

[In Biology and Philosophy vol. 26 no. 1, January 2011, 141-150]

(R)evolutionary Aesthetics: Denis Dutton's *The Art Instinct: Beauty, Pleasure and Human Evolution*.

Bloomsbury Press, New York, 2009.

The title of Denis Dutton's recent book is meant to provoke. How could talking about *instincts* shed any light on the creation of Bach's B minor mass or Picasso's Guernica? And how could it shed any light on our appreciation of those works of art? Artistic creation and art appreciation seem far removed from the kinds of activities – sex, parenting, avoiding dangerous animals and rotten food, and so on – that we think of as instinct-driven.

However, as Dutton argues, aesthetically we are not a blank slate. Just as our biology makes us more likely to develop a fear of snakes than a fear of rabbits, so it may make it easier for us to appreciate Renoir than Duchamp.

While it is true that culture sanctions and habituates a wide variety of aesthetic tastes, it does not follow that culture can give us a taste for just anything at all. Nor, conversely, does it follow that if in the future no postman is ever found whistling one of Schoenberg's tone rows, the reason must be that the postman's culture deprived him of the chance to appreciate the beauties of atonality. Human nature, so evolutionary aesthetics insists, sets limits on what culture and the arts can accomplish with the human personality and its tastes. (Dutton 2009, 205-206)

This is worth pointing out, since resistance to the idea that art has anything to do with biology remains widespread amongst art critics and art historians.

Art is pan-cultural, and that is a prima facie reason to think that there is a biological explanation for our tendency to make art and to consume it. It is not yet a reason to think that our artistic tendencies are adaptations rather than by-products of selection for something else. Dutton discusses this question at length, but it is not entirely clear what his conclusion is: at times he argues that they are adaptations and that this matters (see for example 99-101), but elsewhere he suggests that "a Darwinian aesthetics will achieve explanatory power neither by proving that art forms are adaptations nor by dismissing them as by-products but by showing how their existence and character are connected to Pleistocene interests, preferences and capacities." (96) Dutton's aim in *The Art Instinct* is to show that thinking about art and aesthetic taste in evolutionary terms can shed new light on traditional questions in aesthetics and revolutionise art criticism, art theory and art practice.

Dutton begins by talking about the consistency of landscape preferences across cultures. Chapter 2 is about art and human nature: Dutton points out (illustrating this with discussions of Plato, Aristotle, Kant and Hume) that the idea that art-production and aesthetic enjoyment are part of human nature is not new. Chapter 3 is an admirably clear and sensible discussion of what art is. Dutton defends the methodological principle that it is a mistake to base a definition on peripheral cases, as for example the institutional theory of art is motivated by the need to count as artworks things like Duchamp's *Fountain* (a urinal, labeled and placed in an art gallery). Rather, "we must first try to demarcate an uncontroversial center that gives more curious cases whatever interest they have" (51). Applying this method, Dutton comes up with a very inclusive cluster definition of art that fits well with the view (argued for in Chapter 4) that there is art in all human cultures: art is not a modern

Western cultural construct. Chapter 5 is about art and natural selection; Chapter 6 discusses the origin of our urge to create and enjoy fictions; Chapter 7 is about how costly and apparently functionless art-making behaviour might have evolved partly by sexual selection. Chapter 8 considers three issues in contemporary aesthetics and how thinking about art in evolutionary terms can shed light on them. Chapter 9 discusses the contingency of our aesthetic values: why, for example, do we have well-developed visual and aural arts but not olfactory ones? Chapter 10 is about greatness in the arts.

Dutton is excellent on the history of aesthetics and on the traditional questions that he chooses to illustrate his contention that evolutionary theory will revolutionise aesthetics. What if anything is wrong with forgeries? What role, if any, do the artist's intentions play in determining the meaning of an artwork? What is art, anyway? *The Art Instinct* is worth reading for the discussion of these issues which precedes the attempt to apply evolutionary theory to them.

The discussion of the evolution of our artistic impulses and what it means for present-day art appreciation and art production is less successful. It is difficult to piece together a coherent overall story from the many interesting parts. This is partly because of the nature of the material (as Dutton says, "our aesthetic tastes and interests look... like a haphazard concatenation of adaptations, extensions of adaptations, and vestigial attractions and preferences" (219)), but partly because it is not made as clear as it could be how the parts fit together. Furthermore, the discussion of evolutionary hypotheses and their consequences contains mistakes which seem particularly unfortunate in a book that is intended for a popular audience as well as for an academic one. The value of this part of the book is not in the details, but in the general approach. While it is already common in philosophy to suppose that cultural phenomena have biological underpinnings, it is probably much less common amongst the general public and in the various subdisciplines of cultural studies. Reviews of The Art Instinct have been very mixed, but the positive ones suggest that for readers in these traditions who do not simply reject the view out of hand, the book may genuinely revolutionise the way they see art.

I turn now to a more detailed consideration of some of the issues discussed in *The Art Instinct*: forgery; whether the twentieth century turn away from representational art was a mistake; the adaptation/by-product question and its significance for how we should regard art today; how natural selection and sexual selection work and how they might have shaped our art-related behaviour.

Why do we respond as we do to forgeries?

When we discover that a work does not in fact have the provenance it was presented to us as having, our attitude to it changes. We feel betrayed or cheated, and we usually stop thinking the work as good as we previously thought it was.

Dutton argues that we can understand our response to forgeries by thinking about the evolutionary function of art-making. Successful art-production is a display of fitness to which, in our evolutionary past, potential mates were attuned. But displays of fitness can be faked – one might pretend that someone else's work was one's own, for example. It would also have been adaptive for audiences to be sensitive to, and punish, such fakery – those who could not distinguish genuine markers of fitness from faked ones would have done less well reproductively, since they would have bred with less fit mates. Consequently our emotional response to fakers and plagiarists is an evolved response.

This seems to explain our response to certain kinds of artistic transgression — for example, Joyce Hatto's late-in-life piano recordings, which were strikingly better than her earlier ones and which turned out in fact to be recordings of the performances of other pianists released under Hatto's name. It is less obvious how it accounts for the more standard forgery case, in which rather than putting his own name to someone else's work, the forger puts someone else's (more famous) name to his own. In this standard case, it is of the essence of successful forgery that the forger remains unknown. This is surely not a case of sexual display by the forger.

Dutton's explanation of our responses to such cases depends on the thought that part of what constitutes success, in the realm of art, is the expression of the artist's view of the world.

The history of painting is not a history of what the European Alps once looked like, or how people dressed in the fifteenth century, or how the summer sun can dry out a hayfield in Languedoc. It is a history of innumerable human visions of the world. Creative arts inexhaustibly give us ways of looking into human souls and thus expand our own outlook and understanding. (192)

A forgery might look like the expression of some artist's view of the world, but it is not. "Eric Hebborn might have done a plausible job of a Rembrandt Titus, but it could never be Rembrandt's loving vision of his son: it would be just one clever criminal's attempt to convince us that this was how Rembrandt saw his little boy." (193) Again, the thought is that we are evolved to respond negatively to false indicators of fitness: in this case, a painting which looks as though it has the property of being an expression of a certain view of the world but actually does not. If we focus on the audience response rather than on the activity of the forger, this looks like another case in which we display an evolved tendency to react negatively to being conned. Dutton says:

Tracing our objections to forgery down to its Darwinian roots... puts the subject in a different light. 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. (193)

But does the evolutionary story actually shed any light on the issue of forgery? Before we considered forgery in evolutionary terms, we already thought that the reason we respond negatively to forgery is that it is an instance of dishonesty and we don't like dishonesty. If all the evolutionary aesthetician does is tell us that our negative responses to forgery are an instance of our responding negatively to dishonesty, and then give us an evolutionary explanation of why we respond negatively to dishonesty, little has been gained. Perhaps, however, a little more is being done here than this. Dutton claims that we are particularly sensitive to dishonesty in what might historically have been mating displays, and this might lead us to think about our responses to forgery from a slightly new angle. It might also lead us to compare our response to forgery to some responses to non-artistic cheating which, on Dutton's view, are instances of the same kind of response: the way we treat athletes who take performance-enhancing drugs, for example. None of this seems likely to revolutionise our view of how we respond to forgeries, but neither is it likely to do any harm – and it may lead to insights.

The limits of evolutionary aesthetics

The thought that considering the evolution of our artistic tendencies might in principle shed light on long-standing questions in aesthetics and art theory is plausible for some traditional questions in aesthetics, including the forgery question just discussed. Why do we care about whether or not a painting is a forgery, when if it is a good forgery it will be just as beautiful as the original? Why do we cry at the movies when we know that the characters are fictional? Why do so many people like the same kinds of landscapes? These are psychological questions, and it seems likely that in principle there could be an evolutionary answer to them, to the extent that they are questions about pan-cultural psychological tendencies. It might be an explanation according to which these aesthetic tendencies are by-products of some other tendency that was adaptive in our evolutionary past, rather than being specifically aesthetic adaptations, but it will be an evolutionary explanation nonetheless. And it might in some cases displace traditional answers to the same question, or help us to choose between competing traditional answers, or cause us to reformulate the question.

There are other questions in aesthetics that are not so much about how we actually respond to fictions, forgeries and so on as about how we *should* respond to them. Are we being irrational when we cry over fictional characters? Are we making some kind of mistake when finding out that a painting is a forgery changes our response to it? These normative questions, I suggest, are not ones that theorising about the evolutionary origins of art will help us to answer. After all, present-day tendencies towards xenophobia would not be legitimised if it turned out that we have them because xenophobia was adaptive in the Pleistocene, and the fact that our writing capacities are not an adaptation but a by-product of selection for other things does not undermine the present-day importance of writing. Likewise, our responses to fictions and forgeries will not be either legitimized or undermined by any discovery about their evolutionary history. Evolutionary explanations of present-day behavioural and psychological tendencies do not, in general, have normative consequences.

The reason one might be tempted to think otherwise is that natural selection does deliver a kind of normativity. When we say that the biological function of the liver is to remove toxins from the blood, we are making a normative claim – that is what my liver should do, and if it fails to do it (when toxins are present, in the kinds of concentrations that it is evolved to handle) it is malfunctioning. What grounds the normative claim is a history of evolution by natural selection: cleansing the blood is what the livers of my ancestors did which contributed to their survival and reproduction, and that explains why I have the kind of liver that I have. If some trait is an adaptation for doing X, and it is not doing X even though conditions are normal, then we can say that it is not doing what it should.

However, this will not help in the case of art, for the same reasons that it doesn't help in the case of xenophobia. An adaptationist explanation of some psychological mechanism or behavioural tendency tells us why we have that tendency: it led to behaviour that had reproductive advantages in our evolutionary past. But we are in a different environment to that of our Pleistocene ancestors: behaviour that was adaptive then may be disastrous now (for example, eating as much sweet stuff as you can get). Furthermore, we (as opposed to our genes) have goals other than ensuring that we have as many healthy and fertile descendants as possible: even if xenophobic behaviour was adaptive in our present environment, we have other ends that lead us not to endorse it in others or in ourselves. Showing that some human tendency is an evolved tendency has no bearing on the question of whether we should give in to that tendency or fight it. This is not to say that the evolutionary explanation

of how we come to have the tendency is false: rather, it is to say that the evolutionary explanation is irrelevant to questions about how we *should* behave (as opposed to questions about how we *do* behave).

Dutton is mostly careful about this: he applies evolutionary theory to psychological rather than normative questions in aesthetics. However, on two occasions he does draw normative conclusions from his evolutionary account of our aesthetic tendencies. In the first case the conclusion is about the 20th century turn away from representational art, and it is a passing flourish in the introduction, not repeated elsewhere in the book. The second case is more important: Dutton discusses at length the question of whether or not our artistic tendencies are adaptations, and built into the discussion is the assumption that if they should turn out not to be, that would undermine the significance of art in modern life.

Twentieth Century Art

Dutton says that the twentieth century turn away from representational art was a *wrong* turn, and the suggestion is that this follows from his account of the biological functions of our aesthetic preferences and of our art-making tendencies.

He explains our liking for landscapes (both real and represented), and green and pleasant landscapes in particular, in terms of the evolutionary advantages of being attracted to those kinds of landscapes.

Landscapes suitable for human habitation and flourishing are richly varied, but for our ancestors not infinitely so. The average survival for *Homo sapiens* who had an emotional predisposition toward green and the potential for water in landscapes would have been evolutionarily decisive. (25-26)

He explains our art-making propensities in terms of sexual selection. Displays of artistic skill are markers of fitness, and potential Pleistocene mates were sensitive to them: art-producers did better reproductively than others, and so, to the extent that the tendency to produce art was something that was passed on from generation to generation, that tendency spread through the population.

The chain of reasoning that leads from these evolutionary hypotheses to the claim about twentieth century art is not spelled out, but presumably it goes something like this. Our evolved liking for certain kinds of landscapes means that it is natural for us to like, for example, paintings by Constable, and our evolved appreciation for displays of skill means that it is natural for us to admire finely worked paintings that not just anyone could have produced. No wonder many of us have trouble appreciating ready-mades, paintings which consist of a plain white canvas, or paintings made by throwing paint from a distance, all of which deliberately refuse to play on our natural liking for landscape and admiration for artistic skill. We, the educated public, have been trying to get over our natural tendency to like calendar pictures of nice scenery. We have been trying to like the things art critics tell us we should like. The thought seems to be that evolutionary theory gives us permission to stop.

Maybe we *should* stop, but not for this reason. Finding out that we have an evolved tendency to like particular kinds of landscapes does not show that twentieth century art took a wrong turn when it embraced abstraction. Neither does finding out that art-making is an adaptation for sexual display of skill show that twentieth-century art took a wrong turn when it embraced ready-mades and Jackson Pollock's paint-splatter. Evolutionary explanations lack these kinds of normative consequences. Any question in aesthetics that is a question about how audiences should or should not

respond, or about what artists should or should not produce, is not going to be illuminated by an evolutionary account of the origins of our aesthetic tendencies.

Why does it matter whether our aesthetic tastes and art-making tendencies are an adaptation or a by-product?

Dutton asks "Are the arts in their various forms adaptations in their own right, or are they better understood as modern by-products of adaptations?" (86) Implicit, and occasionally explicit, in his discussion of this question is the idea that this is not a purely theoretical issue: if our artistic tendencies were not adaptations, the significance of art would be undermined.

This idea is most evident when he draws a parallel between art and sex. Dutton discusses the view that the female orgasm is not an adaptation: "this analysis implies, in my opinion, a paltry, limited view of human sexual experience. In this regard, it is directly parallel to arguments about whether artistic pleasures might be adaptive" (99). He goes on to consider kissing. "While erotic kissing does not cause pregnancy, and is not even a reliable cross-cultural universal, who would say that the kiss is a nonadaptive by-product of sexual intercourse? The erotic excitement of human lips meeting is an evolved adaptation. Only an impoverished view of erotic sex could grant adaptiveness exclusively to the male orgasm and suggest that everything else that happens in sex, from flirting to foreplay to affectionate aftermath, is only an incidental accompaniment, an extraneous by-product" (100).

This is surely a mistake. Sex without orgasms or kisses would be impoverished and limited. But why would a view of sexual experience according to which these are not adaptations be impoverished, paltry and limited? There is an extensive literature (which Dutton cites) on whether or not the female orgasm is an adaptation, but which view turns out to be correct makes no difference to the present-day importance of female orgasms.

The parallel claim about art is similarly mistaken. The importance of art to us would not be undermined if our artistic tendencies turned out not to be adaptations in their own right but rather by-products of selection for something else. This is the second instance of Dutton's reasoning as though there is a kind of relationship between an evolutionary hypothesis and a normative claim about present-day behaviour which in fact there is not. The mistake is all the more surprising since it is clear that Dutton is aware of the risk of making it: he points out that "[e]volved adaptations... are a relatively small though crucially important subclass of the long list of things that we may enjoy or benefit from," and cites Stephen Pinker's caution that "it is wrong to invent functions for activities that lack design merely because we want to ennoble them with the imprimatur of biological adaptiveness." (95-96, citing Pinker 1997: 525.)

What traits are we talking about?

Dutton's discussion of the adaptation vs by-product question is difficult to follow, in part because it is unclear exactly what the trait is about which he is asking the question. Confusion is evident in the "kissing" quotation above: the question is surely not whether kissing is "a nonadaptive by-product of sexual intercourse," but rather whether the disposition to kiss (or perhaps the pleasure we get from kissing) is an adaptation, or a by-product of selection for something else. Suppose that we all kiss because we have all discovered, by watching others and by trying it ourselves, that kissing is pleasurable. Suppose also that the reason it is pleasurable is that it just happens that a bunch of different characteristics of our mouths (the sensitivity of our lips, for example) and the way stimulation of them affects the rest of us have been

naturally selected for effects other than the pleasure of kissing. Then the pleasure of kissing is not an adaptation but a by-product. Suppose, on the other hand, that we have sensitive lips and so on precisely because these characteristics made kissing pleasurable and being someone who found kissing pleasurable increased our ancestors' fitness (as it well might): then the pleasure of kissing is an adaptation.

What is the trait about which Dutton is asking "Are the arts in their various forms adaptations in their own right, or are they better understood as modern by-products of adaptation?" (86) When he asks whether art is an adaptation, Dutton is asking whether it is a characteristic that helped our ancestors out-reproduce those who didn't have it, and that consequently got passed on to descendants, including us. A plausible candidate for making this claim more precise will have to be the kind of thing that can be passed on from generation to generation. At times Dutton talks as though his question is about artworks themselves, but artworks are not a likely candidate - they are not traits of the individuals that produce them, let alone ones that can be passed on from generation to generation.

Art-related behavior looks like a better candidate. However, there are good reasons for thinking that it is not behavioural patterns themselves but the mechanisms that underlie them which should be explained in evolutionary terms. It is not clear how to individuate behaviours or behavioural complexes for the purposes of providing evolutionary explanations of them. For example, there are (at least) two distinct kinds of art-related behavior – the making of artworks and the appreciation of them. It might be the case that the same mental mechanism is responsible for both of these things, but it might not, as well – we should not assume that there will be a univocal evolutionary explanation of art-related behaviour. If we consider the narrower category of art-making behavior, similar issues arise. Is all art-making behavior generated by the same mental mechanism? There are a couple of different ways in which it might not be. It might be the case that the right categorization (for the purposes of evolutionary explanation) is even narrower: that there are different species of art-making behavior that are generated by different mechanisms. Or it might be the case that any particular example of art-making behavior is not generated by a single evolved mechanism, but results from the interaction of a number of different evolved mechanisms. The last of these would amount to saying that artmaking behavior is not an adaptation.

It is difficult to piece together Dutton's view. Here is a charitable reconstruction: Dutton thinks that we have aesthetic response mechanisms which are adaptations for guiding us towards the kinds of things (the right habitats, the right mates) that will help us to survive and reproduce and which explain some of our responses to art, that our tendency to create art is a consequence of sexual selection for the display of fitness to potential mates, and that some of our responses to art are to be explained in terms of coevolved mechanisms for detecting genuine markers of fitness.

Natural selection and sexual selection

There are a number of mistakes in *The Art Instinct* about how natural and sexual selection work. In general, they do not make a difference to the defence of the central claim that thinking about our artistic tendencies in evolutionary terms will shed light on them, but they are unfortunate because they tend to reinforce mistakes about evolution which are already prevalent amongst the popular audience for whom the book is partly intended. For example, Dutton claims that "The putative objective of

natural selection is to embed those genetic traits in individuals that will produce a maximal increase of inclusive fitness"(42), thus mistaking an effect for a goal, and furthermore a goal of a process which has no goals.

Sexual selection has a starring role in *The Art Instinct*. Indeed, some reviewers have taken the point to be that our current aesthetic impulses are to be explained almost solely in terms of it: sexual selection plus an evolved positive response to certain kinds of landscapes will explain them all. In an afterword added to the paperback edition of the book, Dutton makes it clear that this is not what he had in mind: "Darwinian sexual selection, particularly as it applies to human beings, is much less familiar to most readers than natural selection. I therefore give it a more detailed, striking description." However, "[h]uman evolution – including the evolution of that ensemble of instincts that gave us the arts – is a product of natural selection, including group selection, sharpened and intensified by sexual selection." (244-245)

Dutton's discussion of sexual selection seems mistaken in some respects; at the very least it presents as uncontroversial a view that is unorthodox. His claim that "the intrinsic mechanisms of natural and sexual selection are fundamentally different" (138) is controversial: arguably a process of sexual selection is just a process of natural selection in which the mating preferences of conspecifics are part of the environment with respect to which competing traits are more or less fit. Perhaps the thought that sexual selection is a completely different kind of process from natural selection is explained by Dutton's view that sexual selection "allows purposes and intentions back into evolution through an unlocked side door" (165). On Dutton's account sexual selection involves individuals consciously selecting mates who have certain characteristics.

Sexual selection describes a revived evolutionary teleology – the reintroduction of intentional, intelligent design into the evolutionary process.... Every Pleistocene man who chose to bed, protect and provision a woman because she struck him as, say, witty and healthy, and because her eyes lit up in the presence of children, along with every woman who chose a man because of his extraordinary hunting skills, delightful sense of humor, and generosity, was making a rational, intentional choice that in the end built much of the human personality as we now know it. (165)

No doubt (*pace* the evolutionary psychologists) mate choice *is* partly like this – but to the extent that it is, it has nothing to do with sexual selection as the term is normally used. Rational, intentional choices do not need special biological explanations – only an explanation of how we came to have a general-purpose capacity for rationality. A sexual selection story would leave out the rational intentional choice, and along with it the impression that sexual selection is fundamentally different from natural selection in being genuinely teleological. It would involve a gradual co-evolution of kneejerk responses to markers of fitness with tendencies to display or play up those markers of fitness.

Conclusion

There is much to like about *The Art Instinct*. Almost throughout, it is well-written, entertaining and informative, and Dutton's enthusiasm for his subject is contagious. The chapter on art and natural selection is an exception: it gets bogged down in a discussion of adaptations and by-products which is both confusing and confused. Hopefully, however, the book will inspire more precise work on this topic: in any

case, it surely succeeds in its overall aim of undermining the view that art has nothing to do with biology.

Justine Kingsbury University of Waikato

References

Dutton, Denis. 2009. *The Art Instinct*. New York: Bloomsbury Press (paperback edition with afterword, 2010).

Pinker, Steven. 1997. How the Mind Works. New York: Norton.

Acknowledgements

Thanks to Tim Dare, Stephen Davies, Jonathan McKeown-Green and Mohan Matthen for their comments on a draft of this paper, and to audiences at Southern Methodist University, the University of Auckland and the University of Canterbury (especially Denis Dutton) for useful discussions of some of this material.