

Literature and the Brain

Norman N. Holland

The PsyArt Foundation
Gainesville, Florida

Contents

Part I. The Questions

- | | |
|-----------------------|----|
| 1. About This Book | 2 |
| 2. The Alp of Mind | 10 |
| 3. Neuropsychanalysis | 17 |

Part II. Being Transported

- | | |
|----------------------------------|-----|
| 4. Where Is a Text? | 25 |
| 5. Four Changes in the Brain | 40 |
| 6. Losing Self, Losing the World | 47 |
| 7. Why Don't We Doubt? | 59 |
| 8. Metafictions | 75 |
| 9. About Emotion | 80 |
| 10. Why Do We Care? | 89 |
| 11. Characters or Persons? | 108 |

Part III. Enjoying

- | | |
|----------------------|-----|
| 12. How We Expect | 126 |
| 13. Form and Control | 143 |

14. Endings	164
15. The Content Fallacy	171
16. Literary Language	187
17. Individual Styles	211
18. Cultural Styles	228
19. Pleasure Principles	235
20. Enjoying Ugliness	247
21. Making Meaning	258

Part IV. The Big Questions

22. Inner Creativity	274
23. Outward Creativity	297
24. Evaluating	304
25. Is Literature Innate?	321
26. Why Literature?	342

Acknowledgments	360
Appendix: About the Brain	362
Notes	388
References	409
Index	445

1 | About This Book

I have a device to make all well. Write me a prologue . . .

—Shakespeare, *Midsummer Night's Dream*, 3.1.

OUR BRAINS PLAY tricks on us when we respond to literature. We tense up when Poe's "Tell-Tale Heart" continues its deadly throbbing. We feel sad when Dickens' beloved Little Nell dies. We feel glad when Jane Austen's heroine gets her man—why? We know perfectly well that she is just a character in a book, no more than ink on a page.

The brain's tricks become even clearer at the movies (and I think film is a form of literature as much as plays). The cute blond starlet, looking for her missing friend, opens a creaking door. She walks down a dark hall. And we're thinking, Don't go there! Don't go there! And then the maniac in the hockey mask lunges out from a dark corner, brandishing a chain saw. You jump and I jump and all the people around us jump. Yet you and I and all of us know deep down that the blond and the maniac are just light flickering on a screen. We still jump—why?

I happened to see that fine old weeper *Love Story* in rural Florida. And there we were: the rednecks and the Ph.D., tears rolling down all our cheeks because Jenny Cavilleri, newly married Radcliffe girl, is dying of leukemia. Seeing *Casablanca* for the umpteenth time, we come to the final scene. Will Humphrey Bogart put Ingrid Bergman, the woman he loves, on the plane with her heroic but dull husband who needs her? Every time I wonder, though I know perfectly well he will.

Since Aristotle, people thinking about literature have encountered such psychological puzzles. But literary theorists from earlier times have faced the limitations of the psychology of those earlier times. Only in the last century have we had a “scientific” psychology. Only in the last few decades have we had a neurology with which we can observe actual brain systems.

Our brains on literature

When we are sitting in an armchair reading or in a theater seat watching, our brains are behaving oddly. We know that we ourselves cannot change the story, movie, play, or poem. Somehow that knowledge changes our brains. We go into a trance-like state. We become “absorbed.” We no longer pay attention to our bodies or our environment, and that is not normal. We accept all kinds of improbabilities in science-fiction, fantasy, beast fables, Arthurian romances, epic poems, and so on, because we no longer test the reality of what we are reading or seeing, and that is not normal. Somehow, the mere fact that we are reading or hearing or seeing a sequence of words or images makes us believe in it—at least temporarily. We feel especially intense emotions toward the words that poets put before us. The language of literature, particularly poetic language, draws more on our right brain systems for processing language than normal, everyday languages does. Stories

and plays appeal differently to the “what” and the “where” circuitry in our brains, and we are puzzled to find that we think about the characters in stories and plays as though they were real people. Perhaps the ultimate question is, Why have all human cultures at all times and in all places had some kind of literature? Why have humans, ever since we evolved into language-using animals, practiced this peculiar form of pretense, of lying, really? What does it do for us?

We humans are creatures of our biology. We can only do what our biology permits. We cannot jump a hundred feet in the air or hold our breath for six hours, but we can jump and we can hold our breath. Our biology both enables and limits us.

Our brains are part of that biology, and our brains enable us to create and re-create literature, but they also define how we can respond to or create literature. In this book, I shall try to say how our brains determine the processes of literature. This is *not*, then, a book of literary criticism that addresses particular works or types of literature. It is a book about thinking about literature. It is a book that poses questions.

Whys and hows

All my life I have wondered why people respond the way they do to jokes, movies, poems, stories, radio programs—all the fantasies that our society provides. As a boy, I would come to school, and my pals and I would compare notes about the radio shows we had heard the night before. Why did they prefer Fred Allen and I Jack Benny?

Why did that early form of literature puzzle me? Because part of me longs for certainties. I have always been uneasy about the way fantasy intersects with reality. Yet, too, I have always liked to imagine myself into a story, to

lose myself in a movie or a play, or to savor the language of a poem. And the reason for that hovering between fantasy and certainty surely lies buried deep in my childhood in a small New York apartment

As you can see, I like asking questions. This book abounds in whys and hows. But I like finding ideas that answer my whys and hows even more. And I like to combine my love for ideas and answers to questions with my love for literature. I like to “theorize,” as we professors of literature say.

Pursuing my wonderings about literature, I studied psychoanalysis. I wrote books offering psychodynamic accounts of the literary process, from creation to response.¹ I objected to current literary theories that seem to me to pay too little attention to the activity of the reader or audience member.² This book will address many of the same questions, but in what is for me a radically new way, through neuropsychanalysis. Neuropsychanalysis enables me to write about the actual brains of readers and writers in psychodynamic (that is, psychoanalytic) terms.

The most exciting ideas about literature that I’ve come across in recent years emanate from brain scientists and from a hardy band of my fellow literary theorists who use neuroscience or cognitive science to study literary phenomena.

Drawing on neuroscience, I think academic critics and professors will come up with persuasive answers to some of the wonderings we all have about literature. Even more, I think we will get a big bonus from this neuroscientific inquiry into literature. Understanding how and why we humans do literature asks us to understand ourselves as the biological creatures we are.

Chapter by chapter

With that hope in mind, I offer this book. Part I, the

opening chapters (1-3), sets out the general thinking and method: two ways of looking at mind/brain and the usefulness of neuropsychanalysis. Incidentally, in an Appendix, I provide some basic information about the brain. Those who need or wish it should probably read the appendix early on.

Part II addresses what is to me the most puzzling thing about literature. Why do we lose ourselves in books and dramas? Why are we, in the psychologists' word, transported? Chapter 4 raises a preliminary question: Where is a text? We know that all we know of a literary work is what our senses tell us. Yet we *feel* as though a poem or a story or any text is something wholly separate from our senses, something "out there" beyond our skins. Why? Moreover, we assume that poems, plays or stories do something to us. How accurate is that assumption? The answer lies in some basic facts about the brain that apply to much else besides literature, to our relation to reality in general.

Chapters 5-11 deal with that trance-like state of mind we get into when we are "rapt" in a book, movie, play, or any work of art. Why don't we disbelieve the giants, ghosts, impossible science, talking asses (not the human kind), and all the other improbabilities literature offers us? We don't test reality when we lose ourselves in stories, plays, or films—why not? Why do we feel real emotions at things we know are fictional? Why do we imagine fictional people, who we know are just words or pictures or actors, into real people? We do so because our brains are functioning differently from the way they function in ordinary life. They are behaving differently because we are not going to act on the work of art. And we can sense that crucial difference when authors play metafictional tricks on us, calling our attention to the fact that what we are responding to is a fiction.

Parts I and II address our relationship to reality in gen-

eral and to literature in general. Part III, chapters 12-21, looks at the process of enjoying, that is, responding to literature in particular: form, content, style, and meaning. First, though, when we pick up a book or buy a theater ticket, what do we want? How do we “set” our brains for literary effects? The short answer is, we expect pleasure, and we do not expect to do anything to the literary work to get it.

We meet a work of literature through its form, the fourteen lines of a sonnet or the successive chapters of a novel. Abstract things like rhyme or meter or cross-cutting or digression work in our brains to make our responses to what is being represented into pleasure.

Then, having allowed ourselves to be governed by the form, we make a text into a story or simply an intelligible sequence by a basic quasi-emotional brain process called SEEKING. Through SEEKING, we give narratives and poetic language coherence and significance. We also bring in our personal unconscious concerns. In general, we ourselves make “meaning” or “sense” from literary works, gratifying our wishes and fantasies in imagination.

Chapters 19-21 address the question, Why do we get pleasure from these purely imaginary gratifications? For example, we get pleasure from “literary” language, from jokes, and from clever metaphors. We do so because the brain makes them make sense by applying right-hemisphere language systems that, with ordinary language, are less used. We even enjoy ugly or fearsome things when they are represented in works of art. Enjoyment, however, differs from person to person. There are styles of enjoyment and styles of interpretation. We enjoy the ugly and fearsome *if* we can fit them to our taste, ultimately our personal style of being.

Writers write and readers read and both enjoy in individual styles, and they can override those styles only with

effort. Both reading and writing literature involve style, and Part IV goes on to apply the concept of style (from Part III) to the big questions of creation and evaluation. Writers need to evaluate what they produce, and readers finish a literary experience by deciding whether it is good or bad or even great.

The literary process begins with the writer's writing in that writer's style. To some extent the reader's brain in the act of reception mirrors the writer's act of creation. That is why no study of the brain's determination of literature would be complete without some account of creativity. What is it? Is it innate? Is it tied to madness? Depression? Addictions to drugs or alcohol? What is the difference between creating a work of literature and the work of creating an ordinary life? For me, creativity begins with the sense of compulsion writers, artists, and some readers feel. Creative people feel compelled to create in a certain medium because that medium has become part of a their personal style of being or identity embodied in their brains.

The compulsion can be painful, if unfulfilled, but creativity does not itself cause depression or an addictive self-medication for depression. The brain characteristics that give rise to the compulsion parallel those that give rise to depression.

Ultimately, however, we cannot fully understand creativity because it rests on a value judgment. When we say a literary work is good, we are predicting that it will please many and please long. We do not award the accolade "creative" unless we think the work has value, and that decision depends on what uncountable numbers of brains do now and in the future. The individual styles of readers play a role in evaluation and therefore in what we deem "creative."

The final two chapters (25 and 26) deal with ultimate questions. All human cultures have had some form of litera-

ture. Shall we conclude that we are innately programmed to do literature? Does literature confer an evolutionary advantage? Some literary theorists think so. I think not. Why do we do literature? My answer is simple and not evolutionary: we do literature because we enjoy it. We enjoy it because of the way our brains deal with it. Our brains on literature function differently from our brains in ordinary life, but in some ways the same. We seek satisfactions, and when we get them, that gives us pleasure.

This is *not*, in short, a book of literary criticism. It does *not* assess or interpret individual literary works. This is a book of questions about literature and its many forms and an effort to answer those questions. *The point of this book is not to change what we do and feel about literature, but to change how we think about what we do and feel.*