

# The New Criterion

## Books

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### Make way for bio-aesthetics

by [John Derbyshire](#)

On *The Art Instinct* by Denis Dutton

The Modernist composer Anton Webern predicted that mailmen on their rounds would one day whistle his atonal non-melodies. Three-quarters of a century later I see the following in a 2006 report from the National Academy of Sciences. The report labors under the title *Beyond Bias and Barriers: Fulfilling the Potential of Women in Academic Science and Engineering*:

Women are a small portion of the science and engineering faculty members at research universities, and they typically receive fewer resources and less support than their male colleagues... . It is not lack of talent, but unintentional biases and outmoded institutional structures that are hindering the access and advancement of women.

These two observations have in common a certain view of human nature—a view that, beginning about a century ago, colonized large regions of both the arts and the human sciences. That view owed much to German Romanticism, something to Marxism, and something to nineteenth-century technological triumphalism, but it owed even more to base but universal human urges: wishful thinking and the desire for novelty.

That colonization process and its fruits are now coming into perspective. Thanks to Steven Pinker, the greatest human sciences popularizer of our time, the view of human nature that underlies the preposterousities of both Webern's prediction and *Beyond Bias and Barriers* has even acquired a name, current among educated non-specialists of all kinds: the Blank Slate principle, harking back to ancient *tabula rasa* theories.

Our minds and personalities, following this principle, are almost infinitely malleable. Today people like melodic ditties; we shall train the next generation to prefer tone rows. Today women are kept out of engineering professorships by “outmoded institutional barriers”; we shall sweep away those barriers to make women love engineering and excel in it. Innumerable similar promises can be extracted from the literature of arts and human-sciences of the past hundred years, and from the legions of charlatans and power-seekers who saw in that literature cover for their own goals, some of which were innocently wrong-headed, some nefarious: New Soviet Man, “deconstructed” literature, No Child Left Behind, installation art ...

There were two armies of intellectual resistance to the colonization process. One was manned by pre-modern supernaturalists, who reworked their theologies to accommodate key findings in the natural sciences, brought forward the more abstract notions of Godhead worked out by ancient and medieval theologians, and took up lines of defense behind appeals to tradition, absolutist ethics, and the natural inclination to spirituality possessed by most human beings.

The other army of resistance was the biologists. Unfortunately, the slow unfolding of natural science equipped biologists with few indisputable insights into human nature until the later twentieth century. Biologists held only a different batch of promissory notes, most of them signed by Charles Darwin in his 1871 book *The Descent of Man*. Crank theorists tried to redeem those notes prematurely. Cruel dictators took up their theories, and the whole sociobiological project—the attempt to uncover biological explanations for human nature—was discredited by association. Blank Slaters held the field for an entire generation, not much bothered by supernaturalists sniping from behind their fortifications.

Across the last third of the twentieth century, biologists regrouped. The steady accumulation and refinement of social-science data, the revealing of DNA's structure, new techniques for imaging brain activity, and results from novel inquiries like separated-twin and adoption studies, began to turn Darwin's promissory notes into hard cash. The great nature-nurture battle commenced under formidable generals on both sides: Stephen Jay Gould and Richard Lewontin for the Blank Slaters, E. O. Wilson and Arthur Jensen for the sociobiologists.

Fighting still sputters on. Blank Slaters hold strategic territory in the humanities and politics, while supernaturalists still venture an occasional foray, most recently under the banner of Intelligent Design. Biologists have made important gains in anthropology, genetics, and the mind sciences, though. As data comes in from close studies of the now-decoded human genome and from broad surveys in population genetics like the HapMap, biologists sound increasingly confident. Blank Slaters are correspondingly more shrill, with periodic descents into gibbering panic, as in the 2006 flap over Harvard President Larry Summers's remarks concerning women in science, or the 2007 debagging of the geneticist James Watson following his outspoken skepticism about progress in Africa. With rising confidence on the one side and rising hysteria on the other, a betting man should put his money on the biologists at this point.

Denis Dutton has done just that in *The Art Instinct*.<sup>[1]</sup> The American-born Dutton teaches philosophy at a New Zealand university. He is better known, though, for having founded the *Arts & Letters Daily* website, a compendium of interesting articles about everything under the sun, drawn from Anglosphere-wide magazines and newspapers (including *The New Criterion*, to which Dutton is an occasional contributor).

In *The Art Instinct*, Dutton seeks to offer explanations from evolutionary biology for the existence and forms of painting, literature, music, and the decorative arts. (Architecture does not get much of a look-in.) He is careful to tell us in his introduction that this is not a destructive exercise, as evolutionary explanations for religious belief necessarily are. "Works of art . . . seldom make overt assertions of fact or instruct people on how they must behave. Art's world of imagination and make-believe is one where analysis and criticism spoil none of the fun." Thus reassured, we are taken on a tour through some curious experiments, philosophical conundrums, and ingenious speculations.

It is common for Blank Slaters to follow Stephen Jay Gould in scoffing at evolutionary explanations for human nature as "just-so stories"—narratively appealing, but untestable, unverifiable, and unfalsifiable.

This line of attack is not entirely unfair. There are indeed knotty questions to be tackled in applying biology to behavior and mind. Knottiest of all, as Dutton explains very patiently, is distinguishing between a true adaptation—"an inherited physiological, affective, or behavioral characteristic that reliably develops in an organism, increasing its chances of survival and reproduction"—and *by-products* of the evolutionary process with no survival value. As biology lecturers tell their freshman classes: Not every trait is an adaptation. Our bones are white, but that is an accident of

their composition. They would serve just as well, with no evolutionary downside, if they were chartreuse. As well as being knotty, these issues are politically fraught. Is the female orgasm an adaptation or a by-product? Best not ask.

Still, so long as care is taken with such distinctions—and I think Gould can fairly be charged, as Dutton *does* charge him, with deplorable carelessness here—the construction of hypotheses about the origin of traits is legitimate science. The evidence is at present largely circumstantial, to be sure, but as Thoreau noted, circumstantial evidence can be very persuasive, “as when you find a trout in the milk.” It is easy to think of modest advances in our understanding of biology that would bring some of these “just-so stories” into the testable zone. There is nothing unscientific about putting hypotheses out there to await the happy day.

Dutton’s first chapter, “Landscape and Longing,” concerns common human preferences in pictorial art. Exhibit A in the evidence here is an experiment conducted by Vitaly Komar and Alexander Melamid in the mid-1990s to determine what kind of picture people most wanted to look at. A worldwide survey by professional pollsters was commissioned.

The result? We like calendar art. The world’s favorite color is blue; the world’s favorite picture is “a landscape with trees and open areas, water, human figures, and animals.” Most disliked were abstract designs in jagged shapes and commonly despised colors: gold, orange, yellow, and teal.

These preferences are global. The derived “just-so story” is that each of the preferred features keys to some survival advantage for human beings traversing the landscape. Hills offer scouting prospects; trees, a handy escape from predators, and so on. Across the tens of thousands of generations in which early humans developed, preference for these features would confer slight advantages in “fitness”—a biological term of art that just means a genome’s probability of passing its material to the next generation. These preferences would therefore spread through populations, according to well-established biological laws.

Dutton bolsters the hypothesis with studies from child development. Younger children, much more than older ones, prefer savannah landscapes of the kind our remote ancestors lived and evolved in, even when the children being studied have no familiarity with savannahs. Circumstantial though this all may be, it is nonetheless highly persuasive. Just-so or not, there is a phenomenon here that needs explaining, and Dutton’s explanation violates no known principles of biology.

Are there alternative explanations on offer? Yes, there are. The philosopher and art critic Arthur Danto has suggested that the artwork on *actual* calendars, which are popular everywhere in the world, has formed people’s preferences. Dutton disposes of this with an appeal to the psychological literature. The whole discussion is instructive and well argued.

That’s the easy work, though. Literature and music present more challenging problems to the bio-aestheticist. On the first of those, Dutton quotes the evolutionary psychologists John Tooby and Lesa Cosmides: “Evolutionary researchers want to know why the mind is disposed to find stories interesting.” Well, why is it so disposed?

The late William F. Buckley Jr., a supernaturalist on these topics, quoted a friend with approval: “I find it easier to believe in God than to believe that *Hamlet* was deduced from the molecular structure of a mutton chop.” Steven Pinker cast a colder eye on the Danish prince in his 1997 bestseller *How the Mind Works*:

Fictional narratives supply us with a mental catalogue of the fatal conundrums we might face someday and the outcomes of strategies we could deploy in them. What are the options if I were to suspect that my uncle killed my father, took his position, and married my mother?

The philosopher Jerry Fodor, in turn, had rough fun with this passage in his review of Pinker's book: "Or what if it turns out that, having just used the ring that I got by kidnapping a dwarf to pay off the giants who built me my new castle, I should discover that it is the very ring that I need in order to continue to be immortal and rule the world?"

Dutton takes on these issues methodically, and I think *The Art Instinct* is at its best in its discussion of fiction. Yes, fiction is instructive: We all know a lot about nineteenth-century Russia, though none of us has been there. Yes, it helps us strategize our social lives, as Pinker argued. Dutton adds another dimension: Fiction hones our mind-reading skills. The minds being read are not only the prince's and the dwarf's, but that of the *author*, understood by the reader as "an actual person, the creator of the story, who negotiates between the various points of view of [the characters], the author's own point of view, and the point of view of the reader."

As well as providing surrogate experiences, as Pinker says of *Hamlet*, and plain instruction about the world, including nineteenth-century Russia, fiction lets us explore other minds—the minds both of imagined characters and, at one remove, of authors. That all three of these features are adaptive is highly plausible. So far as the third is concerned, reading other minds is a key skill for a social animal like ourselves. We know that the skill is innate because it emerges spontaneously in children under many different circumstances, beginning around age two. As further evidence, there is the unhappy fact that mind-reading ability sometimes fails to develop—the condition known as autism—without other faculties being affected.

Dutton's treatment of music is skimpier. Darwin was intrigued by this topic, and spilled four thousand words on it in *The Descent of Man* under the general heading "Secondary Sexual Characteristics of Man." Darwin's conviction was that our appreciation of music has something to do with sexual selection, a principal theme of *The Descent*. His speculations were vague, though, and Dutton does not do much to advance them. He does note some particular curiosities of music: our tolerance for repetition in this art form, for example. We can hear a symphony hundreds of times, yet still find pleasure in hearing it again. Nobody wants to read a novel or watch a movie that many times (though poetry is an intermediate case).

The connections between language and music are not very surprising, since both come to us through our ears. The "attack" of an instrumental note—its first tenth of a second or less—seems to be processed by the brain just as the initial consonant of a word is. Since language is almost surely an evolved adaptation, possibly music is one of its by-products. It is all a bit of a mystery, though, and Dutton throws up his hands at last:

Pitched sounds ... became the basis for a great art form despite having no survival implications whatsoever. While I am persuaded by the plausibility of Darwin's speculations about mating cries being somehow involved in the origins of music, to trace a continuous route from primordial calls to *The Art of the Fugue* will never be possible.

That there is something innate about our musical appreciation is demonstrated by the story of Webern's mailman. The evolutionary sources of that appreciation, however, still await explanation, even at a speculative level.

There is much, much more in this rich and fascinating book. Is aesthetic perception culturally relative? (Hardly at all—there is an entire chapter on this.) Why do forged art works, however skilfully done, offend us? ("Authenticity, which in the arts means at the most profound level communion with another human soul, is something we are destined by evolution to want from literature, music, painting, and the other arts.") Why has the sense of smell never been the basis for an art form? (Is Dutton sure about this? I note that the *New York Times* now employs a Perfume Critic.)

The project to uncover indisputable biological explanations for human cognition and behavior is a tremendous one. So far we have only opened preliminary enquiries on lesser creatures, though more is under way than most people realize. There is already a complete map of gene expression in the mouse brain to be found on the internet: Google “allen brain atlas.” Even more ambitious, the Howard Hughes Medical Institute has commenced a project to build a complete working model of the fruit-fly brain. Nobody is underestimating the challenges here. Says the lead researcher on that latter project: “In a hundred years I’d like to know how human consciousness works. The ten- or twenty-year goal is to understand the fruit-fly brain.” A fruit-fly’s brain, please note, measures about one-eightieth of an inch from side to side.

Life is short, art is long. It will be longer yet before we understand what art is, and why art does what it does. Many lives will pass, surely including yours and mine, before science can dethrone the God of this greatest of all Gaps, if indeed it can. (In this context I note that, as I have long been predicting, the Intelligent Design promoters are abandoning their interest in general phylogeny and heading over to the mind-science labs to defend the soul. They are wise to do so, and can look forward with confidence to decades of conferences and junkets.) In the meantime we need informed speculation to inspire us, data in which to hunt for patterns, and hypotheses that future researchers may be able to test. *The Art Instinct* gives a comprehensive survey of the field, written with fluency, wit, and wide erudition.

## Notes

[Go to the top of the document.](#)

1. *The Art Instinct: Beauty, Pleasure, and Human Evolution*, by Denis Dutton; Bloomsbury, 288 pages, \$25. [Go back to the text.](#)

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