

**THE EVOLUTION OF LITERARY THEORY: TOWARDS A BIO-CULTURAL
APPROACH TO LITERATURE THROUGH JANE AUSTEN'S
*NORTHANGER ABBEY***

A Thesis by

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I have examined the final copy of this Thesis for form and content and recommend that it be accepted in partial fulfillment of the requirement for the degree of Master of Arts with a major in English.

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DEDICATION

To my beloved wife Barbara who shares a love of Ms. Austen's works

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ABSTRACT

This thesis attempts to develop a synthesis of two traditionally conflicting epistemological approaches to literary theory and criticism. Over the past ten years, poststructuralist theory and the developing branch of cognitive and evolutionary literary theory have been at odds with one another. The overall purpose of this thesis strives to find a common ground between the two epistemological approaches to literature. In recent years, the emergence of a third epistemological position, situated between the two binary dichotomies, has sought to resolve the realist/relativist polemic through bio-cultural approaches to literature. This thesis will attempt to apply the bio-cultural approach to literature. The thesis first evaluates an existing poststructuralist argument, Jacqueline Howard's Bakhtinian analysis of Jane Austen's *Northanger Abbey*. Following this evaluation, an overview of cognitive and evolutionary theories' connection to the Romantic period's development of a brain-science will establish a bio-cultural approach to Austen's *Northanger Abbey* and will situate cognitive and evolutionary theory within a cultural context. Finally, an analysis of *Northanger Abbey* from a cognitive and evolutionary standpoint will provide a synthesis of Howard's basic premise and achieve a bio-cultural deconstruction of the realist/relativist polemic.

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CHAPTER 1

INTRODUCTION

In Jane Austen's *Northanger Abbey* the narrator, adopting the voice of a young lady, exclaims, "Oh! It is only a novel!" (58) Austen's narrator then ironically retorts that such an "affected indifference, or momentary shame" results from

only some work in which the greatest powers of the mind are displayed, in which the most thorough knowledge of human nature, the happiest delineation of its varieties, the liveliest effusions of wit and humor are conveyed to the world in the best chosen language. (58)

This retort exposes the audacity of some fiction writers who, joining the critics, "adopt that generous and impolitic custom [. . .] of degrading" and "bestowing the harshest epithets" upon the English novel (57-8). The narrator's claim that the novel conveys such powerful displays of the human mind's potential and such extensive knowledge of human nature harbors a long-standing notion about the art of story telling. As David P. Barash and Nanelle R. Barash in *Madame Bovary's Ovaries: A Darwinian Look at Literature* observe, "[C]onnecting literature and human nature isn't really all that new. Until recently, in fact, our most enduring images of human nature have resided in literature" (3). Echoing Austen's claim, however, this father-daughter team adds an even bolder declaration for their readers. Citing recent breakthroughs in cognitive psychology and evolutionary science, Barash and Barash join a decade-long school of literary studies that asserts, "[E]volutionary biological insights yield a powerful set of instruments with which to understand literature and, in the process, ourselves" (9).

Barash and Barash target their book towards a popular readership rather than an academic one; however, their claim echoes a long list of scholars who legitimately seek to apply cognitive and evolutionary insights within the academic realm of literary studies.

In the introduction to “Part I: Evolution and Literary Theory” of *The Literary Animal*:

Evolution and the Nature of Narrative editors Jonathan Gottschall and David Sloan

Wilson make the academic goal clear:

The subject of literary studies is ultimately the human mind—the mind that is the creator, subject, and auditor of literary works [. . .]. [A]t the core of all the classes and orders of literary scholarship are assumptions about the nature of human beings: our capacities, our limits, our ultimate motives, our wants and needs, our strengths and weaknesses. (3)

Gottschall, Wilson and other contributors to *The Literary Animal* make a strong, well-supported argument for placing evolutionary and cognitive theory in the position to examine the subject of literature. Certainly, such an argument has not gone without its own fair share of scrutiny and opposition. Within the established theoretical schools of literary studies of the past thirty years, many scholars have, with a Saussurean ear, hearkened to the implicit language in cognitive and evolutionary literary criticism’s discourse. Indeed, cognitive and evolutionary literary criticism’s theoretical claims do point towards a shift in paradigm. In “Literature and Evolution: A Bio-Cultural Approach” Brian Boyd begins with the dramatic statement, “Many now feel that the ‘theory’ that has dominated academic literary studies over the last thirty years or so is dead [. . .]” (1).

Certainly, such a bold assertion invites the question about two aspects of human nature in Western thought that have, since Plato, traditionally been at odds with one another—the realist empiricism of the natural world and the relativist disembodiment of social discourse and culture. Throughout the debate, contemporary arguments from both camps within literary studies have aggressively gone so far as to antagonize one another. Joseph Carroll, who helped to pioneer Darwinian literary studies with his *Evolution and*

Literary Theory (1995), makes it a point to “argue against the poststructuralist views that have dominated academic literary studies” (1). Carroll has made it his mission to attack the poststructuralist approach as well as the various schools and movements of theory that poststructuralism has helped to shape like feminism, postcolonialism, cultural studies, et cetera. In Chapter 3 titled “‘Theory,’ Anti-Theory, and Empirical Criticism” from his book *Literary Darwinism: Evolution, Human Nature, and Literature*, Joseph Carroll dissects what he perceives to be the three main components of poststructuralism’s complex scope: deconstructive linguistic philosophy, Marxist social theory, and Freudian psychology. Carroll writes, “In isolation, each [. . .] has a certain totalizing and self-insulating quality” (29). Moreover, Carroll states that the most “cosmically inclusive” of these theories—deconstruction—affirms poststructuralism’s autonomy of all rhetorical constructs. Deconstructive linguistic philosophy creates what he calls “a defensive force field” that he claims “covers the whole complex” and “renders it impervious to empirical criticism” (29). As a result, Carroll believes that the dominance of poststructuralist theory provides a distorted, skewed, and strained account of the governing principles in literary studies because its complex system of rhetoric strives to remain isolated from the checks and balances of empirical study. Carroll desires a pragmatic approach to literary criticism; thus, Carroll’s charge over the past ten years has sought to engage the empirical foundations of Darwinian theory as a means to justify alternative hypotheses in literary criticism. Carroll develops his Darwinian literary theory to combat what he sees as poststructuralism’s speculative theory “that is protected by the general laxity of intellectual standards in the humanities” (30). Ultimately, Carroll seeks to inspire pragmatists “to work as polemicists and revolutionists” and to achieve reform as well as

agitating “a fundamental revision in the way we organize higher education” (40).

Alternatively, a poststructuralist analysis like George Levine’s *Dying to Know: Scientific Epistemology and Narrative in Victorian England* would appear to deflect Carroll’s charge. Taking a relativist stance, Levine writes, “Empiricism always threatens to pull back from reality to the sensation of reality to a solipsistic self” (182). Levine posits, “Is it possible to really know another object, another person, another culture, another text? The question implies a belief that there is a discoverable reality rather than one shaped by our consciousness of it” (182-83). Applying both new historicism’s and the cultural studies’ approaches, Levine argues throughout that the history of scientific epistemology “must disguise some kind of interest” that is “unsatisfactory and often dangerous” (5).

Comment:

Such a dichotomized polemic cannot be productive in any attempt to achieve synthesis of an evolutionary and poststructuralist approach to literature. Indeed, in “The Epistemology of Cognitive Literary Studies” Elizabeth Hart sees a problem in forming Darwinian biological views—like cognitive or evolutionary theory—and poststructuralist approaches—such as new historicism or cultural studies—into over-generalized, binary terms. Hart feels such bifurcation unnecessary “in light of statements made in recent years about the possibility of a *third* epistemological position nestled between the polar extremes of realism and relativism” (320). As Hart establishes the parameters of this third epistemological position, she notes that its construct actually contains a combined “*set* of positions that together define the continuum connecting its two ends” (320). First, Hart takes George Lakoff and Mark Johnson’s shift away from “ultimate knowledge,” and she places emphasis on their “*possible* knowledge” of experientialist epistemology (321-22). Influenced by Hilary Putnam’s dissent from metaphysical realism, Hart notes

that Lakoff and Johnson’s experientialism blends the dichotomized polemics of scientific objectivism with “phenomenological subjectivism” (321). As a result, an epistemology emerges emphasizing possible knowledge over ultimate knowledge. Hart then observes how this emphasis on cognitive systems mediating such knowledge has been widely accepted by scientists in other fields. Notably, Hart cites N. Katherine Hayles’s “constrained” constructivist approach (322) and Nancy Easterlin’s analogous “weak constructivism” (325). Both approaches acknowledge as Hart observes, “the formative forces that environments, including cultures, impose on the shape of human knowledge” (325). Additionally, Hart includes Easterlin’s insistence “that ‘claims about the kind and nature of human knowledge [be held] accountable to our growing understanding of the brain-mind’” (325). Hart believes this “constrained or weak constructivism” puts scholars of cognitive and evolutionary literary studies in a prime position:

[T]hey, perhaps alone among today’s literary critics, claim the minimal conditions necessary to inhabit that epistemological middle-ground [. . .]. [A]ll of these critics operate from a conviction that there is such a thing as species-specific knowledge and that such knowledge must contribute substantially to our philosophical discussion about knowledge; yet they also recognize that all knowledge, including species-specific knowledge, is environmentally situated, context-dependent, and culturally indexed, i.e., subject to lesser or greater degrees of constructivity. (326)

The importance of this third position lies in Hart’s conclusion that a bio-cultural approach that utilizes cognitive or evolutionary literary criticism proves advantageous for literary studies. Hart acknowledges differences and some challenges within the many and varying bio-cultural approaches—notably Joseph Carroll’s and Robert Storey’s works that Hart feels, “[C]annot help but inspire charges of reductionism” (329);

nonetheless, Hart believes that the uniqueness of cognitive and evolutionary literary theory infuses it with an effective ability to deconstruct “the realism/relativism dichotomy of habitual epistemological debate” (331).

In an attempt to deconstruct this realism/relativism dichotomy and to achieve synthesis of a bio-cultural approach to literature, one need only return to Jane Austen’s *Northanger Abbey*. By first evaluating a poststructural analysis of the novel, Jacqueline Howard’s *Reading Gothic Fiction: A Bakhtinian Approach*, then synthesizing it with recent cognitive and evolutionary literary approaches, a bio-cultural analysis of Austen’s *Northanger Abbey* may prove rewarding. Ultimately, one should find that a bio-cultural approach to Austen’s “species of composition” best occupies Hart’s third epistemological position. Finally, a bio-cultural approach can lend more tenor to Austen’s defense in *Northanger Abbey* of the novel’s ability to display “the greatest powers of the human mind” and convey “the most thorough knowledge of human nature, the happiest delineation of its varieties” (58).

CHAPTER 2

A POSTSTRUCTURALIST THEORY: OVERVIEW OF JACQUELINE

HOWARD'S BAKHTINIAN APPROACH

Jacqueline Howard's *Reading Gothic Fiction: A Bakhtinian Approach* examines Gothic fiction and its relation to literature's critical paradigms. Howard makes a compelling case for locating "tensions within and between the discursively constructed perspective" of Bakhtin's dialogic heteroglossia (47). However, just as she criticizes certain formalist, structuralist, psychoanalytic, and historical/political readings of the Gothic for being too singularly narrow, Howard's reading of Gothic fiction underestimates the massive scope that she implies with a Bakhtinian approach. Outlined in Chapter 1, "Theories of the Gothic," Howard's argument falls prey to its own criticism. Amidst the potential existence of so many discourses, the critic inevitably must force a confinement of those languages in the heteroglot that allows one to determine his or her own privileged case. For poststructuralist theory, the suggestiveness of being able to fully recognize and reveal all the discourses at work in a text yet provide a salient analysis often becomes problematic in a claim like Howard's. While Howard makes a passionate and important essay for approaching Gothic literature from a Bakhtinian perspective, she nonetheless subverts her own argument by suppressing "not only the differences of texts [. . .], but also the ways in which each text differs from itself" (14).

Howard outlines her Bakhtinian approach to Gothic fiction in her first chapter, "Theories of the Gothic." She begins by examining various studies in Gothic fiction leading to poststructuralism. Howard asserts that such studies inevitably encounter problems arising from an imposed, monologic structure "which disallows a text's

semantic richness and suppresses alternative ways of speaking” (14). While Howard admits that a value can be assigned to these prior studies, she says that such singular, authoritative treatments simply cannot reveal and chart the multiple discourses prevailing through Gothic fiction within the scope of Bakhtinian theory. Howard then provides a wide range of critical approaches to Gothic fiction and critiques each, yet she gives particular attention to Gothic fiction’s gendered, social-political debate over the conservative/subversive polemic. Howard identifies how a critic’s reading of a text as a singular, monologic discourse can make a critic susceptible to privileging a particular point. She gives one example that illustrates how, in a monologic structure, certain critics focus attention “on the language of the fantastic in Gothic fiction and the ways in which it can be used to relativize normative ways of perceiving and feeling” (36). Howard does an in-depth Bakhtinian analysis of the fantastic in Gothic fiction in a section titled “The Fantastic and its Role in Gothic Fiction” (36-43). Through this, she illustrates that in a dialogized heteroglossia “while certain discourses may strive for and achieve dominance, no discourse can become totalizing” (47). According to Bakhtinian perspective, Howard believes that “this is how works become rich in meaning over time—in Bakhtin’s sense, semiotically rich and subject to ‘unfinalizability’” (51).

Lacking further qualification or definition, this unfinalizability of a work places upon the poststructuralist critic the Sisyphean task of identifying an interminable number of discourses within a work. This potentially infinite number of discourses Howard notes, “[K]eeps open and unresolved the conflicts of voices and languages which constitute it” (47). Here, one can turn to Howard’s application of the double-voiced

discourse of Bakhtinian stylization to Gothic parody. In “Gothic Parody: Jane Austen’s *Northanger Abbey* and Eaton Stannard Barrett’s *The Heroine*” Howard writes,

Because parody, like any other form of textual dialogism, is an enunciative act which involves an entire context of time, place, and prior discursive practices, as readers we need first to examine the climate of literary and social criticism in which *Northanger Abbey* and *The Heroine* appeared. (148)

When Howard examines this climate of literary and social criticism of Gothic fiction, she inevitably enunciates her own textual analyses by containing it. Here lies a point where Howard would benefit from qualifying Bakhtin’s unfinalizability to which a work is subject. Such a qualification exists in “Discourse in the Novel” when Bakhtin suggests that the interminable heteroglossia entering a text becomes constrained by means of stratification:

At any given moment of its evolution, language is stratified not only into linguistic dialects in the strict sense of the word [. . .], but also [. . .] into languages that are socio-ideological: languages of social groups, “professional” and “genetic” languages, languages of generations and so forth. From this point of view, literary language itself is only one of these heteroglot languages—and in its turn is also stratified into languages (generic, period-bound and others). (1199)

Despite the ensuing need to explain how exactly Bakhtin suggests this stratification occurs or what biological or cultural mechanism produces it, stratification’s presence in conjunction with heteroglossia allows a means of synthesis that emphasizes the import of possible knowledge into the poststructuralist equation. By constraining the ultimate knowledge of the heteroglot through the possible knowledge of stratification Howard could show how the enunciative act differs from the singular, authoritative treatments of

the other critical paradigms prior to poststructuralism. As it stands however, Howard's analysis appears to render a finite set of discourses within a contained scope that contradicts her claim that literary language is not a closed system.

CHAPTER 3

HOWARD'S BAKHTINIAN APPROACH IN *NORTHANGER ABBEY*

It may be helpful to illustrate how, to make her point, Howard contradicts her own acknowledgement of Bakhtinian indeterminacy by containing concrete social and historical environments in which successive writers and readers have operated. Much as been made of the moment in *Northanger Abbey* when Henry Tilney confronts Catherine Morland about the suspicions that she has entertained regarding his father, General Tilney. At this moment, Henry pointedly asks from what Catherine has been judging (199). Henry's address comes at a time when all of Catherine's suspicions about the mysterious General Tilney's potentially murderous role in the death of Henry's mother have reached a climax. Essentially, Catherine derives her suspicions of the General from Ann Radcliffe's *Mysteries of Udolfo*; however, as soon as Henry expounds upon the "social and literary intercourse" of "the country and the age" in which "lay every thing open," Catherine experiences an awakening (199). The narrator describes Catherine running off "with tears of shame" and later in her room contemplating how Henry's address "had thoroughly opened her eyes" to the "visions of romance" that she had been entertaining about the General (200-01).

In Chapter 4 of *Reading Gothic Fiction*, "Gothic Parody: Jane Austen's *Northanger Abbey* and Eaton Stannard Barrett's *The Heroine*," Howard acknowledges Catherine's failure to incorporate "Radcliffe's distancing devices" to decouple the fictional from the real; nevertheless, Howard concludes that Austen treats Henry's overstated and "blinker avowals" with a more sarcastic irony (167). Howard downplays Catherine's mistake and magnifies Henry's to point out that Henry takes

pleasure in deeming himself Catherine's superior. Essentially, Howard claims that Austen directs her criticism at the "dominant assumptions by men about women's intellectual powers and education" (168). Yet, as Barbara Seeber observes in *General Consent in Jane Austen: A Study of Dialogism*, Howard's premise contradicts itself. Seeber sees Howard's assertion that the novel is a self-reflexive unsettling of male critics' fixed notions of the real and the romantic, yet Seeber notes how Howard simultaneously contradicts this by acknowledging that Catherine's own notions of the real and the romantic are evidently wide of the mark (120). Thus, Seeber reveals a dialogic conundrum:

Again and again in the criticism of *Northanger Abbey*, the possibility that the general did kill his wife is represented as impossible. Yet there is overwhelming evidence in the text of the general's capacity for violence; hence we need to entertain the possibility of Catherine's being right. (123)

Howard further obfuscates the continual shifting of evaluative standards by glossing over the fact that Austen directs as much of her satire at female writers/moralists as she does men. In Howard's discussion of *Northanger Abbey*'s many discursive tensions, her examples of divisions between gender conspicuously parenthesize and footnote "those complicit with" the male reviewers/moralists (170). Earlier in her essay, Howard's incidental editing of Austen's "extraordinary outburst" may be interpreted as drawing attention away from novelists and focusing on reviewers—the result of which lends preferentiality to Howard's statement about the beleaguered state of women's intellectual labors by male critics (160-61). If Howard characterizes Henry's patronizing love of Catherine as a love for her fresh, honest, teachable, and very ignorant *tabula rasa*, then Howard's narrowing of Henry's chauvinistic rebuke of Catherine needs some explaining. After all, Catherine's own mother, Mrs. Morland, also patronizes Catherine

by suggesting she look for “a very clever Essay in one of the books” that contains similar platitudes to those on which Henry relies (238). In all fairness, Howard does make marginal reference to Austen’s satiric dart at “those of her sex who are complicit” with the patronizing talk of conduct books. Howard provides an example from Maria Edgeworth’s *Practical Education* (172); however, Howard only goes so far as to establish a parallel between Edgeworth’s discourse and the stylization of Henry’s authoritative, patronizing talk. If one places female novelists like Maria Edgeworth and Jane Austen in a broader historical context, then Austen’s injured body of readers become part of a much larger political struggle within the romantic period’s popular literary culture. In fact, Austen appears to represent a minority of published female writers who championed women’s novelistic endeavors.

Ian Haywood’s *The Revolution in Popular Literature: Print, Politics, and the People, 1790-1860* provides an in-depth analysis of this evolution of popular literature during the romantic period. Haywood focuses on this period when both radical and reactionary politics sought to capture the hearts and minds of a popular readership. According to Haywood, the relation of female-authored, popular fictions pioneered by Hannah More and similarly reworked by Maria Edgeworth do not lend weight to liberal interpretations of gender politics. Instead, Haywood notes that they actually serve as “instruments of an intensely conservative social and political agenda” (66). For example, contrary to critics who assert that Hannah More’s “crypto-liberal” fiction actively calls for female autonomy Haywood states,

Her empowerment of women, both inside and outside her fiction, was a means for stabilizing the existing class system. Female agency in the tracts is a vehicle for depoliticising both working-class culture and female reading, and purging them of dangerous passions [. . .]. More attacked the

“complicated drug” of novel reading, which spreads “destructive politics, deplorable profligacy, and impudent infidelity” [. . .]. Only “serious study” can “lift the reader from sensation to intellect.” (66-7)

Haywood sees More’s hatred of “the infantilised reading cultures of women and the working class” exhibited in her fiction’s “profoundly illiberal view of popular literature” (67-8). Ian Haywood observes, that with the end of the Napoleonic wars and a resurgence of radicalism in 1816, the “anti-Jacobin ethic” was perpetuated in the flood of published literature by women as well as men (83). Haywood sees such promotion of reactionary literature as an attempt to convert readers of popular literature “to a correct set of moral and political values” that “chooses paternalism over anarchy and violence” (84-5). In his extensive, quantitative study titled *The Reading Nation in the Romantic Period*, William St. Clair would lend support to Haywood’s claim:

During the romantic period, we also see books solely devoted to advice on reading, seen as one of the biggest threats to the existing social structures [. . .]. Reading should be undertaken in moderation and under supervision. Women were at risk of liking reading too much. It was too exciting, too distracting, and it inflamed the imagination. Women were liable to become literature abusers, with disastrous consequences for themselves, their families, and society at large. (281)

St. Clair supports his observations with the primary, documented lists and figures of publishing histories, print runs, and sales. St. Clair shows both More’s and Edgeworth’s works appearing in the tens of thousands from the mid-1790s up through the mid-1830s. It would seem in *Northanger Abbey* that Austen articulates her awareness of such a widespread sentiment throughout England’s reactionary regime to restrict and regulate reading when she writes, “[O]ur foes are almost as many as our readers” (58).

Ultimately, one must determine how exactly Austen intends *Northanger Abbey* to achieve what Howard sees as a self-reflexive unsettling of fixed notions of the real and the romantic. In *Speaking Volumes: Women, Reading, and Speech in the Age of Austen*, Patricia Howell Michaelson notes that in *Northanger Abbey*, Catherine and Henry—unlike most of the other characters—are avid readers of novels (155). Unlike Catherine however, Michaelson notes, “Henry can read with the sympathetic identification required to enjoy the horrors of a gothic novel. But he can also recognize the boundaries that must keep novelistic and realistic expectations separate” (155). Jacqueline Howard’s essays on patriarchal power’s abusive treatment of women’s intellectual labors during Austen’s time perceives Henry’s recognition of these boundaries in the novel as a deterrent to his interpretation of Gothic fiction. Howard believes that the “scholarly and often judiciously ironic” Henry reads Radcliffe’s novels with too much distancing between novelistic and realistic expectations (167). Howard observes that Austen treats Henry’s inability to notice the isomorphic connection between Radcliffe’s fiction and his world “with some irony” (167). Howard then identifies that this distancing forces Henry to overstate his case in the segment of Henry’s address in Chapter 24 of *Northanger Abbey* where he asserts England’s ordered society and security from threat:

Remember the country and the age in which we live. Remember that we are English, that we are Christians [. . .]. Does our education prepare us for such atrocities? Do our laws connive at them? Could they be perpetuated without being known, in a country like this, where social and literary intercourses is on such a footing; where every man is surrounded by a neighborhood of voluntary spies, and where roads and newspapers lay everything open? (200)

Howard notes Austen’s ironic sarcasm in Henry’s admonishing defense of England’s education, legal, social, and literary regulatory regimes. At the same time, she ignores

the potential of Henry's ability to sympathetically identify with Catherine. One must note that soon after Henry addresses Catherine, she finds him the "greatest assistance to her" by behaving with "astonishing generosity and nobleness of conduct" (202). Henry pays more attention to Catherine than usual, he shows awareness of her needing comfort, and most importantly he never alludes "in the slightest way" to their conversation (201-02). In Howard's reading of this passage, she does more than simply contain the many discourses in the novel. She disembodies any physical characterizations from the character's discourse. This draws attention to social, political, or literary discourses in Henry's dialogue, but it suppresses Austen's characterization of Henry's behavior.

Howard's emphasis on the connection between Henry's harsh rebuke of Catherine and Austen's parodying "with satiric intent" the dominant masculine notions about female intellectual powers appears conspicuous since she seems to look past Austen's other characterizations of Henry (168). In one sense, Howard stands correct when she asserts, "*Northanger Abbey* can be seen as a reply and challenge to those who would denigrate women's intelligence, undervalue their reading, writing, range of feeling and imagining, restrict their education, and everywhere impose stereotyped expectations and responses" (174-75). However, one should mark that Howard's argument continually suppresses important aspects of Austen's characterizations in the novel to privilege more relative discourses. Howard's idea becomes disembodied from specific behaviors exhibited by the characters to such an extent that *Northanger Abbey's* "parodic echoes and waggish renditions of the words of others jostle against each other, producing a welter of meanings and frustrating attempts at interpretive closure" (175). Howard articulates poststructuralism's frustrating attempts to reach closure when she asks,

“Where in all this are we to locate the narrative’s dominant voice or perspective?” (177)

Ultimately, her argument becomes unfinalizable by “the dialogic play of those other historic voices echoing in the background” (178).

In a sense, the weakness inherent in Howard’s Bakhtinian analysis of *Northanger Abbey* can be seen as quite natural. In *Gaps in Nature: Literary Interpretation and the Modular Mind*, Ellen Spolsky takes a look at the role that the biological cognitive and evolutionary constructs of the brain play in human understanding and literary interpretation. Spolsky hypothesizes:

[T]he gaps in human cognitive structure—the vacancies between fragments of understanding—not only permit but actually encourage transformation and innovation and furthermore, this state of affairs is the logical outcome of evolutionary development [. . .]. [T]here is a level of cognitive structure at which brains can be said to bridge gaps creatively in response to failures in understanding, these failures themselves produced by the neurological equipment on which we depend for that understanding of the world [. . .]. The inevitable slippage we have come to acknowledge between words and the world has at least an analogue, and presumably also a source, in the workings of the human brain. (2-3)

For Spolsky, a literary theory such as Howard’s Bakhtinian approach becomes part of the current poststructuralist paradigm “emphasizing not only the inadequacy of the verbal description [. . .], but also the power of the words to suggest images, sensations, and thoughts beyond those of their original context” (5). Spolsky finds evidence in cognitive and evolutionary theories of the brain to confirm “that the inadequacies of language are not merely matters of local inadequacy [. . .]. The phenomenon of incommensurable readings is not accidental; it is genetically built into the brain” (5). Observing the changes in these literary systems, Spolsky argues that “the difficulties [. . .] of maintaining the kind of unified perspective traditionally thought of as centered in an individual mind or soul are not logical or philosophical difficulties but are, in fact,

material” (12). Spolsky’s case derives its support from empirical sources. For these reasons, Tony Jackson’s “Questioning Interdisciplinarity: Cognitive Science, Evolutionary Psychology, and Literary Criticism finds Spolsky’s analysis a “persuasive force because it takes into account strong arguments from both sides of the intellectual divide” (338). Part of the success Spolsky’s analysis experiences stems from an anchoring of the disembodiment of poststructuralist thought—such as Howard’s unfinalizability of language and texts—from the biologically embodied concept of a brain-mind.

CHAPTER 4

BIO-CULTURALISM: JANE AUSTEN AND THE BRAIN SCIENCE OF THE ROMANTIC PERIOD

In “Romantic Anti-dualism and the Blush in *Northanger Abbey*,” Jenna Bergmann analyzes the prevalence of the blush in the novel. Bergmann claims, “Read in terms of current theories of cognitive neuroscience, which [. . .] pertain to Romantic-era brain science [. . .], the blush becomes an arresting example of a non-verbal gesture that problematizes the mind/body connection” (43). Using Antonio Damasio’s somatic-marker hypothesis from *Descartes’ Error: Emotion, Reason, and the Human Brain* (1994), Bergmann sees the blush functioning as a “somatic signal” that indicates a cognitive awareness and reaction to a “cultural stimulus (such as the social construct of modesty)” (43). Bergman then observes how characters’ use of physical, emotive responses in *Northanger Abbey* develops logical reasoning within the characters rather than solely impeding it (43-4). Accordingly, Bergmann sees Austen’s implementation of blushing throughout *Northanger Abbey* as an indicator of Catherine Morland’s development of “both positive and negative bodily signals” to reveal “a system equally dependent upon reason and emotion” (44). Noting depictions about the function and connotation of the blush in poetry, conduct books, as well as Erasmus Darwin’s observations from *Zoonomia*, Bergmann illustrates how cultural productions transfer social expectations to young women such as Austen’s Catherine. Because the blush allows one to perceive of Catherine’s mind and body acting in accordance, Bergmann sees the blush as “a striking example of a non-verbal gesture that forces reconsideration

of other textual examples of Romantic anti-dualism” (47). Ultimately, Bergmann asserts that Austen’s use of the blush in *Northanger Abbey* “strives to expose not the falsity of cultural ideology but rather its brutal, universal presence” (48).

Bergmann’s analysis applies a reading of *Northanger Abbey* that supports the premise of Howard’s Bakhtinian reading without becoming disoriented by the dialogic play of historic discourses. Bergmann’s analysis also successfully merges discourse with the body—a topic that Alan Richardson explores in *British Romanticism and the Science of the Mind*. Richardson takes as his subject the anti-dualistic “return of the brain-mind” (2). Richardson observes that the recent developments beginning in the 1950s in cognitive and evolutionary science have opened the door to new readings of literature. In his exploration of the topic, Richardson focuses on Romantic literature:

In relation to the Romantic era, recent work on the brain and mind can help scholars to perceive distinctions, register nuances, and appreciate moral and philosophical repercussions that might have seemed non-existent, elusive, or simply not worth pursuing a few decades ago [. . .]. [T]he connections between, say, adaptationist accounts of mind and the hypothesis of a modular brain, or anti-dualistic cognitive theories and an emphasis on the unconscious and emotive aspects of rational thought, have returned in a different but comparable manner. (3)

Richardson’s book provides an in-depth account of British Romantic literature and the emergent brain science of the time. Richardson observes that people mostly associate Romanticism with “idealistic and transcendental conceptions of the mind,” but Richardson counters, “[T]he many points of contact between scientific and literary representations of the embodied psyche helps remind us of an antidualistic, materialist, register within Romantic writing that has, until recently, been badly ignored” (36).

Richardson's introduction titled "Neural Romanticism" gives an overview of brain science during the Romantic period, and he highlights four of the most influential brain scientists of the period: F. J. Gall in Austria, Pierre-Jean-George Cabanis in France, and Erasmus Darwin and Charles Bell in England. Additionally, Richardson notes many others in the field and recognizes their diverse backgrounds and philosophies:

[T]he list includes detractors as well as advocates of phrenology, vitalists as well as materialists, avowed skeptics and devout Christians—these doctors, philosophers, and proto-psychologists together altered the terms and changed the terrain for theorizing about the mind. Their work not only provided new directions for medical research, but also helped fundamentally to recast the great questions on the mind in terms of new theoretical and scientific work on the brain. (5-6)

According to Richardson, the pervasive interest in brain science during the period could not have gone unnoticed throughout the literary community. Richardson carefully avoids suggesting that all Romantic writers directly engaged in "a common project" with contemporaries like Darwin or Bell. Admittedly, a few explorations into well-known citations exist, such as Coleridge's ultimate rejection of the corporeality of mind, Wordsworth's poetic exploration of the science of feelings, and Mary Wollstonecraft Shelley, her husband Percy, and Lord Byron's famous discussions regarding the perceived radical materialist science. Because of the cultural-wide presence of this radical science Richardson believes Romantic-era writers to have engaged more extensively with brain science "more directly than has generally been recognized" (36).

For example, Richardson writes that even though Jane Austen "has been seen as fundamentally Lockean in her ideas on character and education," he does not feel that this diminishes the influence of scientific ideas as a means of interpreting her literature (38). In chapter 4, "Of Heartache and Head Injury: Minds, Brains, and the Subject of

Persuasion,” Richardson writes that critics often approach Jane Austen “as a novelist working primarily from the empiricist standpoint of an experientially constructed subject” (94). Coupled with this notion, Richardson notes the prevalence of advances in brain-based science in addition to the well-known materialist-vitalist debates from 1814-1818. During this time, he examines those elements of Austen’s writing—of which he chooses *Persuasion* as his focus—that constitute an anti-dualist nature. Despite this Lockean influence Richardson asserts, “Austen anticipates Victorian novelists in looking to biological and innate aspects of mind and character, in tune with and in some ways ahead of the brain science of her time” (94). For Richardson, characters in Austen’s novels contain particular displays “between thought and feeling, physiological expression and conscious introspection” that does not only provide an “elaboration on the modest blush but a new, ‘Romantic’ sense of mind-body relations” (106). Whether vitalist or materialist in nature, these displays clearly exhibit a scope that embodies notions of the brain science during the time. Entwined with these embodied notions, cultural repercussions become evident.

Near his conclusion, Richardson explores the scope of the emerging brain science of the era and suggests how this emergent science also “threatened to destabilize received notions of gender” (110). Citing Marina Benjamin’s discussion regarding the relation of women writers to scientific discourse in the Romantic era, Richardson notes how the biological psychologies of Darwin, Cabanis, and Gall actually engaged in undoing dichotomies of “the ‘masculine character of scientific epistemologies [. . .] like rational/emotional, deductive/intuitive, objective/subjective’” (110). Throwing the traditional process of appraising reason over passion and mind over body, Richardson

suggests that Romantic brain science played an important role in forwarding the embodied notion of human subjectivity and consequently “forcing a reevaluation of traditionally feminine prerogatives like sensibility and intuition” (110). Richardson’s case illustrates one example of how science and literature both appear entwined in the emergent notion of embodied epistemological discourse—science through its function of explaining knowledge and literature through its function of expressing knowledge.

CHAPTER 5
COGNITIVE AND EVOLUTIONARY THEORY AND
NORTHANGER ABBEY

Turning to literature, one can observe Austen achieving a similar displacement of the rational, disembodied, male-coded subject through her realistic characterizations of reading in *Northanger Abbey*. If one constrains the echo of voices in Howard's Bakhtinian reading of Austen's novel by situating these voices into the bodies of Austen's characters, then perhaps the narrative's dominant voice or perspective can emerge. One need only give the disembodied discourse of *Northanger Abbey* an equally important aspect of characterization in the text. In her introduction to *Northanger Abbey*, Anne Ehrenpries states, "it is no accident that Jane Austen uses *natural* and *heroic* as opposites" (15). For Ehrenpries, Catherine reverses the typical Romantic period's notion of a heroine. For Austen, that reversal had to be aligned with her belief in the novel's ability to display the in-depth workings of the mind and a thorough knowledge of human nature. Little could Austen have realized how acutely accurate her characterizations would be by today's cognitive and evolutionary theoretical standards. Austen's heroine navigates her world symbiotically attached to the inseparable functions of mind and body, reason and emotion, judgment and instinct, as well as conscious and subconscious mental activity. These commingling functions set Catherine apart from the Romantic period's sentimental and unrealistic notions of a heroine in other gothic novels. If one returns to Henry Tilney's climactic question, "What have you been judging from?" then Austen's clear and dominant perspective responds with a resounding voice: Catherine's judgment stems from a tightly bound and inseparable bond of biology and culture.

For Catherine, reading novels clearly provides immense pleasure. Her craving for fictional experience manifests itself in her engagement with Ann Radcliffe's *Mysteries of Udolfo*. When asked by Isabella Thorpe whether "Udolfo" had been the reason for her tardiness one morning, Catherine acknowledges that it has and adds, "[I]f it had not been to meet you, I would not have come away from it for all the world" (60-1). Once introduced to the Gothic novel, Catherine's obsessive fascination with Radcliffe's story engages her to venture into the subject of *Udolfo* with nearly every acquaintance she makes. When conversation ebbs upon her first encounter with John Thorpe, she "ventured at length" onto the topic "which had been long uppermost in her thoughts" (69). Later, during her long-anticipated hike with Henry and Eleanor Tilney, Catherine does not hesitate to make reference to *Udolfo* and then to ask whether Henry ever reads novels (121). A dialogue ensues and eventually the conversation transitions into a discourse on reading. Not able appreciate Henry's enthusiasm for history or match his retorts, Catherine ultimately assents with "a very warm panegyric" on Radcliffe's "merits" as a means to close the subject (124-5). One of the definite repercussions of Catherine's preoccupation with the novel obviously becomes her entrancement with its gothic elements and her application of these elements to her interpretation about Northanger Abbey and General Tilney; however, another more functional and immediate effect of her reading should be first noted. Catherine's enthusiastic engagement with the Radcliffe's *Mysteries of Udolfo* parallels her emergence and education into social intercourse.

In his “Evolutionary Theories of Art” Brian Boyd asserts that any writer or storyteller can be interpreted in terms of biologically evolved characteristics of human life because writing and storytelling share the universally human characteristic of shared attention that evolved biologically within the human brain. Thus, Boyd moves for synthesizing the prevalent climate of literary criticism’s tendency to involve local cultural conditions with evolutionary biological theories. Boyd suggests that not to do so limits the power and range of a work. In one sense, Boyd would agree with part of Bakhtin’s principle idea in “Discourse in the Novel” that claims, “Form and content in discourse are one” (1190); nonetheless, Boyd would disagree with Bakhtin’s belief that verbal discourse is strictly a social phenomenon. Boyd admits that verbal discourse plays an important role in evolutionary theories of fiction and art:

We engage each other’s attention, of course, in casual conversation or in information exchange, but even here there may be elements of artfulness to the degree that we use images, allusions, jokes, mimicked intonations, or ironic deflations as we vivify gossip through selecting, highlighting, animating, reenacting or stretching the truth toward fiction for the sake of holding an audience. (148)

Additionally, he disagrees with cultural critique’s notions that human nature as reflected in art exists merely as a cultural phenomena, that it becomes relatively disembodied, or that it is nonexistent altogether (149). According to Boyd, culture “is not *apart from* nature but *a part of* nature [Boyd’s emphasis]” (149). Boyd claims that just as art plays an important role in evoking aspects of human nature, science should play an equal role in its explanation. Boyd theorizes that art “is an adaptation whose functions are *shaping and sharing attention*, and arising from that, fostering *social cohesion* and *creativity* [Boyd’s emphasis]” (151). Boyd proposes that this explanation is both multifunctional and multilevel (151).

Northanger Abbey's Henry Tilney presents an interesting expansion of Boyd's proposal. The intrinsic pleasure that Henry takes in intellectual—albeit pretentious—engagement stems from his own literary experience and illustrates an evolved sense of Catherine's social intercourse. Upon a close reading, it becomes apparent that Henry draws his sophisticated, social dialogue from his Oxford education as well as his extensive recreational reading of novels. In *Northanger Abbey*, Henry eagerly engages Catherine in what he perceives as artful discussions throughout the novel. His “affected” quizzing of Catherine when they first meet (48), his pedantic lecturing about the picturesque countryside around Beechen Cliff (125-26), his playful chiding of her understanding about his brother's intentions regarding her brother's fiancé, Isabelle Thorpe (142), his facetious mimicry of gothic elements in his description of Northanger Abbey (164-66), and ultimately his patronizing address of Catherine (199-200) may all be perceived in relation to Henry's reading. Here one might consider Austen's satirical attention to the ironically judicious Henry's sensitivity to taste. What stimulates Henry most in these conversations turns out to be not just the topic itself, but also rather Catherine's responses to him. For indeed, Henry's impertinent statements elicit revealing physiological somatic signals from Catherine from which Henry feeds. This becomes clear when the narrator reveals near *Northanger Abbey*'s conclusion that Henry's sincere attachment to Catherine might never have occurred had it not been for her open “partiality for him” (240). Austen again shows the more realistic and natural anti-dualistic functions emerging during the Romantic period.

Austen hints at her reason for portraying the characters in this way when she writes, “It is a new circumstance, and dreadfully derogatory of an heroine’s dignity; but if it be as new in common life, the credit of a wild imagination will at least be all my own” (240). Austen makes her reader aware that knowledge of literature in and of itself does not constitute taste. The way one responds to literature constitutes taste; in addition, this taste also reveals something about values. Anne Ehrenpries’s introduction to *Northanger Abbey* explains this functional role as prevalent in works by Austen:

What is significant in her characters is not so much their choice of books as the way they read them [. . .]. It is thus in their reactions to what they read that Jane Austen makes suggestive distinctions among the characters of *Northanger Abbey* [. . .]. Her characters’ attitudes toward literature are often symptomatic of their attitudes toward life, and false taste in one may suggest false values in the other. (21)

Ehrenpries’s emphasis on characters’ reactions to literary productions also brings into play another important adaptive function of fictional experience as viewed by cognitive and evolutionary literary theory.

In “Does Beauty Build Adapted Minds? Toward an Evolutionary Theory of Aesthetics, Fiction, and the Arts” John Tooby and Leda Cosmides explore this “cross-culturally universal, species-typical” phenomena of “the human attraction to fictional experience” (7). Tooby and Cosmides define fictional experience as a wide array of imaginative simulations produced through writing or orally shared that includes, though certainly is not limited to, pretend play, gossip, storytelling, and fictional productions in a variety of mediated forms—including novels. Despite the apparent lack of utilitarian function that fictional experiences provide, Tooby and Cosmides observe that a phenomenon exists in humans’ voluntary preference and voracious appetite for such

experiences over more accurate and applicable information about the world. The familiarity of this phenomenon leads Tooby and Cosmides to an important deduction:

Novels and films are not an accidental side effect of attempts to manufacture accurate information packages. They are not near misses. And the most basic design feature you would expect built into a reward system for inputting information—an appreciation for its truth—seems to be completely switched off in a wide variety of circumstances. (12)

As a result, Tooby and Cosmides assert that specialized, and functionally adaptive neural and cognitive machinery must have evolved to allow humans to “enter and participate in imagined worlds” without completely confusing or endangering our ability to differentiate between fictional experience and empirical experience (9). Part of this adaptive machinery includes “decoupling mechanisms” whose functions appear “to protect our knowledge stores from being corrupted by the flood of false informations (‘fictions’) that the ability to engage in imaginative activities allows” (9). While they acknowledge the adaptive function of negotiating the social world that has already been discussed, Tooby and Cosmides feel another important adaptive function exists. Tooby and Cosmides find a certain fictional truth exists that paradoxically shows, “as Picasso said, ‘Art is a lie which makes us see the truth’” (13). Tooby and Cosmides theorize, “[A]esthetic motivations may be [. . .] motivations to detect, seek, and experience certain aspects of the world [. . .] to help adaptations become organized into their mature form” (15).

Perhaps most relevant to Austen’s defense of the novel, Tooby and Cosmides finally assert that the specialized cognitive machinery exists as adaptive functions of evolution in which fictional experiences apparently cause an organizational effect within the neural and cognitive architecture:

[H]umans live with and within large new libraries of representations that are not simply stored as true information [. . .]. Managing these new types of information adaptively required the evolution of a large set of specialized cognitive adaptations. For example, it involved the evolution of new information formats, based on what we call scope syntax, that tag and track the boundaries within which a given set of representations can safely be used for inference and action. (20)

Accordingly, the appeal of fictional representations serves not only to foster social cohesion, or to serve other functions like sexual selection; fictional representations assist in developing identification and organization solutions for other adaptive problems. Tooby and Cosmides believe that many seemingly purposeless behaviors like humanity's participation in fictional experience may be driven by adaptations operating in their organizational mode.

This can be observed through Austen's portrayal of Catherine's cognizant awakening. Immediately following Henry's address, Catherine becomes suddenly able to decouple Radcliffe's unrealistic depictions of human nature and inform a realistic understanding of common life. Despite feeling "grievously" humbled, Catherine's error only really causes temporary pain to herself (201). Although her folly becomes exposed to Henry, his "astonishing generosity and nobleness of conduct" never allows her folly to grow beyond a blush—a minor cost considering the adaptive benefits she gains towards insight into the character of others (202). Catherine's newly informed conviction that "among the English [. . .] there was a general though unequal mixture of good and bad" differs from her previous romantic visions taken from Radcliffe's works (202). More importantly, however, one should note that Catherine's conviction also differs from Henry's characterization of England. This newly self-fashioned conviction makes Catherine relatively confident that "some actual specks" in the character of General

Tilney make his character remain “not perfectly amiable” (202). Able to differentiate between the unrealistic, dualist characterizations in Radcliffe’s works, Catherine now can accurately integrate the General’s harshness towards his children, his lack of tenderness towards his wife, and his overall paternal stoicism as flaws within and otherwise unspotted character. She then successfully synthesizes what she has learned about the unequal mixture of good and bad in human nature to draw an accurately informed inference about patriarchal tyranny.

In this sense, Catherine’s reading of novels aids her in the organization of what Tooby and Cosmides call scope syntax. Tooby and Cosmides would identify Catherine’s inability to decouple fictional experience prior to Henry’s address as a sort of scope problem:

[I]nformation, to be useful, must be combined and transformed through inferences. Not only do inferences propagate errors present in the source inputs, but the resulting outputs are then often fed as erroneous inputs into other inferences [. . .]. In short, the heavily inference-dependent nature of human behavior regulation is gravely threatened by erroneous, unreliable, obsolete, out-of-context, deceptive or scope-violating representations. (19)

When viewed in this light, *Northanger Abbey* appears as Austen’s attempt to evolve the novel’s form through a self-reflexive unsettling of not only the Romantic period’s fixed notions of the real and the romantic but also fixed notions of gender. In contrast to the dangers that Romantic reactionaries believed novel reading provoked, Austen’s *Northanger Abbey* exhibits a realistic heroine relatively unaffected by her temporary confusion of fact and fiction. *Northanger Abbey* ultimately presents the reading of novels not as a complicated drug that reduces a person’s sensibilities to sort of naïve realism; rather, Austen’s novel represents a highly evolved adaptation that awakens ones sensibilities about genre and gender. *Northanger Abbey* tackles the problems stemming

from the Romantic period's reactionary naïve realism—a type of realism that Tooby and Cosmides observe “is the birthright of other species—species untroubled by the need to piece together belief systems and struggle with the question of how much to trust them and when to abandon them” (19). In cognitive and evolutionary terms, novels can be perceived as aids in the complex organization of scope syntax. With the proper decoupling mechanisms activated, reading novels assists in building important features that facilitate a calibration of mind and body.

In *Jane Austen's Discourse with New Rhetoric*, Lynn Rigberg observes of *Northanger Abbey* that Austen requires her audience's and Catherine's aesthetic and moral judgments to “rely on tasteful discernment, not imagination's unsupported conjectures”:

When Henry asks Catherine, “What have you been judging from?” he invokes the rhetorical issue of old logic versus new rationalism [. . .]. His direction suggests an agenda that incorporates reason and observation [. . .].

The scene in which Henry directs Catherine to exercise better judgment suggests that the novel will perform within nature, as Blair demands of poetic art. Henry's demand that Catherine base her judgments on what is natural foreshadows that *Northanger Abbey* itself will not submit to popular tastes for the unreal or sentimental. (34)

According to Rigberg, Austen's defense of the novel in Chapter 5 uses “an offense as her defense” by attacking other popular publications to argue first, that the type of contemporary novel Austen writes “meets the needs and interests of its audience better than the other forms of rhetoric it names” and secondly, that the novel “derives strength from realistic characterization, conversations, and circumstances” (38-9). *Northanger Abbey* clearly illustrates that reading novels cannot be held responsible for the descent of human reason. Falsely informed inferences and narrow-minded counsel should be blamed. Indeed, an argument may be made that much of Jane Austen's fiction—its

themes, its plots, and its discourses—depends heavily on the prevalence of folly through faulty inference propagation. If not, then to what should one assign the Thorpe's misleading assumptions, General Tilney's mistaken persuasions, Henry's misunderstanding of English patriarchy, or any other aspects of Austen's work that bears repeated parodying and deflation? Along with Howard's premise that Austen's *Northanger Abbey* achieves a self-reflexive unsettling of the Romantic period's fixed notions of the real and the romantic, one may add Austen achieves this through portraying a bio-cultural destabilization of dualistic notions within the anti-dualistic scope of the emerging brain-science of the time.

CHAPTER 5

CONCLUSION

Near the conclusion of “Jane, Meet Charles: Literature, Evolution, and Human Nature” Brian Boyd provides a justification for cognitive or evolutionary theories’ analyses of Jane Austen:

I suggest that even in the work of a writer who seems aloof from biology and remote from the humanly universal, much can be interpreted in terms of biologically evolved characteristics of human life, rather than as no more than the product of a particular cultural moment. (23)

Boyd’s suggestion makes a valid case for interpreting not just those authors with direct claims and historical ties to evolutionary theory. While it would seem that this new paradigm finds itself advantageously situated to supplant the poststructuralist theories that have dominated literary studies over the past thirty years, much still needs to be addressed before a truly comprehensive bio-cultural theory can deconstruct the problematic binary division of the realism/relativism polemic. Written in 1993, Ellen Spolsky’s *Gaps in Nature: Literary Imagination and the Modular Mind* concedes that she supports her hypothesis with developing cognitive theorizing and neurological data. She recommends, “It needs not only a lot more of both of these [theory and data], but also the attention of literary scholars” (2). Spolsky’s challenge indeed has been met and much has been done in both cognitive and evolutionary theory and the quantifiable research that supports the theories. Even with the impressive range of literary concerns addressed by cognitive and evolutionary criticism, certain challenges remain.

One of the major challenges that exists requires further explication of some terminology. In “Questioning Interdisciplinarity: Cognitive Science, Evolutionary Psychology, and Literary Criticism” Tony Jackson observes that a number of influential

writers in the field of cognitive and evolutionary theory “have taken up narrative as key term in their explications of the nature of cognition and mind” (332). Jackson sees key terms from other disciplines as a potential problem. For example, Tooby and Cosmides conclude in “Does Beauty Build Adapted Minds?” that novels actually facilitate in building a well-engineered mind’s inferential capabilities because of their narrative structure:

We think that fiction consists of representations in a special format, *the narrative*, that are attended to, valued, preserved, and transmitted because the mind detects that such bundles of representations have a powerfully organizing effect on our neurocognitive adaptations, even though the representations are not literally true. (21)

The prevalence of the narrative structure in fictional experience thus functions as an organizer of scope syntax. The use of the word narrative presents semiotic issues about narrative structures that have long been the focus of other fields in literary studies. To what extent, Jackson posits, “will arguments in a given discipline be expected to include a full knowledge of the key terms imported from other disciplines?” (332) Jackson’s concern resounds across the theoretical divide. In “The Epistemology of Cognitive Literary Studies” Elizabeth Hart states, “The term ‘cognitive,’ a necessity for the projects of both groups, presents a genuine difficulty because it is inevitably overburdened with meaning in both cognitive science and literary theory” (317).

Part of the challenge of terminology must ultimately stem from the primary attack of poststructuralist theory. Tony Jackson explains:

The idea of the subsymbolic or presymbolic can appear only as a form of Platonic essentialism, as the positing of a kind of magical foundational element that is outside of history and culture. A given writer may, wisely, try to qualify her or his position by stressing the affective relationship between culture and cognitive architecture; but still, the very knowledge

of that architecture can only appear to us through discourse; therefore, the architecture itself is ultimately a function of discourse. (344)

And yet, Jackson supposes that perhaps this relativist skepticism has actually assisted cognitive and evolutionary theory to develop. Jackson speculates that perhaps a groundbreaking book like Jerome Barkow, Leda Cosmides, and John Tooby's *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (1992) would not be what it is "without the antagonism (implicit or explicit) of relativist skepticism" (345).

Perhaps until cognitive and evolutionary literary theory can develop an organizing principle such as Darwin provided for biology, a fully developed bio-cultural approach to literature would be subject to poststructuralist criticism. Be that as it may, many now feel that cognitive and evolutionary approaches to literature have made much greater strides in literary theory than poststructuralism in the past decade. In his adapted essay "Of Heartache and Head Injury: Reading Minds in *Persuasion*" for *Poetics Today*, Alan Richardson echoes Spolsky's recommendation that much more in the areas of cognitive and evolutionary theory and data needs to develop in literary studies. Admittedly, Richardson acknowledges that literary studies has only just begun to explore the possible connections of science and literature inspired by the recent advance of cognitive and evolutionary theory:

We have hardly begun to understand how pervasively and centrally the literature of the Romantic era is caught up in emergent notions of an embodied mind because we have ourselves, up to now, shown almost no interest in the brain or in the remarkable developments in brain science of our own era. (158)

This admission should be extended and explored throughout all of literature.

BIBLIOGRAPHY

BIBLIOGRAPHY

- The Adapted Mind: Evolutionary Psychology and the Generation of Culture.*
Eds. Barkow, Jerome, Leda Cosmides, and John Tooby. New York: Oxford University Press, 1992.
- Austen, Jane. *Northanger Abbey*. 1818. New York: Penguin, 1985.
- Bakhtin, Mikhail M. "From Discourse in the Novel." *Norton Anthology of Theory and Criticism*. Trans. Caryl Emerson and Michael Holquist. Ed. Vincent B. Leitch. New York: W. W. Norton, 2001. 1190-1220.
- Barash, David P. and Nanelle R. Barash. *Madame Bovary's Ovaries: A Darwinian Look at Literature*. New York: Delacorte Press, 2005.
- Bergmann, Jenna R. "Romantic Anti-dualism and the Blush in *Northanger Abbey*." *Wordsworth Circle*. 33.1 (Winter 2002): 43-48.
- Boyd, Brian. "Evolutionary Theories of Art." *The Literary Animal: Evolution and the Nature of Narrative*. Eds. Jonathan Gottschall and David Sloan Wilson. Evanston, IL: Northwestern University Press, 2005. 147-76.
- "Jane Meet Charles: Literature, Evolution, and Human Nature." *Philosophy and Literature*. 22.1 (1998): 1-30.
- "Literature and Evolution: A Bio-Cultural Approach." *Philosophy and Literature*. 29.1 (2005): 1-23.
- "The Origins of Stories: *Horton Hears a Who.*" *Philosophy and Literature*. 25.2 (Fall 2001): 197-214.
- Carroll, Joseph. *Evolution and Literary Theory*. Columbia: University of Missouri Press, 1995.
- Literary Darwinism: Evolution, Human Nature, and Literature*. New York: Routledge, 2004
- Damasio, Antonio R. *Descartes' Error: Emotion, Reason, and the Human Brain*. New York: G. P. Putnam's Sons, 1994.
- Ehrenpries, Anne. "Introduction." *Northanger Abbey*. New York: Penguin, 1985.
- Hart, Elizabeth F. "The Epistemology of Cognitive Literary Studies." *Philosophy and Literature*. 25.2 (Oct. 2001): 314-34.

- Haywood, Ian. *The Revolution in Popular Literature: Print, Politics, and the People, 1790-1860*. New York: Cambridge University Press, 2004.
- Howard, Jacqueline. *Reading Gothic Fiction: A Bakhtinian Approach*. Oxford: Clarendon Press, 1994.
- Jackson, Tony. "Questioning Interdisciplinarity: Cognitive Science, Evolutionary Psychology, and Literary Criticism." *Poetics Today*. 21.2 (Summer 2000): 319-347.
- Levine, George. *Dying to Know: Scientific Epistemology and Narrative in Victorian England*. Chicago: University of Chicago Press, 2002
- The Literary Animal: Evolution and the Nature of Narrative*. Eds. Jonathan Gottschall and David Sloan Wilson. Evanston, IL: Northwestern University Press, 2005.
- Michaelson, Patricia Howell. *Speaking Volumes: Women, Reading, and Speech in the Age of Austen*. Stanford, CA: Stanford University Press, 2002.
- Richardson, Alan. *British Romanticism and the Science of the Mind*. New York: Cambridge University Press, 2001.
- "Of Heartache and Head Injury: Reading Minds in *Persuasion*." *Poetics Today*. 23.1 (Spring 2002): 141-160.
- Rigberg, Lynn R. *Jane Austen's Discourse with New Rhetoric*. New York: Peter Lang, 1999.
- Seeber, Barbara K. *General Consent in Jane Austen: A Study of Dialogism*. Montreal: McGill-Queen's University Press, 2000.
- Spolsky, Ellen. *Gaps in Nature: Literary Interpretation and the Modular Mind*. Albany, NY: State University of New York Press, 1993.
- St. Clair, William. *The Reading Nation in the Romantic Period*. New York: Cambridge University Press, 2004.
- Tooby, John and Leda Cosmides. "Does Beauty Build Adapted Minds? Toward an Evolutionary Theory of Aesthetics, Fiction and the Arts." *SubStance*. 30.1-2 (2001): 6-27.