

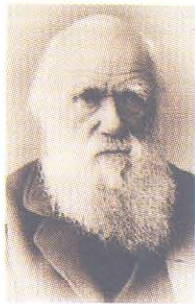
SCOTT GOLDSMITH FOR THE CHRONICLE REVIEW

Jonathan A. Gottschall, an adjunct professor of English at Washington and Jefferson College and a proponent of Literary Darwinism

IN THE FACE of any looming apocalypse, imagined or not, prophets abound. For the literary academy, which has been imagining its own demise for almost as long as it has been around, prophets seem always to look to science, with its soothing specificity and concreteness. As the modern discipline of literary criticism was forming in the early 20th century, scholars concentrated their efforts on philology, a study that was thought to be more systematic than pure literary analysis. When the New Critics made their debut in the 1920s and 30s, their goal was to give a quasi-scientific rigor to literary theory: to lay out in detail the formal attributes of a “good poem” and provide guidance as to how exactly one discovered them. Later the Canadian critic Northrop Frye, in his 1957 *Anatomy of Criticism*, famously queried: “What if criticism is a science as well as an art?” And some of the poststructuralist thought that began to filter into America from France in the 1960s took as its bedrock linguistic and psychoanalytic theory.

But very few pro-science activists suggested that literary scholars should actually work the way scientists do, using such methods as accumulating data and forming and testing hypotheses. Even Frye argued that, while the critic should understand the natural sciences, “he need waste no time in emulating their methods. I understand there is a Ph.D. thesis somewhere which displays a list of Hardy’s novels in the order of the percentages of gloom they contain, but one does not feel that that sort of procedure should be encouraged.”

Over the last decade or so, however, a cadre of literary scholars has begun to encourage exactly that sort of procedure, and recently they have become very loud about it. The most prominent (at least in the nonacademic media) are the Literary Darwinists, whose work emphasizes the discovery of the evolutionary patterns of behavior within literary texts—the *Iliad* in terms of *dominance and aggression*, or *Jane Austen* in terms of mating rituals—and sets itself firmly against 30 years of what they see as anti-scientific literary theories like poststruc-



MICHAEL NICHOLSON. CORBIS

Darwin to the Rescue

A group of scholars thinks evolutionary science can reinvigorate literary studies

By BRITT PETERSON

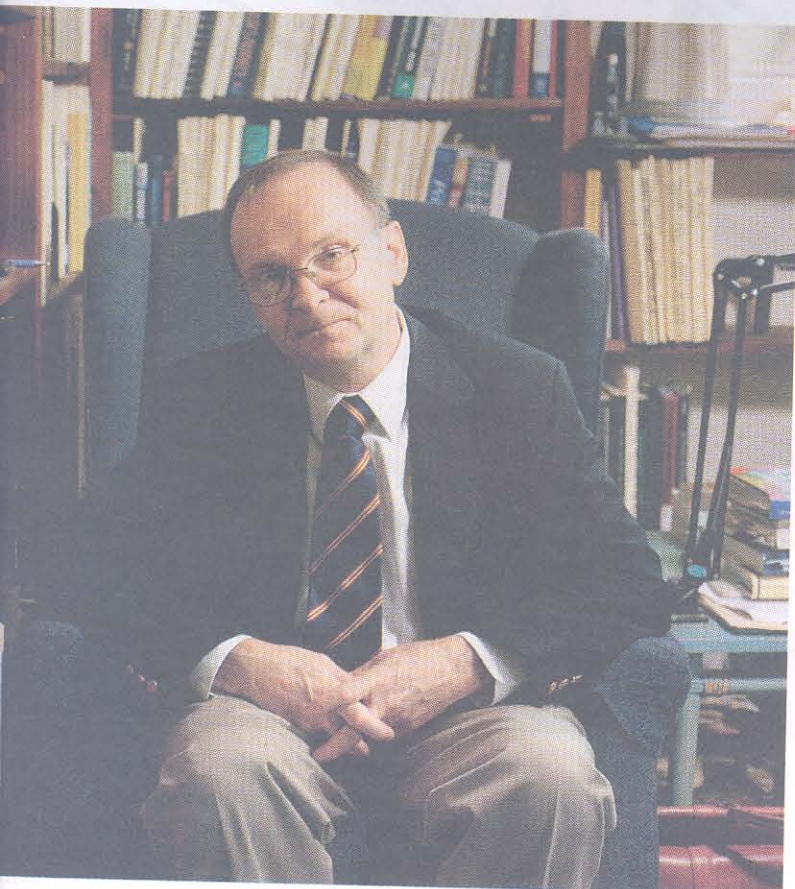
turalism and Marxism. In the past few years, such critics have had the honor of a long, if quizzical, *New York Times Magazine* profile and, in May, a place on the *Boston Globe*’s Ideas page, where Jonathan A. Gottschall, a leading proponent of Literary Darwinism and an adjunct English professor at Washington and Jefferson College, explained why the approach is for him, as he says, “the way and the light.”

His comments have been receiving widespread attention in the blogosphere, perhaps because they touch a nerve: The idea that traditional literary studies are in decline, or already dead, is bandied about almost casually now. The symptoms are legion, from the discussion of books as an old technology to the tight job market and the increasing reliance on adjunct labor in the humanities. And, like Gottschall, many academics see literary theory as an alienating force that has driven students away from their disciplines, and splintered the disciplines to the point, sometimes, of outright war.

Nonetheless, many literary scholars are skeptical of the idea that Literary Darwinism will save their sector of the academy. And some of the strongest criticism comes from those you might think would be allies—other members of the loosely defined group of literary critics breaking new ground with studies that incorporate scientific theory and even, in a few cases, empirical method. Literary Darwinists are “a very small group of people that position themselves as martyrs for the cause ... because they expect to be berated by everyone else in the field,” says Lisa Zunshine, an English professor at the University of Kentucky, who works with cognitive approaches to understanding literature. “But, in spite of the publicity that they’re getting, I don’t see that they’re actually attracting so many people.”

Literary Darwinists beg to differ. Gottschall’s *Globe* article is a bracing manifesto, outlining the sad state of the literary academy and pointing to scientific method as the only life raft in sight. “Literature professors should apply science’s research methods, its theories, its statistical

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WHITNEY CURTIS FOR THE CHRONICLE REVIEW

Professor of English at the U. of Missouri at St. Louis
Darwinian approach to literature

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tools, and its insistence on hypothesis and proof," he writes. "The alternative is to let literary study keep withering away." He provides two demonstrations of his approach. The first is a study just published in the journal *Human Nature*, in which he collects accounts of beauty in fairy tales from around the world to test whether Western tales place an extraordinary importance on female beauty. The second is a comparison of reactions from "500 literary scholars and avid readers" to characters from 19th-century British novels to gauge whether the author is truly dead—in other words, whether the meaning of a text is derived primarily from each reader's particular experience, as cultural theory has had it.

The subjects of the two experiments are not accidental. Literary Darwinism conceives of itself as the primary opposition to cultural theory in all its forms: Marxism, poststructuralism, Freudian and Lacanian psychoanalysis, feminism, and so forth. In the Literary Darwinist mind-set, cultural theory—subjective, deliberately obtuse, politicized, based on outmoded assumptions—is the disease that's stricken the academy, and scientific rigor is the cure. "Most of the big ideas in literary theory have been tried out and rejected in other disciplines. So psychoanalysis has no life in psychology anymore—it only exists in the humanities. Marxism has no life really in political theory or in economics classrooms," Gottschall says. "My point is, we start with these bad theories, and work founded on faulty premises is going to be faulty itself." Of course, the tests he cites in his *Globe* article find both the feminist critique of the Western tradition as having a unique focus on beauty and the poststructuralist idea of the "death of the author" to be false. (Not all Literary Darwinists subscribe to Gottschall's reliance on quantitative study; others treat scientific ideas more as a theoretical frame for reading than as a guide to method.)

Literary Darwinism is also garnering attention because it joins evolutionary-minded scholarship in various fields. Scholars like Gottschall; Joseph Carroll, of the University of Missouri at St. Louis; and the

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Nabokov scholar Brian Boyd, of the University of Auckland, have found much common ground with evolutionary psychologists. The 2002 book *The Blank Slate: The Modern Denial of Human Nature* (Viking), by Steven Pinker, an evolutionary and cognitive psychologist at Harvard University, reads like a companion piece to Gottschall's and Carroll's writings: "The dominant theories of elite art and criticism in the 20th century grew out of a militant denial of human nature. One legacy is ugly, baffling, and insulting art. The other is pretentious and unintelligible scholarship. And they're surprised people are staying away in droves?" In a review last year in *Philosophy and Literature* of the seminal Literary Darwinist anthology, *The Literary Animal: Evolution and the Nature of Narrative* (Northwestern University Press, 2005), edited by Gottschall and David Sloan Wilson, a biologist at the State University of New York at Binghamton, Pinker wrote that, despite several methodological concerns, he found the book "exciting." He added, "It isn't often that one can be present at the genesis of a new field of knowledge."

BUT Literary Darwinists have been far less welcomed by mainstream literary theorists. Referring to the theory of the unity of scientific and literary knowledge in E.O. Wilson's 1998 book *Consilience: The Unity of Knowledge* (Alfred A. Knopf, 1998), Louis Menand, a professor of English at Harvard, wrote in 2005 that humanities departments "should definitely not want consilience, which is a bargain with the devil." While scientists have criticized the methods Gottschall uses in his experiments as not very scientific, literary scholars have often claimed that the concerns of Literary Darwinism are less than literary. Natalia Cecire, a literary blogger and graduate student at the University of California at Berkeley, wrote an impassioned denunciation: "For a literary critic, Gottschall seems alarmingly unaware of what it is that we actually do." Taking issue with his finding that Western society is not alone in its sexism, she charged, "I challenge Gottschall to come up with some citations of 'scholars' (plural) who have said that. Not Naomi Wolf: actual literary critics."

The Literary Darwinists expect and almost court that type of dismissal. The scholars tend to see themselves as outsiders: denied jobs at prestigious universities, tenured positions, and grant money because of the iconoclastic nature of their work. Gottschall is still an adjunct, and he says he believes that no one of a "principally Darwinian bent" has tenure, except for those who originally started down a more-traditional path. "It is true that we are promoting views that seem disturbingly alien or threatening to most of the professors who serve on hiring committees, editorial boards, and who comprise the main pool of peer reviewers," he says. Carroll says that he is "looking forward" to the day when he can just "get down and do the work," instead of being forced to constantly explain and defend his approach.

Still, both Gottschall and Carroll are sure that their ideas will eventually gain mainstream credibility. Carroll talks about Literary Darwinism's exerting a "carrot and stick" influence on the literary academy: "The stick is that [mainstream academics are] going to feel more beleaguered and provincial and left out in the cold, and the carrot is that they're going to feel that here's something new to do." Gottschall adds: "I think that ambitious young scholars, graduate students and so forth, will see something of glamour in here, something that can motivate their studies. And there will probably be resistance against it too, but again, I have confidence in the ideas, and I think they'll win out."

A less-expected attack, however, comes from similarly marginalized scholars who, like Kentucky's Zunshine, study related fields like cognitive theory and empirical literary research. Like the Literary Darwinists, such scholars, to varying degrees, work at the juncture of literary theory and scientific methods. Those who turn to cognitive theory fit into several different subfields, including literary critics who use empirical data, collaborating with neuroscientists and experimental psychologists to study the connections between brain function and reading. Some adherents, like Nancy Easterlin, of the University of New Orleans, draw both on cognitive theory and evolutionary psychology in their work. Easterlin works with a broad assortment of approaches, including Darwinist-based feminism and what she calls "cognitive ecocriticism." It is the pro-science literary scholars who don't use evolutionary psychology who tend to be the most skeptical that the Literary Darwinists will succeed in transforming literary studies forever.

For some of the literary scholars who use cognitive science, that is be-

cause their background incorporates cultural theory as well as science, and they're wary of junking 30 years of new thinking. F. Elizabeth Hart, an associate professor of English at the University of Connecticut who has a background in Renaissance literature and an interest in how cognitive theory affects, for example, conceptions of metaphor, says she mistrusts an approach that so de-emphasizes the effect of culture on the individual. "We have to find a theory that creates or explains or allows for an interface between the individual as an agent and the—to use a Marxist phrase—superstructure that bears down on the individual. You have to have a model that accounts for both," she says. Zunshine accuses the Literary Darwinists of "throwing the baby out with the bathwater. ... It's somewhat ridiculous to say that scientific method can help us to shed light on all of the questions that literary theory has been engaged with."

The Italian literary scholar Franco Moretti, now at Stanford University, isn't in the field of cognitive literary studies, but his work frequently gets lumped in with the empiricists because of its particularly scientific and mathematical nature. He has been writing about the connections between evolution and literary theory for many years. He reiterates in an e-mail message the argument that Literary Darwinism doesn't address literary form, that it's concerned with external issues that avoid literature's literary nature: "If Literary Darwinism manages to improve the way to understand and explain literary form, then it will be a great step forward, but if it eludes form, or just doesn't 'see' it, then it will mean exactly nothing."

Joseph P. Tabbi, a professor of English at the University of Illinois at Chicago who studies the intersections between cognitive theory and 20th-century literature, says of Gottschall's fairy-tales experiment: "If you're interested in questions of sexism, you need to look at more than expressions of stereotypes; you need to look at the way that the narrative is shaped; you need to look at questions of closure in narrative, questions of sequence, and questions that fall into the category of narratology. I'm not sure that by taking samples and doing statistical processing that you're going to get very far." D.T. Max, the author of the *New York Times Magazine* article, got at that objection when he wrote, "I don't think even by stretching one's imagination primates evoke 'The Waste Land' or 'Finnegan's Wake.' Tone, point of view, reliability of the narrator—these are literary tropes that often elude Literary Darwinists."

And still others attack the Literary Darwinists on the other flank, prying apart their scientific credentials. While some who call themselves Literary Darwinists do have a scientific background—and several scientists wrote articles for *The Literary Animal*, including E.O. Wilson—many in the group have no background in statistics or evolutionary biology, and they frequently work alone instead of in groups with scientists, unlike many of the cognitive theorists and empirical literary critics. (Carroll said that he recently gave himself "a crash course" in statistical analysis, but neither he nor Gottschall has any official training.) Alan Richardson, an English professor at Boston College who works with cognitive theory, writes in an e-mail message that the work he's seen from the evolutionary literary theorists "is riddled with basic errors in study design and methodology."

David Miall, a professor of English and film studies at the University of Alberta who teams up with a psychologist to perform empirical studies of reader response to texts, says that, with the Literary Darwinists, "what you've got is just another way of coming up with interpretations of texts, and I'm not sure we need that, so urgently ... unless they really have something new to tell us about the nature of the text. And if there is something new, there should be a way of validating it empirically. So in that sense, their resistance to doing empirical studies seems to be a real disability. It's disappointing that they don't go to that next stage." Miall's recommendation would be to test empirically whether readers are actually influenced to think about the mating strategies and other evolutionary patterns that the Darwinists read into the works they examine.

Both Gottschall and Carroll are used to responding to such critiques and do so pre-emptively in most of their publications. In an upcoming issue of the journal *Style*, Carroll will take on some 30 scholars about various aspects of Literary Darwinism. As for the question of whether its approach can fully get at literary problems, Gottschall writes in his forthcoming book, *Literature, Science, and a New Humanities* (Palgrave Macmillan): "I suspect that there will always be vital humanities questions that deflect every tool and device in science's organon. Moreover,

I do not mean to hint that sound qualitative studies cannot help us generate more reliable knowledge."

Gottschall's essay in *The Literary Animal* also includes an extended defense of using quantitative methods for literary studies, alleging that over the history of human knowledge, many fields (including medicine and sociology) have resisted the importation of statistical analysis. "Critically, the point is not that investigators in these fields eventually discovered that everything could be reduced to numbers after all. Rather, they came to realize that quantitative and qualitative tools were both utterly indispensable for a reasonably complete exploration of their fields, each set of tools being appropriate for different types of questions." (Despite that conciliatory stance in print, however, in person Gottschall often seems to be choking back a complete denunciation of traditional literary studies, saying qualifiedly, "I'm not quite calling for total disciplinary annihilation and genocide.")

The proponents of Literary Darwinism have also taken on the question of its scientific rigor. Carroll says, "A lot of people do say that, and one of the responses to it is that people who say that haven't read most of the stuff they're rejecting." Gottschall points out that much of his writing has been published in scientific journals. He admits, however, that under the name of Literary Darwinism "there's also a lot of crap. There really has been a lot of crap. Now the question is, what does that prove? Does it really prove that it's futile and jihadist and all of that? Or does it prove that we need to do a better job? Because you can also go out and find hugely depressing lists of problems in quantitative approaches."

AS TO WHETHER Literary Darwinism will save literary criticism, opinions are split there too. Indeed, other scholars of scientific theory and empiricist research seem far less morbid on the subject than Gottschall and Carroll. Many see the numbers increasing in their own specialties: it's not unusual to hear stories about scholars in the field of cognitive theory and literary studies, for example, who have been laboring in isolation for decades now getting greater recognition from their colleagues, professional institutions, and academic publishers. For them the future looks far brighter than it seems for the evolutionary literary theorists, perhaps because the field of cognitive studies outside the literary sphere is so hot.

Zunshine, in fact, sees Literary Darwinism as a force that could add to the joblessness and hopelessness of students and professors, instead of vice versa: "Say I am a professor of English, I have graduate students, and I tell them: You have to forget about everything that your colleagues have been working on for the last 30 years because it's all literary theory, it's all wrong, and now you have this new scientific approach that you use. Now let me ask you, what would happen if a graduate student who hears this goes on the job market?"

Even mainstream scholars who have proclaimed the end of literary studies are wary of the solution offered by Literary Darwinism. William Deresiewicz, a former associate professor of English at Yale University, wrote a gloomy article in *The Nation* that is frequently cited as evidence of the apocalypse by Gottschall. Deresiewicz says, "This is not to say that some of those methods can't be useful; I'm not going to make an a priori statement like that. But I worry that they proceed from a failure or an unwillingness to recognize or see that science and literature represent different areas of knowledge." Andrew Delbanco, a professor of the humanities at Columbia University and author of the 1999 *New York Review of Books* article "The Decline and Fall of Literature," calls his attitude "cautiously open skepticism. The kind of reductionist stuff that I could imagine coming out of this would seem to me to be moving in exactly the wrong direction. But I don't think one should close one's mind to it."

For the Literary Darwinists, however, the urgency is so high that they see their work, whatever its flaws, as the literary academy's last, best hope—if, of course, it has the courage to embrace the inevitable. "We're desperate," says Gottschall. "The field is really, really desperate. Morale is so bad. No one really knows what to do. Everyone is saying what I am, in some way—they have the same critique, the same feeling that our old ways are just plain spent."

"But when it comes down to how to solve these problems, how to win back relevance and consequence in the world, how to secure a place for the discipline in the future, people are pretty timid about these more aggressive solutions."