

Book Review

By Sextants and Stars: The Propitious Voyage of *The Literary Animal*

A review of *The Literary Animal: The Evolution and the Nature of Narrative* by Jonathan Gottschall and David Sloan Wilson, 2005, Northwestern University Press.

by

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To introduce *The Literary Animal: Evolution and the Nature of Narrative*, E. O. Wilson draws an extended analogy between the work of the essays to follow and European exploration of the Americas. He notes that

the first geographic explorers were Columbian; they searched for continents and archipelagos. The second wave of explorers were Magellanic; synthesizers by nature, they encompassed the whole. The third wave were cartographic; they pressed on into the details of coastline and rivers, or cordilleras and inland tribes. (vii-viii)

He goes on to dub the “the naturalistic literary theorists” represented in this volume “would-be Columbians.” No doubt in an age when Columbus’s legacy is heavily contested, some critic is apt to lunge at the colonialism in the metaphor, lamenting the fate of literary studies should the precepts of Darwinian criticism establish themselves on the farther shores. Will the conquistadors even acknowledge the tribes--poststructuralist, new historicist, feminist, postcolonialist--already residing there (some would say thriving, others merely surviving)? Will they forcibly attempt to “convert” the natives to their scientific culture, eradicating existing methodologies and discursive customs and planting in their stead flags of biological determinism and unrelenting empiricism?

The fear is unfounded, mainly because the exploratory spirit that animates this book is derived from literary scholars and scientists alike. How many books, after all, can boast both a “Foreword from the Scientific Side” and one from the “Literary Side?” Time and time again, the authors of these essays remind us that they aren’t rejecting culturally-based explanations, or what one might loosely group together as “constructivism,” but seeking what co-editor David Sloan Wilson calls a “middle ground” (35), where biology and culture together shoulder the burden of explanation.

E. O. Wilson’s foreword trumpets this spirit of adventure: “Who will gamble against [these explorers]? If there is any chance of success, who with any courage and ambition would not want to join them—or at least lend support?” (viii) If readers are glancing anxiously toward the horizon, watching the gathering thunderheads, and wondering, rightly, how sturdy, how seaworthy this vessel, *The Literary Animal*, is, I would urge them to sign aboard the frigate. At the same time, we ought to heed Wilson’s own caveat that what is visible in this maiden voyage is merely “continents and archipelagos,” the crude outlines of land masses. Think of the earliest maps of the Americas, the continents with arms akimbo, the mainland indistinguishable from peninsulas. Even with the liberties taken with scale and proportion, one can infer the general contours of the world as it is now rendered by sophisticated satellite technology; in short, *we can see what they were getting at.*

This book, then, represents the equivalent of those early likenesses. No doubt much work, perhaps the bulk of it, remains as far as close interpretation, determining how to apply the steady accumulation of scientific insights to individual texts, incorporating the latest brain imaging technology, and teasing out the subtle warp and woof of independent elements at work in literature. If they are to deliver on the promise of this book, future vessels will have to enlist crews whose eclecticism goes beyond even the wide range represented here, and to “press...inland.” Literature’s shoreline, reflecting behavior and consciousness themselves, is like the Maine coast: intricate and rocky, riddled with innumerable nooks and necks, and thus the cartographic tools and crewmembers will have to be correspondingly crafty and precise. But steering by sextants and stars, the critics of *The Literary Animal* have got the right idea, and future work will prove that many of the bigger chunks of land are roughly in the right part of the globe.

The four sections and multiple introductions of *The Literary Animal* cover a lot of ground, including several models for how evolutionary psychology can inform literary work, several cases of hands’-on criticism, two models for the evolution of art and narrative, and a few examples where quantitative methods have been used to analyze texts. The book also runs the gamut in terms of its literary terrain, from epics and romances to fairy tales, erotica to Jane Austen, Shakespeare to the history of drama. The editors deliver on their insistence that

“the alert reader will quickly discover that we do not all speak with the same voice” (xxv), and perhaps the greater challenge for that same alert reader will be uncovering the subterranean connections between essays; in the tradition of Darwin himself, the reader must be a bit of an “integrationist.” Several patterns become evident, such as the notion that genes and culture are in an ongoing, dynamic relationship, that narrative plays a lead role in our understanding of human nature, and that scientific method and “literariness,” and by extension the arts in general, need not be at loggerheads.

From the opening pages, the writers of *The Literary Animal* make it known that they are not *replacing* culture with biology, but trying to ensure that culture, while given its due, is *compatible* with biology. David Sloan Wilson gives the most direct and extended treatment of this relationship in his piece on “Evolutionary Social Constructivism,” where he delineates several schools of evolutionary thinking, and a couple of modes of constructivism. In his attempt to forge connections, Wilson defines “the heart of constructivism” as based on the “optimistic belief that people and societies can become better in the future than in the present or the past” (35). Constructivists who pride themselves on stringent anti-essentialism will be less than enthused to hear that they have a “heart,” but he raises a fine point—surely, feminists had better be committed at the least to eradicating sexism, postcolonialists to ending racism, etc. Yet Wilson may be *more* optimistic about the “potential for [societies to] change” than many a constructivist. After all, if, as many poststructuralists would have it, we are mired in language and history, and/or enmeshed in configurations of power and desire that “always already” precede us, then behavioral flexibility comes no more readily to *homo constructivus* than to the *homo sapiens* of evolutionary biology. Nevertheless, Wilson’s point, that evolutionary thinking has room aplenty for flexibility, is valid, and I think he could dispense with the “nongenetic evolutionary processes” (29) and homologies between stories and genes he uses here to get it. Scientists like David Geary, in *The Origin of Mind* (2005), have begun to show us exactly how the general intelligence required for flexibility could ride in on the coattails of more rigidly-modular processes via strictly adaptationist processes. But Wilson deserves credit for exploring this on the social plane, and for thereby showing how evolutionary theory might be an ally of those who harbor utopian hopes for society.

The two chapters in the book on drama, by Daniel Nettle and Marcus Nordlund, also put the spotlight on the relationship between nature and culture. Referring to drama as “supernormal conversation” (66), Nettle does a fine job of showing how the theatre, from the classical amphitheater to the black-box of today, reflects our “informational biases” toward coalition-forming gossip, noting that the number of characters in plays (and significant ones in films) hovers around the “mean size of a hunter-gatherer band” (68). Gossip, of course, is

mainly about status and mate selection, and Nettle shows how, predictably, we find that plays stage the “extremit[ies]of the fitness stakes” (67), i.e. marriage and death, in comedy and tragedy, respectively. In his piece, Nordlund dismantles the notion that love is but a many-splendored cultural construct, but rather than tossing history overboard, moves into an analysis of Shakespeare that demonstrates how a Great Writer, given the constraints of his culture, “inverts” expectations in a way that nevertheless abides by the logic of biology.

A second thread that runs through the book is that of narrative, which has pride of place in the social sciences, our mental life, and these essays. David Sloan Wilson adduces no fewer than twelve examples of how social scientists have found narrative and its attributes to be instrumental, from Terrence Deacon’s speculation that symbolic language ratcheted up the brain to Ong’s theory of literacy as a revolutionary force in thought and society; by implication, this list could go on indefinitely. Working in another direction, Michelle Scalise Sugiyama “reverse-engineers” narrative in her essay, putting its “cognitive widgets and sprockets” (180) under the microscope, and thus contemplating how we get from the Blind Watchmaker to Homer, the Blind Bard. In another chapter, Ian McEwan urges us regard at Darwin’s own life *as* a novel in order to better appreciate his theory that the basic emotions are universal. Not only does “Charles” emerge as more human (granted, an ironic phrase if ever there was one), but this biography effectively undermines at least one pernicious myth of Darwinism; having learned taxidermy from a freed slave, and detesting racism, he would likely have been appalled at how easily his theory has been perverted for racist ends. Finally, Joseph Carroll’s laudable efforts to make life-history theory indispensable for evolutionary psychology afford an implicit role to narrative. For Carroll, thinking of humans as either “fitness maximizers” or “adaptation executors” (82), as sociobiology and evolutionary psychology have done, is simply to miss a key part of the picture. Life-history theory, according to Carroll, allows us to leave this dichotomy behind, revealing how everything from physiognomy to behavior unfolds in accordance with a logic based on the trajectory of the human life cycle. People allocate their energy and shift their motivations, whether for “reproductive” or “somatic” spoils, in large measure based whether they are male or female, and what stage of life they are at. In other words, we need to look at the shape of a human life before drawing any conclusions about a behavior, and any “narrative grammar” that ignores this shape is destined to be incomplete. Life-history theory, in Carroll’s hands, gives credibility to the notion that, as one book’s title would have it, “Every Person’s Life is Worth a Novel.”

In addition to theorizing about the pervasiveness of narrative, several of the essays are themselves related in story form. Gottschall, Sloan Wilson, and Dylan Evans each tells the story of his personal intellectual journey, Gottschall emphasizing the frustration of being a literature student facing colleagues and

advisors utterly unsympathetic to a Darwinian sensibility, Wilson the striking connections he found between Japanese and Western literature, and Evans tracing the cultish allure of Lacanianism, and his somewhat anguished extrication from said cult. The presence of these autobiographical, sometimes testimonial pieces--Evan's account could be titled "12 Steps to Beating Your Lacan Habit"--amidst more conventional analysis, is refreshing. But it is plain, too, that there is method to their method; their "storiness" affirms the assertion made in Sloan Wilson's essay that narrative is not mere entertainment, but fundamental to human thought itself. And as with any story, some of the insights are serendipitous, like Gottschall's mention that his colleagues associated Darwin with "eugenics," "determinism," "forced sterilization," and even "holocaust" (xx).

Attempts to bring rigorous scientific methods to bear on literature are still in their infancy, as Gottschall himself is at pains to point out in the overview to his study of fairy tales, which challenges certain axioms of feminism. Gottschall's essay starts out resembling a piece of historicism, as he delves into John Graunt's 17th century studies of mortality. But Gottschall is no historical particularist; rather, this history is a paradigmatic example in his compelling case that literary critics ought to deputize statistics to further their analyses, not as a panacea, but certainly one handy method among many. The studies in the section entitled "Evolutionary Theory and Scientific Methods" take the greatest risks, insofar as the authors are not merely applying established results from other fields to shed light on literature, but venturing into the trenches, engaging in the messy work of science. Even the shortcomings of these articles, then, are illuminating, and point to directions for future research. In Gottschall's own study, he examines a large corpus of folk tales to determine how well-represented female protagonists are in the tradition, as well as their degree of agency. Gottschall cross-examines the feminist tenet that gender is an arbitrary construct, and thus that power relations in European tales mirror the wider patriarchy of the culture. His study convincingly shows that European tales are no more or less patriarchal than those from other continents, and thus that gender and power relations are unlikely to be wholly arbitrary, if indeed they are "constructed" at all. However, a feminist critic looking at the same numbers might retort that the real moral of the story is that patriarchy is so widespread, rather than being an exclusively European invention, and then want some answers as to how and why cultural and biology, in tandem, serve up such near-universals.

Another scientific study, "Proper Hero Dads and Dark Hero Cads" by Daniel Kruger, Maryanne Fisher, and Ian Jobling, compels us to raise fundamental questions about the relationship between art and reality. The study looks at how the desirability of certain characters in novels reflects "dad and cad" mating strategies. The hypothesis that readers will react in predictable ways based on attachment theory is fascinating and true as far as it goes, but it begs the question of how readers extrapolate from a set of ink-marks set down over a hundred years ago, and can

somehow assess whether they “would get along...with” or “prefer to hook-up sexually” (235) with a character that emerges from those marks. Since the authors wisely chose to include the reading samples, depictions of “proper and dark” Romantic heroes, as an appendix, it becomes evident that once excerpted from their novel contexts, they read more like personal ads than descriptions of “people” in action (Carroll reminds us elsewhere in the book that we cannot conflate characters with people). Take this description of George Staunton, also known as “Cad #1”:

He seemed about twenty-five years old. His carriage was bold and somewhat supercilious, his step easy and free, his manner daring and unconstrained. His features were uncommonly handsome, and all about him would have been interesting and prepossessing, but for the indescribable expression which habitual dissipation gives to the countenance, joined with a certain audacity in look and manner...The whole partook of the mien, language, and port of the fallen archangel (240).

Of course, our real-time mating assessments are likely a fine-tuned mélange of observation and inference, with everything, from pheromones to life history, from ovulatory phase or sperm competition, to the attitudes of friends, clothing, and other environmental cues, weighing in the decision. A personal ad, on the other hand, as daters quickly discover, is carefully contrived, hardly some “omniscient narrator’s” perspective (convenient though it might be were it otherwise!). This doesn’t invalidate the results of Kruger et al., but it does put a significant asterisk next to the results in terms of their scope. Yet it is pioneering studies like this that will open up such research questions, and, one hopes, inspire more ecologically-sound studies, as well as further hypotheses about the fluid boundary between literature and “life.”

Indeed, a sense of humility suffuses this entire enterprise—the authors know they don’t have all the answers just yet. E.O. Wilson, in his foreword, allows for the possibility that “existence [might not be]...consilient” (viii), even while reminding us that only those who test the limits of scientific inquiry will bump up against them, and therefore expose them. Such scepticism is salutary, and finds its way into various essays, heralded by the editors’ own introduction, which points out that “the specific hypotheses [of Darwinian social scientists] are often controversial and frequently prove to be false” (xviii). In this vein, Robin Fox’s essay on male-bonding closes with the equivalent of “Limitations of Our Study,” by examining the “Volsung Saga,” which decidedly *doesn’t* conform neatly to his hypothesis. I have my doubts as to whether Wilson himself *really* doubts that the universe might be consilient—or, for that matter, whether non-consilience is even a coherent concept—but such conventions have become part of science for good reason: they reflect a commitment to relentless questioning, and serve as tangible reminders that error is a

methodological concomitant of progress.

Occasionally this doubting even goes overboard, as when the editors claim that Brian Boyd's and Michelle Sugiyama's explanations of the evolution of art and narrative, respectively, are "quite different and, therefore, cannot both be correct." Boyd's piece is an authoritative overview which doesn't pretend to be objective—he makes no secret of his own thesis, that art is a means of "shaping and sharing attention," and as a result of such attention, of "fostering social cohesion and creativity" (151). Treating other theories as the proverbial parts of the elephant, he attempts to expose their blind spots while retaining their strengths in his own sketch of the whole beast. Sugiyama, on the other hand, dismisses the likelihood of a single evolutionary explanation of art, and focuses on narrative exclusively as the best means humans have arrived at for exploiting and conveying information, which she views as our "ecological niche" (190).

Though they might appear incommensurable, with some modifications these accounts might be knitted together. No doubt, attention is a vital aspect of all of the arts, but their content, or informational richness in Sugiyama's sense, is essential as well. "Attention must finally be paid to such a person," says Linda Loman about Willy in her famous speech in *Death of a Salesman*, and she could very well be speaking about the purpose of all art. "Information," in contrast, connotes facts and data, seeming to miss entirely the affective and symbolic dimensions of texts, like William Burroughs's (1979) character in *Ah Pook Is Here* who "reads Moby Dick to find out about whaling and to hell with Ahab, White Whales, Quequod and Ishmael." But as Sugiyama's essay brilliantly illustrates, this is an impoverished notion of information. In the traditional societies that she surveys, information can encompass everything from knowledge of human nature and the status of coalitions and relationships, to advice on hunting techniques, the environment, etc—in other words, the stuff that in short order become the *Norton Anthology* staples of character, conflict, plot, and setting. Moreover, she argues, narrative is the only medium that is "well-designed" for a "holistic simulation of human experience" (191). To offer one off-the-cuff resolution, then, Boyd's theory seems to more aptly describe the origins of the *form* of art independent of content, while Sugiyama's focuses on the *content* giving rise to that form.

This brings us to a larger issue, that of the integration of the multitude of subtheories and hypotheses that are crammed under the rather capacious umbrella of sound Darwinian thinking. The scholar who has done the most in this regard is Joseph Carroll, whose essay on "Human Nature and Literary Meaning," taken from his book *Literary Darwinism*, makes the greatest strides towards synthesis. Carroll's diagram of the "hierarchical motivational structure of human nature" (89), with its organization of behavioral systems, the types of behaviors which comprise them, from tool-making to tale-telling, and, finally the basic emotions,

is the most comprehensive architectonic I've come across to date of "human nature." No doubt this Periodic Table will come under revision—for instance, currently the emotions are randomly strewn on the floor of the chart rather than systematically shelved. But even in its present work-in-progress form, this diagram, and more crucially the life-history and behavioral systems models that it encapsulates, should be of immediate value for scholars and artists alike.

Zooming in on this chart, we find bundles of competing, often-conflicting interests and possibilities. At any given moment, one might be seeking shelter, overcoming competitors, building coalitions, telling stories, favoring kin, and at that same moment it might be unclear which should take priority, either for the somatic or reproductive "success" of the individual. And any given behavior is going to be the same way—the causes at one instant clear, but in the next a combinatorial supernova. Somewhat paradoxically, then, human nature is at once tightly streamlined and integrated *and* a veritable grab-bag of motives and proclivities whose "narrative center of gravity," to borrow Daniel Dennett's term, is ever-shifting. This description applies equally to the field of evolutionary social science, which Carroll characterizes as "a diverse array of intellectually independent investigators from many convergent disciplines—paleoanthropology, life-history analysis, behavioral ecology, behavioral genetics, personality theory, and the study of intelligence" (77).

Let us return, then, to our ship and its crew. As this Age of Exploration continues, thrust forward in notable fashion by *The Literary Animal*, such a hodgepodge, with the occasional Magellanic synthesizer, is just what we ought to be striving for in our ranks. For future expeditions, we'll need neuroscientists aboard to nail down what brain circuitry is involved; already, Raymond A. Mar has found common regions for comprehending stories and spinning them, and Alice Flaherty has mused about everything from the limbic systems of writers to the neurochemistry of writer's block. We'll need to recruit linguists, game theorists, dream theorists, primatologists, economists, and moral philosophers, and integrationists like Carroll. Yes, we'll even need literary critics with poststructuralist stripes, many of whom have sophisticated insights to contribute, but who have too often mistaken proximate explanations for ultimate ones. And further, we'll need to set aside deck space for coalitions to form that disdain disciplinary boundaries. Unexpected combinations—and there are plenty to choose from—are the ones that are likely to yield the greatest, and least predictable, results.

Lastly, I would urge that more fiction writers, poets, and playwrights need to be part of the conversation. Several of us have already stowed away on board, and when we are discovered, I implore the crew to refrain from casting us out into open waters. Much like social scientists, we writers are intensely driven to scrutinize the human condition, or, as Philip Roth would have it, "the human

stain.” But what can writers offer that is unique? The writer Antonya Nelson, in the latest issue of *Ploughshares*, reveals that her story “Loaded Gun” is “written in the *shape* of a gun,” where “[e]ach little secret, of which there are six, is being loaded into the chamber of a...girl’s mind.” This alone is intriguing, but Nelson adds that “she prefers that the reader not detect” such a shape in her work explicitly, yet feel its presence while reading. And, indeed, writers have much to offer of which printed pages themselves leave only minimal traces: the hard-won knowledge of how characters and scenes come, word by word, to life; the pleasures and pains of sustained immersion in virtual worlds; and, alas, the frustrations of our own “blank slate,” the empty page that too often stares right back at us.

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