experience emotions.

#### Why Emotions Are Important in Fiction

Emotions are important in fiction because they arise at the vicissitudes of life, brought on by actions with unforeseen results. Because of the way in which they can monopolize attention, emotions prompt one to concentrate on these issues (e.g., how this action could have led to that outcome). Moreover, they can also point to goals and concerns of which one is unaware. In a study of people who were asked to keep diaries of incidents of emotion, Oatley and Duncan (1992) found that 6% of emotions occurred without the participants knowing why, and, in different samples, between 5% and 25% of emotional incidents had aspects participants did not understand. If one falls in love, why with that particular person? If one feels grief for someone who has died, why does one feel angry as well?

Here is an example: One of Oatley and Duncan's participants, a nurse who worked by making home visits, was interviewed after recording an incident of disgust in her diary. She had felt the overwhelming sense of disgust as a patient cleared his throat. So strong was her disgust that she had to interrupt what she was doing, and her emotion made it difficult for her to perform necessary procedures. Thinking about the incident afterward, she found her emotion still sufficiently compelling to make her wonder about whether she should give up her job. When interviewed, she said that the man's clearing his throat reminded her of her exhusband, who used to clear his throat in a similar way, but that she could not understand why the patient, who was an inoffensive person, made her feel like this or why the feeling was so strong. So here are the beginnings of a story of a woman, and her life, and of something to do with an emotion that had an element of the mysterious about it.

Emotions can point to goals. They happen when events occur that relate to one's goals, to those concerns that are important to one. So an emotion not understood means that something has happened with an obscure implication. Perhaps one has some goal or concern of which one is unaware, or perhaps one has an inner conflict of which one recognizes only one side.

Emotions are at the center of literature because they signal situations that are personally important but that might be either inchoate or just beyond the edge of easy understanding. The simulations that are novels, plays, movies, and so forth can allow people to find out more about the intimate implications of their emotions. They offer a laboratory space that, relative to real life, is safe and can make the relations of emotions to goals and action easier to understand.

# Fictional Elicitation of Affect and Its Relation to Insight

There are several ways in which emotional states are elicited in fiction (Oatley, 1994). Here I distinguish between the elicitation of general affect (discussed in this section) and the elicitation of specific emotions (discussed in the next). Literary narrative, in contrast to nonliterary narrative, has properties that have been discussed by literary critics for at least two millennia. These properties are often referred to in such terms as foregrounding and defamiliarization (see, e.g., Miall & Kuiken, 1994). Certain phrases or passages can strike one anew even when what is referred to is familiar. Literary writers use a range of stylistic devices, from simple alliteration to complex metaphors and metonymies, that capture one's attention and prompt one to consider things in new ways. Sikora, Miall, and Kuiken (1998) found that such features were associated with affect in participants who read Coleridge's "The Rime of the Ancient Mariner" and that they increased the likelihood of insightful thoughts. Readers became involved in what the authors called enactment. In this mode of personal engagement, the boundaries between reader and poet became blurred, and the reader reflected on existential issues. Defamiliarization thus first prompts dissolution of aspects of a schema. Insightful resolution can occur when the schema reaches a new accommodation.

The question of what prompts insight has long been associated with the idea that literature can be profound. Longinus introduced the idea that certain expressions or images seem to come from some realm beyond the merely human. They can be sublime thoughts on fundamental issues of existence. Again, as with the lines from Sophocles, I offer a phenomenological demonstration from Shakespeare. Note that the effect is

not mere surprise, because these are perhaps Shakespeare's best-known words. Consider first an unsublime version that comes from the First Quarto of *Hamlet*, a version that probably was pirated by the actor who played Marcellus in one of Shakespeare's company's productions. The pirate was accurate with his own lines, but elsewhere he ran aground on the shoals of the ordinary.

To be or not to be, ay there's the point, To die, to sleep, is that all? Ay all: No, to sleep, to dream, ay marry there it goes For in that dream of death when we awake And borne before an everlasting judge.

Now compare this with the version from the collated Second Quarto and First Folio editions, thought to be Shakespeare's own words.

To be or not to be, that is the question: Whether 'tis nobler in the mind to suffer The slings and arrows of outrageous fortune, Or to take arms against a sea of troubles, And by opposing end them. (Hamlet, III, i, 1. 56–60)

A poet who sometimes achieved the sublime, and who also wrote about the issue in his letters, was Keats. The following is from a letter to John Taylor, dated February 27, 1818:

In Poetry I have a few Axioms, and you will see how far I am from their Centre. 1st I think Poetry should surprise by a fine excess and not by Singularity—it should strike the Reader as a wording of his own highest thoughts, and appear almost a Remembrance—2nd Its touches of Beauty should never be half way ther[e] by making the reader breathless instead of content: the rise, the progress, the setting of the imagery should like the Sun come natural too him—shine over him and set soberly although in magnificence leaving him in the Luxury of twilight. (Keats, 1818/1966, p. 46)

Keats's idea of "a fine excess" rather than "singularity" (oddness) seems apt. It is right too for mimesis as simulation: One simulates essentials, thus exaggerating them slightly in comparison with inessentials, for the sake of understanding. Just as striking is the idea that poetry should be a "wording of [the reader's] own highest thoughts, and appear almost a Remembrance." This was not a new idea in criticism, but Keats phrased it with such telling simplicity that some part of oneself leaps to meet it, with exactly that kind of engagement that Sikora, Miall, and Kuiken described as the mode of enactment, taking on the perspective of the poet.

### Fictional Elicitation of Specific Emotions

There are many methods of demonstrating and investigating the specific emotions that occur to readers when reading: emotions of anger, sadness, joy, and so forth. One way is a development of self-probed retrospection (discussed earlier), as devised by Larsen and Seilman (1988). In our research group, we have readers mark the text of a short story when a memory occurs, as Larsen and Seilman did. For each memory, we have them mark an M. In addition, we ask them to mark an E when they experience an emotion and, in more recent studies, also to mark a T when a thought occurs that is not a direct paraphrase of what they have read. We have now used the method with some 400 participants reading short stories. Only the occasional participant has failed to record both memories and emotions in this way.

In one study by Angela Baison and myself (Oatley, 1998), we asked high school students to read a 4,000-word story about adolescent identity that had either a male protagonist (by Carson McCullers) or a female protagonist (by Alice Munro). The boys experienced a mean of 3.9 emotions, and the girls experienced significantly more, with a mean of 6.7. We agree with Larsen and Seilman that the occurrence of memories points to the personal engagement of the reader in the story. So, too, does the experience of emotions. The significantly larger number of emotions and memories experienced by the girls is explained, we believe, by the girls being equally able to identify personally with male or female protagonists (they had about the same numbers of emotions and memories for both stories), whereas the boys had fewer emotions and memories if they read the story with the female protagonist than if they read the one with the male protagonist.

Another study showed that emotions can affect a story's interpretation. Seema Nundy and I (see Oatley, 1996) asked participants to read a short story called "Sara Cole," by Russell Banks. We found that exactly the same story engendered different emotions in different participants, and the different emotions prompted participants to different modes of interpretation. Participants who became sad during the first part of the story were significantly more likely to engage in a form of reasoning about the last part that is known as backward chaining: reasoning

backward to find causes of one's emotional state. Those made angry by the story engaged in forward chaining, reasoning forward about what the protagonist might do about the emotional state.

The finding that short stories generally produce emotions, but of different kinds, tends to confirm the constructivist theory of literary reading. Emotions that are produced by narrative are the participant's own. The finding that such emotions affected reasoning shows one of the ways in which qualitatively different interpretive readings can be given to the same story (cf. Barthes, 1975).

So general is the finding that emotions can be elicited by narrative that psychologists wishing to induce emotions in the laboratory now typically use this method. Usually excerpts from commercial movies are shown. For instance, to induce sadness, an excerpt from Sophie's Choice is widely used: Sophie is forced to choose which of her two children to sacrifice to the whim of a sadistic Nazi officer. Elicitation of emotions by film and by short stories is based on similar processes, although film is preferred for reliable and quick induction in laboratory manipulations. In contrast to the range of idiosyncratic emotions produced by certain fiction (as in the "Sara Cole" story discussed earlier), some pieces of text or film (such as the excerpt from Sophie's Choice) can reliably give rise to one rather specific type of emotion. This is the technical manner of magic, or pseudo-art, as described by Collingwood. Such inductions, then, have an interest for understanding of emotions such as visual demonstrations in perception (cf. Gerrig's, 1998, argument that fiction is like perceptual illusion). It is regarded as important among those who study visual perception to have the phenomenological experiences of additive color mixing, of the threedimensional effect of binocular viewing of stereograms, and so forth. Similarly, I would argue, it is important for psychologists who study emotions to experience them and their eliciting circumstances both when these conditions tend to prompt idiosyncratic emotions and when they more narrowly cause specific emotions.

At least three distinct psychological processes have been identified that lead to the reader experiencing specific emotions in fiction. These are as follows.

Identification. The emotions of identification fall out easily from the theory of fiction as simulation (Oatley, 1992, 1994) discussed earlier. The part of the mind on which the reader (or audience) runs the simulation of a novel, play, or film is the planning processor. Ordinarily, it is used in conjunction with one's mental model of the world to assemble actions into plans so as to attain goals (e.g., to pick up some milk on the way home from work). By contrast, when one is reading a story, the plot takes over the planning processor. One tends to identify with the protagonist, adopt his or her goals, and take on his or her plans. Then—straightforwardly, in the terms of this theory—one experiences emotions as events, and outcomes of actions are evaluated in relation to the protagonist's goals. But here is the extraordinary feature: Although the goals and plans are simulated, the emotions are not. They are the reader's own.

Sympathy. A second mode of emotional experience of narrative has been expounded by Tan (1994, 1996). In this mode, the writer offers patterns of events of the kind that cause emotions. From these, the reader attributes emotions to story characters and experiences sympathetic emotions toward these characters. Tan has argued that film is especially effective in inducing spectator emotions.

A third idea is Autobiographical memory. that of Scheff (1979). He argued that a primary function of narrative and drama is to allow the reliving of emotional memories from the autobiographical past. In ordinary life, Scheff argued, emotions can sometimes be overwhelming, so their meaning is not recognized. In other instances, one distances oneself from emotions and suppresses them. In either case, the effects of such experiences can leave one in emotional arrears, because events have occurred that have profound emotional significance but that one has not assimilated. Drama, novels, and certain kinds of rituals allow re-evocation of such emotions, neither underdistanced nor overdistanced but at what Scheff called an optimal aesthetic distance at which they can be understood and assimilated.

Relation of emotion-producing processes to simulation. Of these processes, identification is explained most directly in the simulation theory of literary experience, but sympathy and the prompting of memories also derive simply from this theory. Sympathy will occur as a

character's predicament is vividly imagined. Emotional memories are prompted both by emotions elicited by the other two modes and by events generated in the simulation that depict themes such as meetings, partings, misunderstandings, and reconciliations with which readers might have personal resonance.

## Does Fiction Have Properties That Nonfiction Does Not?

I have argued that fiction has effects that are personal and often emotional. There is perhaps no sharp dividing line between fiction and nonfiction. History and biography, for instance, can be profoundly moving, and an implication of this article is that psychological writing might also benefit by moving occasionally beyond the narrowly informational. Nonetheless, the typical emotional functions of fiction contrast with the typical informative effects of nonfiction. This contrast prompts the following question: "Is there some psychological function that fiction achieves better than nonfiction?" The question is an old one. One answer is that of Philip Sidney (1595/1986), who wrote that the poet

yieldeth to the powers of the mind an image of that whereof the philosopher [one might now say scientist] bestoweth but a wordish description: which doth neither strike, pierce, nor possess the sight of the soul so much as that other [the poet] doth. (p. 119)

One can read experiments, or tables of questionnaire responses, on emotions in the psychological literature, but when one thinks of experiencing and understanding an emotion, something like this proposal is needed. Sidney continued:

Let but Sophocles bring you Ajax on a stage, killing and whipping sheep and oxen, thinking them the army of Greeks, with their chieftains Agamemnon and Menelaus, and tell me if you have not a more familiar insight into anger than finding in the Schoolmen [its] genus and difference. (1595/1986, p. 119)

This kind of statement has generally been used, as indeed Sidney used it, in adversarial debates about the status of fiction. In academic life, the result has been a segregation of those who prefer the effects of poetry (and go into departments of literature) from those who prefer empirical truth (and go into departments of the faculty of science). Such either—or thinking may be appropriate in some circumstances, but in

psychology it has cut the subject off from important aspects of its subject matter.

One need not choose between what Sidney described as "the sight of the soul" and "wordish description." If we are to be proper psychologists, we need to include with the empirical the Gestalt understandings of simulations, and also the personal.

George Eliot, novelist and pioneer social scientist, put forward one of the most cogent arguments yet made for the relation between the empirical and the personal in psychology:

The greatest benefit we owe to the artist, whether painter, poet or novelist, is the extension of our sympathies. Appeals founded on generalizations and statistics require a sympathy ready-made, a moral sentiment already in activity; but a picture of human life such as a great artist can give, surprises even the trivial and the selfish into that attention to what is apart from themselves, which may be called the raw material of moral sentiment. . . Art is the nearest thing to life; it is a mode of amplifying experience and extending our contact with our fellow-men beyond the bounds of our personal lot. (George Eliot, 1856/1963, p. 270)

### A Hypothesis About the Nature of Insight

If, as George Eliot believed, the empirical and the experiential are complementary, then it is a concern to psychologists to keep them in register with each other. As well as being simulated constructions of the imagination, novels contain distillations of folk theory. Without continual mapping back and forth between theories based on empirical science and theories based on experientially derived folk understanding, these two kinds of theory lose touch with each other. Scientific psychology loses relevance for the task of explaining ourselves to ourselves, and folk psychology becomes cut off from what is known scientifically. Fiction, with one of its goals being the understanding of experience beyond "our personal lot," therefore can provide cultural objects that can be shared and discussed among members of a culture. The current renewal of interest in reading groups in Europe and North America (see, e.g., Long, 1986), as well as discussion of fiction on the Internet (Murray, 1997), contributes to the development of shared folk psychological theory.

There is enough evidence, both from literary criticism and from empirical studies of literature, to suggest the following hypothesis. Insights of a personal kind when reading fiction are more likely to occur when the reader is moved emotionally by what he or she is reading and when the accompanying context helps the understanding of the resulting emotions.

Aristotle's statement about katharsis of the emotions of pity and fear in the Poetics was a version of this hypothesis. The term *katharsis* has been regarded as obscure and translated as "purification" or "purgation." According to Nussbaum (1986), however, there is nothing obscure about it. It has the same root as kathairo and katharos, used commonly by Plato and Aristotle, with the meaning of clearing away obstacles. Katharsis has been translated as purification, but such a meaning would be the secondary one of clearing away spiritual impediments. Similarly, it has been given the derived medical meaning of purgation, an alimentary clearing away. It is likely, argued Nussbaum, that Aristotle intended neither of these. They both express a Platonic distrust of the emotions and imply that the theater might be a place apart from ordinary life in which such unfortunate elements could either be transformed into something better or be expelled by inner cleansing. Nussbaum argued for a straightforward cognitive meaning: clearing away obstacles to understanding ("clarification"). The following is Nussbaum's translation of the sentence in the *Poetics* that includes the term: "The function of tragedy is to accomplish through pity and fear, a clarification (or illumination) concerning experiences of the pitiable and fearful kind" (1986, p. 391).

This is a central hypothesis about the psychological value of literature. There are already some empirical suggestions, such as the finding of Sikora et al. (1998) that literary expressions that cause defamiliarization and affect make insight more likely. As yet, there are no findings that specific emotions, accompanied by contexts allowing their clarification, have such effects. But the idea is susceptible to empirical test.

Specific emotions are primarily evaluations of events in relation to goals; they are about what is important to one. If, therefore, emotions of reading are one's own, not just pale reflections of the emotions of fictional characters, insight would be more likely when such emotional experience is combined with contexts of fictional simulations that allow it to be

understood better than is often possible in ordinary life.

In simulations that are psychological fiction, the relation of emotion to empirical truth is that the story models on which they depend would be well served by being based on empirical findings of psychology rather than by being ill informed. At the same time, we should take care that the empirical part of psychology might occasionally move us, rather than being exclusively technical.

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