

## Evolutionary Psychology

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### Original Article

#### Literature and Science: Doomed Reductionism or Evolutionary Literary Pluralism?

A Review of Jon Adams, *Interference Patterns: Literary Study, Scientific Knowledge, and Disciplinary Autonomy*. Lewisburg, PA: Bucknell University Press, 2007, 268pp, US\$55.00, ISBN: 978-0-837-5681-2

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In *Interference Patterns* Jon Adams seeks to evaluate the past and prospect of attempts within literary studies to imitate or incorporate elements of science. He looks at earlier attempts to relate literary analysis to science, especially in Roman Jakobson's linguistics (1920s-1980s, e.g. 1980, 1985) and in Northrop Frye's metacriticism (1957), but has been moved especially by the emergence of evolutionary psychology in the 1990s. He focuses particular attention on E.O. Wilson's claims for the unity of the natural and social sciences and the humanities and arts (1998) and on Joseph Carroll's *Evolution and Literary Theory* (1995).

The subject is timely and important: two already much-heralded books will appear this season, Edward Slingerland's (2008) *What Science Offers the Humanities: Integrating Body and Culture* and Jon Gottschall's (2008) *Literature, Science, and a New Humanities*.

Alas, Adams's book is neither timely nor important. Timeliness first: a worthy PhD, written mostly between 2000 and 2002, it needed much more work to become a book even for an audience of specialists. Published in 2007, it fails to mention nearly all the work in evolution and literature published over the preceding fourteen years, including books by Nancy Easterlin and Barbara Riebling (1993), Robert Storey (1996), Brett Cooke (1999, 2002), Joseph Carroll again (2004), David Barash and Nanelle Barash (2005), and *The Literary Animal* (2005), edited by Gottschall and D.S. Wilson, as well as the fifty-plus articles written by Carroll (e.g. 2005, 2007), Cooke (e.g. 1999), Easterlin (e.g. 1993, 1999, 2000, 2001), Gottschall (e.g. 2001, 2003a,b), Scalise Sugiyama (e.g. 1996, 2001a,b,c, 2003, 2005) and myself (e.g. Boyd, 1998, 2001, 2005, 2006), to name only the most prolific in the field. Characteristically, Adams cites an article by Tony Jackson (2000) critical of Storey's (1996) *Mimesis and the Human Animal*, but does not list Storey's book itself in the bibliography or refer to it except in a brief citation from Jackson. Adams really needed to do more research, even by 2002, let alone for a book published in 2007.

Importance next. An author writing on this subject surely ought to consider the

major attempts to relate literary to scientific methods, and not just to select material he happened to have noticed. Why devote a long discussion to the eccentric and issueless Georges Polti? Why does Adams not mention the Russian formalists of the late 1910s and 1920s (e.g. Shklovsky, 1980), and their attempt to create a scientific approach to literature, and their recent (1980s onward) descendants in both literature (especially Colin Martindale and others in the International Society for the Empirical Study of Literature) (e.g., Martindale, 1990) and in film (especially David Bordwell and his disciples like John Anderson, Ed Tan and Murray Smith) (e.g., Bordwell, 2008; Anderson and Fisher, 2005; Tan, 1996; and Smith, 1995, respectively)? Why does he not do more than just mention the name of I.A. Richards (1929) in passing? Why not discuss Leo Spitzer's important 1948 linkage of the process of critical reading with the hypothetico-deductive method of science?

If Adams really wished to explore the possibilities of would-be scientific approaches to literature, he could have chosen, rather than exploring the main past approaches, to focus exclusively on what he thinks has become or is about to become the dominant current approach, literary Darwinism. He does give this some prominence—rightly, I think, because of the promise it shows. But there are at least three major problems in his treatment.

First, he seems to believe that, where structuralism appeared to offer a means of uniting knowledge and therefore powerfully shaped literary theory and criticism, but failed, evolution also promises to unite the knowledge of living things and therefore may take over the central role structuralism once played in literary theory. Adams seems even to believe that this change is well under way. Those of us who hope such a change *might* come would be delighted if that were the case, but have to acknowledge that although literary studies in the Americas are in a crisis, few yet feel ready to consider evolution as the best path out of the mire. Adams seriously misreads the current situation in literary studies.

Second, his attempted critique of the prospects of scientific and especially evolutionary approaches to literature rests on a woefully simple confusion. E.O. Wilson claims in *Consilience* that scientific and humanistic explanation must be consilient, must take physicalism as their foundation. But the fact that everything is ultimately physics does not entail, for Wilson, Carroll, or anyone else interested in linking evolution and literature, that physics is everything. Everything must be *compatible* with a physical explanation of the world, but this does not preclude new properties emerging at higher degrees of organization and interaction: chemistry, life, thought, and art. Why should Adams suppose that Wilson's work ultimately ousts intentionality when sociobiology depends on competing and cooperating intentions, or that evolutionary *psychology* has nothing to do with minds, or that literary scholars would be remotely interested in consilience at that imagined cost?

This second flaw is decisive, but a third problem compounds it. Not only does Adams not know much of the work that has connected evolution and literature, but he cannot or does not try to imagine what such work might do. He seems to suppose only that it can collapse out intentionality. In fact it can offer a new poetics, a naturalistic theory of literature, explaining why we are story-making animals and why we create and comprehend stories as we do. Or it can offer a new thematics, an examination of the subject matter of literature that returns literary studies from the narrow focus on race, class or gender, or the

social construction of this or that, to the whole range of human behavior depicted in literature and explained in the cross-species, cross-cultural and deep-historical perspectives that evolution makes possible. Or it can show how literature approached in a scientific spirit can supply qualitative and quantitative data for the understanding of human nature in specific times and places or across time and place.

Adams objects to a closer link between literature and the sciences especially because he accepts Richard Rorty's stress on the different questions that different disciplines ask. But neither consilience nor an evolutionary approach to literature imperils pluralism. Consilience requires only that all levels of explanation be compatible. A chemistry that asked only the same questions as physics would no longer be chemistry, but chemistry incompatible with physics would no longer be science. Neither Freudian psychoanalysis nor a biology-denying constructivism proves compatible with evolution or evidence, but within an evolutionary perspective on literature, the latter can be studied from many different angles, so long as they are compatible with other empirical disciplines.

We can study literature from anthropological, economic, political, religious or sociological angles, but with evolution's power to explain multilevel selection and the complex interplay between competition and cooperation, we can explore sociality with far greater depth and range. Or we can study literature from neurological or psychological angles, using all the temporal and physical breadth of evolution and all the temporal and physical resolution of neuroscience. Or we can study literature *as* literature, as art, with all the expertise of human readers, scholarship and traditions *and* where appropriate with all the power of scientific method. For me personally that offers the greatest challenge and pleasure of an evolutionary approach to literature: a *return* to literature *as* literature and to a discriminating, evidence-based and consilient pluralism. Such an approach loses nothing but an indifference to evidence and gains a wide and complex world.

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