Stephen Davies *The Artful Species: Aesthetics, Art, and Evolution.* Oxford: Oxford University Press 2013. 240 pages \$44.95 (hardcover ISBN 9780199658541)

Stephen Davies' most recent monograph explores the evolutionary links between the arts, aesthetic response, and human nature. Can we explain our present-day creation and appreciation of art as a manifestation of one or more genetically inheritable traits, the chance occurrence of which conferred an adaptive advantage on our remote ancestors—that is, as something that made it more likely in that environment at that time that those possessing it would survive and reproduce? Davies answers with a nuanced position, which he summarizes in this way:

When I review the theories and the evidence, I am doubtful that the arts, either together or singly, are selected to serve an adaptive function. If I had to bet, I would say that the adaptations that give rise to art behaviors are intelligence, imagination, humor, sociality, emotionality, inventiveness, curiosity. Though art is mediated by culture, it gives direct and immediate expression to these traits and dispositions, so I would identify it as a by-product rather than as a technology (185).

In short, Davies argues that the universality and spontaneity of aesthetic response and of some other 'art behaviors' supports the view that the relevant inherited proclivities reflect our evolutionary history. However, they are not themselves evolutionary adaptations.

Taking great care to avoid the tendency to treat art and the aesthetic as co-extensive domains, Davies' project has two distinct components. First, he examines the proposal that aesthetic response is a universal human trait and, as such, an evolutionary adaptation. Second, he takes up the proposal that 'art behaviors' and dispositions 'became universal because of the comparative advantages they conferred' (50). Interesting as they are, I will ignore Davies's arguments concerning aesthetic response in order to concentrate on other behaviors and underlying dispositions that he calls 'art behaviors'. Prime examples are singing, dancing, story-telling, and picturing.

However, Davies warns that we cannot make sense of the originating links between art behavior and evolved human nature unless we carefully delineate the range of particular behaviors and preferences of our prehistoric ancestors, as well as the general conditions for the relevant behaviors. The art behaviors of our pre-hominid ancestors must be inferred from physical artifacts and traces. Based on current research in anthropology, evolutionary biology, and other relevant fields, Davies agrees that the production and appreciation of art are both universal and ancient. Consequently, it is tempting to conclude that the behaviors underlying art production and reception must be inherited adaptations, just like our opposable thumbs.

Davies resists this simple interpretation. Even if the propensity to engage in 'art behaviors' is an inherited trait, universality does not prove that a trait was an evolutionary adaptation. Some traits are present in our species today despite the fact that they conferred absolutely no survival advantage in an earlier environment. Some traits are spandrels, that is, they are inherited and yet they are by-products of our evolutionary history, genetically linked to some *other* inheritable trait

that confers survival advantage. The human chin, the male nipple, and the color of oxygenated blood are commonly offered as examples of spandrels. Furthermore, traits that arose as adaptations can cease to confer an adaptive advantage, as with vestigial organs like the human appendix. Or perhaps we should distinguish between primitive art and the art of the last five thousand years. Perhaps the latter is more like the appendix than the opposable thumb. The problem multiplies when we ask whether the capacity for aesthetic response is one trait, or several, and whether the arts are unified in some central way, or whether they are really a plurality of distinct activities that have arisen from distinct traits that arose as distinct adaptations or spandrels.

Based on these and related considerations, Davies shows that we must weigh the evidence for five competing explanations for art behaviors:

- (1) Some relevant art behaviors are relatively simple and at the same time closely tied to the existence of art, and they confer a reproductive advantage, and so became universal, or nearly so, as evolutionary adaptations.
- (2) Some inherited dispositions are applied to art without being *art* behaviors, in which case the universality of art behaviors is a cultural achievement.
- (3) Or, although originally adaptive, art is now more trouble than it's worth. Like the human appendix, art behavior is as a troublesome vestige. Art practices were evolutionarily adaptive once, long ago, but they are not functional any longer.
- (4) Or perhaps, like the feathers of birds, they originated for one purpose and then became useful for another.
- (5) Or, finally, they might be genuine spandrels. They are the unavoidable side-effects of something else that we inherit. They were never adaptive, nor are they now.

Yet another complication is that many proponents of (1) offer a variation designed to meet the puzzle of why it advantaged our pre-hominid ancestors to 'waste' time and other resources on art behavior. Because 'art behaviors are costly in time, energy, and resources' (58), evolutionary theory asks us to identify how their inheritance confers a compensating evolutionary advantage, yielding a net gain for 'artistic' individuals. So what were the conferred advantages? They are hardly obvious. (This is in stark contrast, given the right circumstances, to inheriting disease resistance or lactose tolerance.) This challenge is frequently answered with the proposal that the art behaviors promote survival indirectly, by creating a *collective* advantage on the *group* that supports their development, for example through emotional communication that promoted intergroup cooperation and cohesion. However, Davies observes that when an account emphasizes benefit to the group, it posits group versus group competition, rather than direct competition among individuals with slightly different traits, and it posits a difference in social organization that is supposed to advantage the group that embraces the seemingly wasteful behavior.

But what has all this to do with philosophy? Davies makes it clear that it is foolish to launch arguments for and against an evolutionary basis for art without paving the way with philosophy of art. The great challenge, *philosophically*, is to define art in a non-question begging way that applies to both early hominid behaviors and to more advanced cultural developments, and to delineate the supporting dispositions and behaviors. To preserve historical continuity, Davies argues that art has to be understood relative to 'a small "a" notion of art as encompassing domestic, folk, decorative,

popular, and [today] mass art' (51). Yet this move creates another problem. To offer my own examples, there may be cultural and social advantages to reading James Joyce, but that advantage must be distinguished from whatever advantages arise from being the audience for simple folk tales, orally communicated. The cultural advantages of seeing why Vermeer is a better painter than Thomas Kincaid were probably not the ones that led to a widespread inheritance of the disposition to admire the superior workmanship of some stone tools, considered apart from their utility as a cutting edge. Ironically, of course, those who attain the cultural capital to admire Joyce and Vermeer are precisely those today who are least likely to have larger numbers of offspring into the next and subsequent generations.

Davies argues that much of the sting of this objection dissolves when we think carefully about how *consuming* art differs from *making* art. As is still true today in pockets of pre-industrial, traditional tribal cultures, prehistoric music-making was everyone's art. On the other hand, not everyone made hand axes, much less decorated axes. If the impulse to make music has a different inheritable basis than the impulse to spend inordinate amounts of time on the symmetry of a hand axe—and given that singing is spontaneously pursued by almost every child, but equivalent levels of competence in sculpting is not, they don't seem directly connected—then a distinction between universal and non-universal art behaviors at the level of individuals should be aligned with lower survival and reproduction rates for individuals who spend their time with the non-universal art behaviors. Over many generations, better adaptations spread throughout the population. But we cannot begin to weigh the factual evidence until we become much clearer about the nature of art behavior and the level of sophistication that is hereditary rather than culturally inculcated.

On a final note, it will come as no surprise to anyone with prior knowledge of Davies's previous major works, *Musical Meaning and Expression* and *Musical Works and Performances*, that *The Artful Species* includes a careful, clear, and thorough dissection of the relevant literature on this topic. I, for one, am grateful that Davies has shifted through the vast literature for me. More than a third of the text is supporting documentation, including a bibliography of print references that runs more than 45 pages. Davies shows that the literature is cluttered with weak reasoning and dubious philosophical assumptions about aesthetics and the nature of art. At the very least, this book moves the debate forward by demonstrating that the prevailing level of argumentation about the link between the arts and evolution is shamefully slack.

Theodore Gracyk Minnesota State University Moorhead