BOOK REVIEWS

Evolution and Criticism

Judy Halden-Sullivan, Book Review Editor

“How close can we get to the origins of art in our own species?” Author Brian Boyd poses this ambitious question to focus his wide-ranging study, *On the Origin of Stories: Evolution, Cognition, and Fiction*, a text reviewed in this issue (6). For millennia, humans have distinguished themselves by creating, enjoying, and debating art, but why do we do it? Why art? The books reviewed in this issue offer compelling speculation in regard to this query, and while scientific, psychological, and often Darwinian, each author’s response promises expanded perspectives on what it means to be human.

Julie Nichols, a professor of English who teaches genre studies, provides a double review that marries kindred analyses: Boyd’s aforementioned *On the Origin of Stories* (Cambridge: Belknap Press of Harvard UP, 2009) and Lisa Zunshine’s *Why We Read Fiction: Theory of Mind and the Novel* (Columbus: Ohio State UP, 2006). In his elaborate 540-page exploration, Boyd characterizes art as not simply a by-product of evolution but a trigger for human development: a survival-adaptive function that deepens our cognitive abilities, our mental flexibility. Boyd supports his thesis with findings from diverse evolutionary theorists, and when arguing for the innate necessity of humans’ drive to compose and share narratives, he also draws upon evidence provided by cognitive sciences—in particular, from the field called “Theory of Mind.”

“A cluster of cognitive adaptations that allows us to navigate our social world and also structures that world”: that is how Lisa Zunshine defines Theory of Mind in her study, *Why We Read Fiction*, and it is ToM (as it is termed) that grounds her examination of fiction as a humanizing evolutionary process that bestows upon readers keener social awareness. In turn, in reviewing Zunshine’s work, Nichols posits “evocriticism” as a provocative approach to understanding story-making: applying paradigms afforded by cognitive sciences to analyze narrative texts as material demonstrations of evolutionary principles.

In a similar vein, Denis Dutton applies evocriticism to the world of art in his book, *The Art Instinct: Beauty, Pleasure, and Human Evolution* (NY: Bloomsbury Press, 2009). Mary Pettice, a professor of English studies with a specialization in contemporary media, critiques Dutton’s argument that art, in all its diverse forms, confers survival and even reproductive advantages upon the humans who produce it. As Pettice notes, Dutton, for better or worse, does not hesitate to judge art from around the globe in terms of his evolutionary perspective.

Evocritics like Boyd, Zunshine, and Dutton amply attest to the primal survival-adaptive function of art, revealing that art is not only entertainment, dazzling craft, or moral insight. Art is a catalyst for our species: our commitment to dialogue with even the most intractable texts transforms us, making us more intensely, mindfully human.


Julie J. Nichols, Utah Valley University

Those who belong to an organization called “Assembly for Expanded Perspectives on Learning” may be an audience quick to embrace the notion of story-making as a profoundly human activity. Telling stories—true, false, or invented—identifies us as beings with consciousness and conscience, beings who seek not only factual knowledge but also connectedness with others like (and unlike) ourselves. When I recently taught a “Literary Genres” class on fiction, my undergraduate students predictably answered first-day questions—“What is fiction? What is its function in human consciousness?”—by pointing to fiction’s entertainment value. “It’s always been my escape,” they said in so many words. But, by the end of the semester, they were dancing a far more complex step: fiction co-creates reality, they asserted. In a world where binaries of truth/falsity, reality/fantasy, self/Others are felt to be rigid, fiction allows for the creation of a third thing, as Lewis Hyde argues in his study of myth and art, *Trickster Makes This World:* fiction is a third space richly dependent upon the transformative experiences of readers. As Nabokov points out, the reading of fiction expands emotional and mental awareness, brings into our consciousness types of people and experiences we may not have sought out before, and provides knowledge of being otherwise impossible to gain firsthand. As William Gass argues, such awareness is made possible on the level of the sentence, in the individual work, and within the subcategories of the genre. As those nourished by fiction, we award a plethora of prizes for it because it is essential to our growth and learning. We strive to perpetuate it, to encourage its ever higher quality. Fiction is in us. It is natural, inevitable, and even indispensable to the human race.

All well and good, if a little romanticized for these postmodern times, when theory has made contested sites of the author, the subject, and the text as artifact. But for that very reason, my students were assigned to conclude their semester with readings from two books I will now consider: Brian Boyd’s *On the Origin of Stories: Evolution, Cognition, and Fiction* and Lisa Zunshine’s *Why We Read Fiction: Theory of Mind and the Novel.* The cumulative effect of these books might be visualized as the intersecting arcs of a Venn diagram made up of three—perhaps surprising—circles, one labeled “Darwinian evolution,” another “cognitive science,” and a third simply, “literary theory.” For reasons I hope to demonstrate here, my students’ sense of the role of fiction in human affairs was stretched and augmented by these final readings, which marry current neuroscientific findings about how the mind works with enlightening analyses of specific texts—their production, as well as their effects on those who read them. As writers and readers of fiction themselves, curious about the production as well as the impact of story-making, my students discovered much to ponder. Although our class did not unequivocally agree with either Boyd or Zunshine, we found them refreshing in their attempts to move from abstract postmodernism to practical, material methods of a “scientific” literary criticism. These volumes separately, but even more when read together, reward the
reader with both the immediate pleasure of logical and stylistic clarity and the long-term gratification of useful new ideas regarding the function of fiction in human culture.

Boyd begins by analyzing our longevity as a species, focusing upon the human qualities and behaviors that have guaranteed our survival. He wants to examine art and play. Both have essential adaptive survival functions, which is why they can be found in every human culture from the beginning of our time on earth. By the end of this 540-page volume (notes arrive on p. 417), the words “adaptation” and “survival” begin to constitute almost a mantra, a good-natured rhythmic repetition, as Boyd insists that, since fiction is “the one human art with no known precedent” (2, emphasis mine), the biocultural perspective—the one that acknowledges the survival-adaptive function of all human behaviors—is the only one that will allow us to “appreciate how deeply surprising fiction is, and how deeply natural” (3).

Boyd’s aim is to “offer an account of fiction . . . that takes in our widest context for explaining life, evolution” (11). For those who may accept alternative “widest contexts for explaining life,” the adherence to Darwinian material evolution has shortcomings. For example, Owen Barfield, whose work I reviewed in the 2009 issue of JAEPL, sees evolution as a process that includes consciousness and karma—not a solely material process at all. Nevertheless, Boyd’s two-part argument engages the reader with its clarity and erudite logic. Book One lays out the premises by which art and fiction can be considered biological adaptations, defining “art” and “adaption” with precision by citing numerous theorists, from Darwin through von Frisch (on honeybees and their dance), to Dawkins (on the improbability of performing complex activity for no reason), Cosmides, Tooby, and Geary (on evolutionary psychology), and many others.

“An evolutionary adaptation,” Boyd summarizes, “is a feature of body, mind, or behavior that exists throughout a species and shows evidence of good design for a specific function or functions that will ultimately make a difference to the species’ survival and reproductive success” (80; italics Boyd’s). He takes on Stephen Pinker, “the foremost critic of claims that art is an adaptation,” pointing out that “the compulsion to engage in art needs to explain the compulsion to make art as well as to enjoy it” (82; italics Boyd’s). Pinker’s notion that art is a byproduct of evolution makes no sense to Boyd. Making art is so energy- and time-intensive in comparison to its apparent immediate benefits that we would give it up—it would die out quickly—if it had no survival-adaptive function to compel us toward it.

Art, Boyd posits, is an adaptive behavior—a “kind of cognitive play, the set of activities designed to engage human attention through their appeal to our preference for inferentially rich and . . . patterned information” (85; italics Boyd’s). His italicized words are key. Attention ensures survival. The individual to whom attention is paid is more likely to survive. Attention to patterns, and to their variations, helps ensure the survival of the individual and the community in which those patterns appear. Boyd explains that,

The high concentrations of patterns that art delivers repeatedly engage and activate individual brains and over time alter their wiring to modify key human perceptual, cognitive, and expressive systems, especially in terms of sight, hearing, movement, and social cognition. All of art’s other functions lead from this . . . Art becomes a social and individual system for engendering creativity, for producing options not confined by the here and now or the immediate and given. All other functions lead up to this. (86-87; italics Boyd’s)
Art and play give humans opportunities to attend to patterns—either pre-existing ones or ones newly created by the play itself—without competitive or punitive consequences. The result is a more flexible mind, a wider-ranging intelligence, infinitely expandable brainpower: “By refining and strengthening our sociality, by making us reader to use the resources of the imagination, and by raising our confidence in shaping life on our own terms, art fundamentally alters our relation to our world . . . . By focusing our attention away from the given to a world of shared, humanly created possibility, art makes all the difference” (125).

Boyd then moves from a discussion of art in general to a discussion of story-making—fiction-making—as art, with a survival function equal to that of any art and unique to humans, with their capacity for language. Boyd begins Part Three of Book One by distinguishing between narrative and fiction, pointing out that we are not taught narrative. The drive and the ability to understand events in chronological and spatial order are built into us. If we cannot do so, we do not survive. Memory and prediction are fundamentally survival adaptations, and narrative develops both. It is in this section that Boyd discusses Theory of Mind (141-152), the idea from cognitive science which is Lisa Zunshine’s focus.

Like Boyd, to whom I will return shortly, Zunshine is eminently readable, personal in style (much more so than Boyd, actually, with frequent asides and appeals to the reader), logical, engaging in tone, and continuously thought-provoking in the development of her argument. Like Boyd, Zunshine cleaves to current scientific theories regarding the development of the human mind; like him, she cites numerous studies and the theorists who conducted them in their quest to understand how the mind works. Her considerably shorter but no less scholarly book (198 pages; notes begin on p. 165) defines Theory of Mind (ToM)—also known as “mind-reading”—as “a cluster of cognitive adaptations that allows us to navigate our social world and also structures that world” (162). Pointing to autism as a deficiency or lack of ToM, and to the inability in schizophrenics to attribute correctly the sources of the voices they hear, Zunshine analyzes the differences between “normal” people and those who cannot competently perform three processes that she defines in detail:

- “source-monitor” (47), in other words, identify who said what about whom and how that should be interpreted, explored in Part Two, “Tracking Minds”
- navigate the layers of thinking about others thinking about themselves or about yet others, demonstrated in Part Three, “Concealing Minds”
- interweave cognitive and emotional responses, elaborated upon in Part Three and in the conclusion, “Why Do We Read (and Write) Fiction?”

Finally, Zunshine asserts that meta-representation—the ability to keep track of what is being presented as true and by whom—is a crucial skill for effective living in the world. That is, it is an adaptation with survival functions. It is also a requisite skill for interpreting, understanding, and enjoying fiction. Zunshine’s thesis is, on the surface, more about reading than about evolutionary survival. But her argument is that the skills which good fiction reading requires make readers more “human,” more capable of “making it” in human situations. “Intensely social species that we are,” she says, “we . . . read
fiction because it engages [and exercises], in a variety of particularly focused ways, our Theory of Mind” (162). When taken together, Zunshine’s book illuminates and expands upon Boyd’s. Boyd’s, in turn, constructs a broader foundation for the kind of thinking Zunshine’s work demonstrates. Zunshine applies cognitive science to the service of better reading of texts. Boyd employs texts to illuminate his theory about the evolutionary survival-adaptive functions of art.

Indeed, much of the pleasure to be derived from reading Boyd’s and Zunshine’s books comes from the depth and originality of the case studies each recruits to illustrate his or her thesis. In Book Two of Origin, Boyd introduces “evocriticism” by investigating the Odyssey’s origins in oral storytelling and the apparent conscious creative effort summoned to commit the work to writing, as the bard sought “strategically to solve . . . particular problems, immediate and longer-term” (218), having to do with garnering the attention of his audience. According to Boyd, one way he did this was by beginning the epic with an encapsulation of the story to come, putting it in a context of community—quoting Homer’s appeal to his audience that, “if you are Greek, this concerns you” (as qtd. in Boyd 220).

But more than that, Homer made use of patterns of character and event in new ways guaranteed to keep his audience’s attention. Boyd reminds us that “storytelling can command the attention of others by delivering high-intensity social information” (222). Such information includes images of personalities and accounts of behaviors of highly influential people like Odysseus. Patterns of events which Aristotle approvingly termed “unity of action”—in which every episode fits and none is irrelevant—also constitute high-intensity social information. Recalling his key terms “attention” and “pattern,” Boyd’s detailed reading of the Odyssey stresses Homer’s attention-getting choices in constructing a main character who embodies both an ultimate human being and the impulse to return home. The latter desire, based in the evolutionarily significant biological bond between parent and child and the equally adaptive cultural institution of the family, is hampered by an increasingly difficult set of obstacles. Odysseus overcomes these material and psychological obstacles in “a series of changes in perspective, pace, and tactics” (228)—in other words, through an evolution in his own intelligence, discernible to his audience as possibilities for their own transformation. Incidentally, in Trickster Makes This World, Lewis Hyde reads Odysseus as the first modern consciousness: a trickster who lies to get what he wants.

Throughout his explication, Boyd theorizes that, as an author, Homer was a strategist vying for his audience’s attention in order to “maximize the benefits [he] could earn against the compositional costs [he] had to be prepared to pay” (253). This emphasis also drives his discussion of—surprisingly—Dr. Seuss’s Horton Hears a Who! The contrast in texts is deliberately chosen. In his analysis of the 1954 picture book, Boyd emphasizes the fiction-maker as individual. For instance, little is known about Homer, so that readers of the Odyssey must make assumptions about audience expectations, literary traditions, and cultural norms. But in the case of Horton Hears a Who!, Boyd gives us Theodor Geisel’s detailed personal history to illustrate the “play” and “attention-getting” choices he made as Dr. Seuss, from the repetitive lines and curves in his drawings to the rhymes and polarities in his narratives.
In both cases, the texts are illuminated by Boyd’s insistence that art has evolutionary benefits both for the artist (the fiction-maker) and the audience: the survival of both is ensured by the best works of art. I might add that art itself co-evolves with its makers and audiences. Boyd’s choice of texts, one ancient, one nearly contemporary, illustrates that evolution.

Zunshine’s examples spotlight the ways in which fiction requires readers to exercise their survival-ensuring skills of meta-representation and mind-reading. She points to the convoluted revelations of character in Virginia Woolf’s Mrs. Dalloway; the self-deception of Katerina Ivanovna in Crime and Punishment; and the problem of self-represented “truth” in novels such as Don Quixote and Robinson Crusoe. She analyzes the ways in which the unreliable narrator of Nabokov’s Lolita attributes states of mind to others in the novel which the skillful reader learns to distrust, understanding this distrust as part of the “lesson” of the fiction. Zunshine examines the role of meta-representation in effectively reading detective novels by Dorothy Sayers, Maurice LeBlanc, and Jane Austen, asserting at one point that, “[Emma] has been described as ‘the most fiendishly difficult of detective stories’” (Sayers 31, qtd. in Zunshine 129). Like Boyd, Zunshine shows that fictional texts reflect and demand the complex workings of the human brain as it strives to maintain and also expand its own infinite possibilities.

Whether or not readers of these two books are convinced at the beginning that a Darwinian or cognitive-scientific approach to literature will prove to be more helpful than any other, by the end, they will certainly experience the benefits of having paid attention. Even if doubt remains whether the biocultural perspective is the only one that will allow us to “appreciate how deeply surprising fiction is, and how deeply natural” (3), Boyd and Zunshine’s studies still reveal the distinctly human nature of story-telling and fiction-making, astutely raising awareness of the complexity of these behaviors, and their dynamic, vital role in our species’ evolution.

Works Cited


Mary Pettice, Lebanon Valley College

D enis Dutton’s *The Art Instinct* purports to offer an argument for the development of the arts in early human evolution, but in the end, he relegates evolutionary science to a supportive role for his critique of modernist aesthetics and the last 100 years of artistic production. Dutton, who died in 2010, was the creator of the online *Arts & Letters Daily*, a thoughtful clearinghouse for scholarly writing online, some of it interdisciplinary. And so, Dutton admirably embraces the spirit of interdisciplinary exploration while building his argument, turning to his own discipline of philosophy and art—and also to evolutionary science, psychology, linguistics, and sociobiology. His overarching distaste for modernism does not diminish his main argument, but unnecessarily distracts us from an idea that is ultimately persuasive and quite fascinating.

This ambitious text opens up valuable and interesting lines of thought about how “the art instinct”—as Dutton terms it—came to exist within humankind. At its simplest, his thesis argues that humans universally feel moved to create and enjoy art of all kinds because these drives are hard-wired into our genes. He argues that this particular drive emerged as an adaptation during the same time our prehistoric ancestors acquired the species’ basic skills, social systems, and emotional and intellectual traits. His most persuasive argument comes early in the book, when he painstakingly stitches together evidence for his claim that the African savanna and nearby woodlands represent the worldwide human preference for “the blue, watery landscape,” an image that, he argues, offers prehistoric assurances of high-protein hunting grounds and the promise of security and refuge (18).

One of the more innocent and, indeed, necessary assertions in support of his argument that this particular landscape is favored across cultures is: “This fundamental attraction to certain types of landscapes is not socially constructed but is present in human nature as an inheritance from the Pleistocene, the 1.6 million years during which modern human beings evolved” (18). Dutton’s main thesis rests on two basic arguments: first, that the art instinct is universal in the species, and, second, that it developed not as a byproduct of other, more central adaptations to the genome through the evolutionary process, but as an adaptation itself, one that conferred survival and reproductive advantages upon those whose genomes first expressed the inclination. These claims may seem obvious to anyone who agrees unhesitatingly that the arts are integral to human experiences. However, the philosophical implications of the former assertion can be problematic.

In developing his argument that human universals exist in the first place, Dutton returns again and again to a criticism of those who, in contemporary anthropology, ethnology, and art history, suggest that many observable human behaviors are not based on biological preferences but social constructions. Indeed, he rejects the arguments of those who would caution us to resist applying our Western standards to analyses of non-Western art—and turns the tables on them, accusing them of “exoticizing foreign cultures and denying the universality of art” (4). In his chapter, “But They Don’t Have Our
Concept of Art,” he claims that, while no anthropologist says so openly, many imply that “since the meaning of any concept is constituted by the other concepts and cultural forms in which it is embedded, concepts can never be intelligibly compared cross-culturally” (74). And, using the statement that he has not been able to attribute to any anthropologist, Dutton rejects the caveats made by those who cautiously suggest that thinkers are wrong to apply Western concepts of art and other human endeavors to non-Western societies and cultures. Nonsense, he says; understanding other cultures’ artistic expressions “is hardly an insurmountable task for the Western intellectual imagination” (75). What follows that assertion is inevitable: he claims that if we cannot say another culture’s artifact production is art in a Western sense, then it isn’t art at all (76).

To be fair, Dutton uses a wide-ranging definition of art to justify this dismissal, saying that authentic art is expressed in the “great traditions of Asia and the rest of the world, including tribal cultures of Africa, the Americas, and Oceania” (76). But the overall message of the chapter affirms the centrality of a Western concept of art and further embraces what one might see as a narrow preference for one kind of Western aesthetic.

The African savanna as an enduring image for the book’s theme is, unfortunately, rivaled by the author’s insistence on returning again and again to the problem he sees posed by Marcel Duchamp’s *Fountain*, the urinal offered—and rejected—as an *objet d’art* in a 1917 exhibition. Dutton’s entire thesis rests on a universal definition of art and set of aesthetics that he discusses with persuasive detail. However, the existence of the last 100 years of art, primarily the modernist movement, often complicates Dutton’s definition of art. Indeed, he dismisses much of 20th century Western art, asserting that, “A determination to shock and puzzle has sent much recent art down a wrong path” (11). Dutton most certainly is permitted to embrace a particular aesthetic, one that some will not find agreeable. However, whether fueled by a personal distaste or a logical need to identify the modernist movement as an evolutionary dead-end, as it were, his attacks on both the philosophical underpinnings of the movement and individual works of art themselves lead us far, far away from the book’s promising and intriguing thesis.

Logically, however, his attacks on modernism cannot be said to be entirely off topic. He claims he hopes, through his analysis, that “Darwinist aesthetics can restore the vital place of beauty, skill, and pleasure as high artistic values” (11-12). The promising, even exciting hypothesis of the book—that one might be able to gather enough evidence to suggest that the drive to enjoy and create art is an evolutionary adaptation—seems much more monumental than the mere employment of Dutton’s thesis in a scheme to reclaim what the author sees as the real purpose and expression of high art.

Therefore, the most rewarding discussions Dutton offers are those that return to the enticing ideas expressed by his thesis. Art, he argues, is not simply a by-product of a species that found itself with discerning eyes and ears, capable hands and voices, and, once having met their immediate survival needs like food and shelter, then turned to art as entertainment. Instead, Dutton roots art’s primacy in the work of evolutionary biologists who point to several fitness indicators that are positively correlated with health and reproductive potential: facial symmetry, clear skin, an hourglass figure in women, and the appearance of upper-body strength in males. The ability to create art that pleases others is, he asserts, like language in that it serves as an evolutionary fitness indicator.
and is indeed integral to survival and to sexual selection. Dutton claims that the abilities to think like an artist or be an appreciative member of an artist’s audience denote both intelligence and an ability to relate to other human beings.

In addition, Dutton argues, the luxury of having time to create art also indicates to a potential mate a special kind of surplus: that a fit individual is doing more than just surviving. Dutton draws on the work of economist Thorstein Veblen, the inventor of the phrase “conspicuous consumption,” and reinterprets human displays of wealth, arguing that creating or adorning oneself in useless but beautiful art reinforced the message that the individual, particularly in prehistoric times, could thrive even when engaged in behaviors not immediately linked to survival. He imagines the cost/benefit implications of the male peacock’s tail and says that, for our ancestors, “The best way for an individual to demonstrate the possession of an adaptive quality—money, health, imagination, strength, vigor—is to be seen wasting these very resources” (156). To his credit, Dutton worries about inadvertently suggesting that “costliness and art are intrinsically connected in our aesthetic psychology,” but the overall argument ably supports his contention that art demonstrates a kind of mental and imaginative fitness (156).

Dutton’s work ultimately argues that art is not only essential to the species but one of its central attributes. He suggests that human evolution in the wake of our rapid development of large brains needed art as an intellectual coping mechanism as we negotiated our places in an increasingly social environment. Dutton writes, quoting the sociobiologist Edward O. Wilson, “‘There was not enough time for human heredity to cope with the vastness of the new contingent possibilities revealed by high intelligence,’ Wilson says: ‘the arts filled the gap,’ allowing human beings to develop more flexible and sophisticated responses to new situations” (120).

Our ancestors self-selected the art instinct by esteeming those with artistic sensibilities. Our efforts at creating aesthetic schemes by which to judge art happen, Dutton implies, as a byproduct of the centrality of art in our imaginative lives. In such an environment, then, his own particular aesthetic theories are welcome enough—but shouldn’t be a distraction from the truly inspired connection he makes between human genetic history and the development of art.

Work Cited