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EVOLUTION AND AESTHETICS

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Editorial

Evolution and Aesthetics

Mandy-Suzanne Wong

Is aesthetics a product of evolution? Are human aesthetic behaviors in fact evolutionary adaptations?

The creation of artistic objects and experiences is an important aesthetic behavior. But so is the perception of aesthetic phenomena *qua* aesthetic. The question of evolutionary aesthetics is whether humans have evolved the capacity not only to make beautiful things but also to appreciate the aesthetic qualities in things.¹ Are our near-universal love of music and cute baby animals essential to our species' evolutionary development, which took place over thousands of years? Or are such traits more recent products of cultural conditioning?

For that matter, what makes a trait essential to the evolution of the species? What counts as an evolutionary adaptation? According to Denis Dutton, "The gold standard for evolutionary explanation is the biological concept of an adaptation: an inherited physiological, affective, or behavioral characteristic that reliably develops in an organism, increasing its chances of survival and reproduction."² A characteristic of an organism is an evolutionary adaptation if it bears some relation to the organism's biological conditions or requirements, passes from generation to generation, and helps the organism to survive or reproduce. The survival of individuals well adapted to their particular conditions of life and such individuals' production of offspring are the mechanisms of natural selection: the process by which a species evolves over time.

Do aesthetic practice and appreciation help people to survive or reproduce? Do aesthetic behaviors help to propel natural selection?

If so, what does that tell us about ourselves as human beings? What does it tell us about art, our other aesthetic practices, and aesthetic experience? These are the driving questions of evolutionary aesthetics.

Charles Darwin believed that aesthetic practices and tastes are vital to reproduction. Birds, for example, attract mates "by singing." Male peacocks and birds of paradise "display with the most elaborate care, and show off in the best manner, their gorgeous plumage; they likewise perform strange antics before the females, which, standing by as spectators, at last choose the most attractive partner." Darwin saw "no good reason to doubt that female birds, by selecting, during thousands of generations, the most melodious or beautiful males, according to their standard of beauty, might produce a marked effect" on the evolution of their species.³ In his writings on botany, he

also argued that the colors and scents of flowers excite the aesthetic sensibilities of insects, who help the plants to reproduce by pollination.

Darwin's theory of beauty as biological, sexual, utilitarian, and appreciable by nonhumans met with adamant opposition from aesthetic theorists of his time. In an assessment of Darwin's relationship with Victorian visual cultures, Jonathan Smith observes that "it is only in recent years that Darwinian accounts of beauty can be said to have garnered a truly significant intellectual and cultural following."⁴ Despite its early detractors, the idea that aesthetic behavior has some relationship with evolution is now a topic of enthusiastic interdisciplinary research and discussion.

In 2009, for example, Dutton argued that an "art instinct" peculiar to the human species helps our species to survive. The art instinct is "a complicated ensemble of impulses — sub-instincts, we might say — that involve responses to the natural environment, to life's likely threats and opportunities."⁵ Driven by this aesthetic instinct, when we look at landscape paintings and photographs, we enjoy them more when they depict places that even the most primitive hominid would want to live in because they offer our kind the best chances at survival. Dutton felt that the same instinct, common to every human since the very first, also influences how we manage and curate actual landscapes. He believed that just as fishes evolved to live in water and not on land, humans evolved "for" a particular habitat:

African savannas are not only the probable scene of a significant portion of human evolution, they are to an extent the habitat meat-eating hominids evolved for: savannas contain more protein per square mile than any other landscape type. Moreover, savannas offer food at close to ground level, unlike rain forests ... The type of savanna that is ideal appears to be the very savanna imitated not only in paintings and calendars but in many great public parks, such as portions of New York's Central Park. The modern design of golf courses can make stunning use of such savanna motifs.⁶

A premise of Dutton's argument is that if our most primitive ancestors displayed a certain behavior or preference, then it's likely to be an evolutionary adaptation. This is a central premise of evolutionary psychology, which wields a heavy influence over several philosophical theories of evolutionary aesthetics. As Dutton put it, "a Darwinian aesthetics will achieve explanatory power ... by showing how [art forms'] existence and character are connected to Pleistocene interests, preferences, and capacities."⁷ Although we must consider "the effects of history and culture on how evolved adaptations, strictly conceived, are modified, extended, or ingeniously enhanced — or

even repressed — in human life,” the starting point of “Darwinian explanation is always looking back into the past to adaptations that come to us from the ancestral environment.”⁸

Ellen Dissanayake bases her ethological argument on the same premise. In her view, art-making and aesthetic appreciation are manifestations of our species’ “universal ability ... to recognize that some things are ‘special,’ and even more, to *make things special* — that is, to treat them as different from the everyday.”⁹ Humans also make things special when we play with them or engage with them in ceremonial rituals, which Dissanayake seems to consider proto-aesthetic behaviors. She implies that our prehistoric ancestors acquired the ability to experience things aesthetically during ceremonies aimed at destroying evil forces or attracting prey. Because these ceremonies were aesthetically interesting, large numbers of people would participate in them, forming communal bonds. Belonging to cohesive groups improved our species’ chances of survival. Dissanayake writes:

natural selection favored groups that performed long complex rituals not because such ceremonies really produced more game or more capably destroyed evil forces, but because they more effectively contributed to social cohesion and group solidarity ... and perpetuate[d] the knowledge that was essential for group maintenance and survival. Yet in order to achieve these benefits a way had to be found that would encourage people to engage in time-consuming and often arduous ceremonies rather than in shorter, less socially-advantageous ones. I believe that an important factor contributing to successful ritual ceremonies would have been their incorporation of what are now called *aesthetic* elements.¹⁰

Because our production and appreciation of “aesthetic elements” is “universal,” having “evolved” from similar or equivalent behaviors in our prehistoric ancestors — behaviors which, like tool-making and language, make “use of a number of fundamental human attributes and tendencies” — Dissanayake believes that aesthetic behaviors are “bioevolutionary” adaptations.¹¹

But in *The Artful Species*, Stephen Davies takes issue with both of the preceding views as well as certain of their underlying premises, including the assumptions of evolutionary psychology. In his criticism of Dissanayake, Davies notes that not all aesthetic practices and experiences promote group solidarity. Creating and listening to music, which often go on in solitude, are equally likely to discourage social interaction.¹² In fact, evolutionary and musical psychologists tend towards self-contradictory arguments in which

music is both a socially alienating practice that promotes competition between individuals and a socially cohesive practice.¹³ Davies also points out that if social cohesion helps our species to survive and “making things special” encourages social cohesion, but “making-special” includes non-aesthetic activities such as play and ceremonial ritual, then it’s not aesthetic practices that are likely to be evolutionary adaptations. Rather, “what is adaptive is the tendency to make things special, with art [or aesthetic behavior] only one among many ways of giving effect to the tendency.”¹⁴

Davies’ point is that if aesthetic behaviors really are germane to natural selection, they must help our species to survive and reproduce in ways that nothing else can.¹⁵ Evolutionary theories of aesthetics must be specific to aesthetics. This argument is related to Davies’ criticism of Dutton’s view and his concerns about evolutionary psychology.

Davies concedes evolutionary psychologists’ basic premise: “we have inherited (some) ways of thinking and perceiving, emotions, personalities, and values because those behaviors and attributes promoted the survival and reproduction of our distant forebears.”¹⁶ But he is wary of assumptions about what our ancestors’ values, ways of thinking, and so on actually were. Dutton’s argument that our aesthetic preferences for certain landscapes evolved from our species’ biological adaptation to a particular habitat relies on the assumption that our species really did evolve “for” some particular habitat. As Davies points out, however, the most compelling scientific evidence indicates that no such habitat existed. The Pleistocene landscape underwent frequent, major upheavals; so according to Davies, those who survived were those able to adapt to all kinds of living conditions—which humans eventually did.¹⁷

Davies is also suspicious of evolutionary psychologists’ assumption that human behaviors are fixed responses to fixed conditions.¹⁸ This assumption is in keeping with the unrealistic dichotomy between biology and culture that Davies identifies in many evolutionary psychological perspectives. Such a dichotomy precludes the possibility that, for example, humans in our time view the African savanna very differently from Pleistocene, Elizabethan, or Meiji-period humans even though many of our biological characteristics are the same. Davies cannot hold with the idea that human behavior is completely “modular,” “automatic,” or biologically determined.¹⁹ Nor does he believe that all our tendencies and values are products of “arbitrary cultural conditioning.”²⁰ Instead, he subscribes to a

version of “gene-culture coevolution” that “recognize[s] not only that culture is affected by biology but also how cultural change can bring about genetic change.”²¹

Given his commitment to biology and culture as mutual contributors to the development of human behavior, Davies cannot entirely dismiss the argument that our biological requirements to some extent influence our aesthetic preferences, which in turn may help us to fulfill our biological requirements, encouraging our survival and hence that of our species.²² But the apparent fact that biology influences aesthetic preference isn’t enough to guarantee that aesthetic behaviors are evolutionary adaptations. The latter argument requires more evidence.

However, from his comprehensive survey of relevant scientific and humanitarian research, Davies is forced to conclude that there is “no hard evidence to suggest that [aesthetic behavior] made our ancestors fitter” for survival, and there are no convincing arguments that aesthetic abilities and propensities are inheritable.²³ For example, the musicological, psychological, and neuroscientific arguments currently offered in favor of music as an evolutionary adaptation are “at best incomplete and unsatisfying.”²⁴

That said, “alternative positions — that art is a by-product of evolution or, alternatively, that it has so little to do with evolution that it must be counted as a non-biological invention of culture — are not more strongly supported.”²⁵ Aesthetic behaviors are virtually universal among members of our species, and they seem “peculiarly central to our humanity as such.”²⁶ Indeed, it seems only to make sense that aesthetic behaviors must be evolutionary adaptations — as many of us would desire them to be. Davies “recognize[s] the tantalizing appeal and plausibility of claiming art as a central aspect of our common biological inheritance.”²⁷

Nevertheless, he concludes, claiming that aesthetics is an evolutionary adaptation “depends ultimately on a leap of faith, rather than on appeal to incontrovertible scientific fact.”²⁸ The dearth of scientific evidence for evolutionary aesthetics does not impel Davies to give up on it. While the lack of evidence deters him from the decisive position championed by Dutton and Dissanayake, who are convinced that aesthetics are evolutionary adaptations, Davies retains a positive view of the matter from a more open perspective. He agrees that aesthetic behaviors are not “purely cultural technologies,” that they are instead “biologically rooted,” and that to some extent they indicate an individual’s ability to survive — which means that

aesthetic behaviors are *somehow* “connected to evolution.”²⁹ It does not mean, however, that aesthetic behaviors are necessarily adaptations.

In sum, Davies seems committed to the view that aesthetic behaviors “cannot be incidental to our biological agendas.” He believes aesthetic behaviors “are part of human nature, and not in the trivial sense in which whatever we do gives expression to our species’ character.”³⁰ But the nuances of Davies’ view in comparison to his contemporaries’ include a generally more open perspective and more demanding appeal to empirical and argumentative evidence, which preclude a strong commitment to the theory that aesthetic behaviors are evolutionary adaptations.

The evidence may be a long time in coming. How did our prehistoric ancestors, who in many ways seem completely unlike ourselves, give rise to our familiar values and ways of thinking? How did our species survive environmental upheavals? For a while yet, given the relatively scant physical evidence, we may only be able to speculate on these questions. Yet the questions at the heart of evolutionary aesthetics remain vital questions to scientists, aestheticians, and other aesthetic practitioners as this issue’s contributors demonstrate in the following pages. The research I’ve described so far is only a small sampling of the most prominent ideas in circulation.

Why are these questions vital and fascinating: Is aesthetics a product of evolution? Are human aesthetic behaviors in fact evolutionary adaptations?

Why are these questions interesting? Why are our contributors driven to pursue evidence for evolutionary aesthetics and look towards its implications? I’ll offer a few suggestions in no particular order.

Things of interest to artists are in turn of interest to aesthetic scholars and philosophers. The connection between aesthetics and evolutionary theory, the processes of natural selection, and the methods, rhetoric, and illustrations used in evolutionary science have inspired artists since Darwin’s day. A recent anthology entitled *Endless Forms: Charles Darwin, Natural Science, and the Visual Arts* discusses the influence of Darwin’s ideas about ancestry and pre-history on Western visual art in the nineteenth century, including impressionism.³¹ Among other ideas, the same anthology addresses how popular or “coarse” Darwinism — which reduces natural selection to a crude matter of typology, “series of oppositions,” and “inevitability” — influences photographic portrayals of non-Western people.³²

In turn, aesthetic and creative thinking certainly influenced Darwin's study, theorization, and documentation of natural selection.³³ Jonathan Smith analyzes the aesthetic choices Darwin made as he attempted to articulate and disseminate his evolutionary theories. The illustrations in his books deliberately avoided the appearance of "fine art," for example.³⁴ Such decisions reflected Darwin's de-anthropocentric aesthetic theories, which flew in the face of the artistic trends and aesthetic values that prevailed in his Victorian milieu: the idea that our sense of the beautiful and love of beauty are naturally selected biological adaptations entails that they are not God-given gifts.

In fact, in *The Descent of Man*, Darwin's objective "was to demonstrate not merely that humans were physically descended from animals, but that the supposedly unique features separating us from animals — our mental powers, moral sense, and aesthetic sense — were different only in degree from those of animals, and had been inherited from them."³⁵ For Darwin's conservative detractors, this idea was intolerable. The premise of evolutionary aesthetics was considered an affront to art; for if art is just another process of natural selection — which is something even ants and trees can do — then art isn't an elite practice of God's chosen species. In fact, the implication is that there is no "chosen species"; compared to other living beings, humans are nothing special. And this, for Victorians, was a depraved insult to God and all humanity. In the unthemed section of the present issue, **Eoin O'Connell** questions whether artworks, art forms, and God can incur moral harm.³⁶ But for Darwin's opponents, evolutionary aesthetics was atheistic, materialistic, and thus indeed morally wrong.³⁷

Thankfully, more recent views have moved beyond Christian prejudices. Theories like Dutton's, Dissanayake's, and Davies' prefer to focus on the positive implication of evolutionary aesthetics: if aesthetic behaviors are evolutionary adaptations, then they are essential to our survival and that of our species. For us aesthetic practitioners — artists, aestheticians, aesthetic scholars, and seekers of aesthetic stimulation — it would be a very nice feeling if our beloved sphere of interest, for the sake of which we all struggle for recognition and the means to eke out a living, actually turned out to be as integral to humanity's survival as bipedalism and a certain cellular structure. If aesthetic practices turned out to be as indispensable as sexual reproduction or medicine — which are some other means of ensuring our species' survival — then our work would be just as indispensable as these

other practices upon which our society places a much higher value. Aesthetic research would pursue some of the same questions as the “hard” sciences of evolution, which are generally more respected and better funded. If aesthetic behaviors are bioevolutionary adaptations, then those of us who live for aesthetics, even though we’ll never be as influential as John Lennon or Leonardo DiCaprio, do so because we have to — and we have to for very good reasons. If solid evidence in favor of evolutionary aesthetics was discovered, then our compulsion to practice aesthetics despite the countless uphill battles involved therein would be a scientifically verifiable contribution to society.

But social legitimation and recognition, however much we crave them, do not seem to me the best reasons to go after something. Throughout history, most aesthetic practitioners have had to survive without them. Nevertheless, there’s something to be said for the possibility that if aesthetics are evolutionary adaptations, then aesthetic drives and preferences aren’t mere whims but geneti-cultural characteristics with at least some biological basis. Aesthetic perceptions, interpretations, and tastes are not “purely subjective” in that case but biologically and thus objectively grounded. In other words, from this perspective, the partially objective nature of human subjectivity — its foundation in our characteristics as living physical objects — is more apparent. Our aesthetic creations and ideas are deeply rooted in our bodies, the things that constitute our bodies, and our ancestors’ bodies.

In the following pages, **Mariagrazia Portera and Mauro Mandrioli** suggest that epigenetic science — the study of how learned responses to environmental stimuli might be genetically transmitted to subsequent generations — may have something to say about aesthetic taste.³⁸ The authors relate biochemical findings to Immanuel Kant’s and John Dewey’s philosophical theories of aesthetic experience. In my opinion, Portera and Mandrioli’s analysis is important not because it implies that aesthetic preferences may be scientifically verifiable — ergo objective and legitimate according to contemporary Western ideologies and values — but because it implies that human aesthetic behaviors may be intimately connected to the nonhuman aspects of being-human: our genes (which are not in themselves human beings); our thingly and animalian characteristics as biological entities.

In fact, if human aesthetic behaviors are evolutionary adaptations, then perhaps there is all the more reason to suspect that aesthetic behaviors

are not exclusively human. This idea is consistent with Darwin's theories. But many others, including the eminent nineteenth-century theorist John Ruskin as well as Dutton and Dissanayake, would not agree. Dutton was particularly adamant that the "art instinct" is "distinctly human" and does not exist in other animals.³⁹ And for Ruskin, to "treat beauty as utilitarian, to make it part of the sexual 'family affairs' of flowers, was unbearable."⁴⁰ However, in a new essay that this journal is privileged to host, **Stephen Davies** argues that the ancestral species *Homo heidelbergensis* had all the physical and communicative capacities necessary for aesthetic practices, including music, dance, and visual design, even though these animals lacked the mental complexity that we consider definitively human.⁴¹ So it is possible that the evolution of art preceded that of humans, *Homo sapiens*, the exclusive characteristics of which are not necessarily essential to aesthetic practice and appreciation.

Even if we can do no more than speculate that nonhuman species create aesthetic phenomena and appreciate them as such — just as we can really only speculate on what beauty may have meant to our prehistoric ancestors — the possibility that nonhumans may have aesthetic experiences or practices complicates our species' aesthetic relationships with nonhumans, adding a dimension of potential reciprocity to such relationships. As **Christina Colvin** points out in this issue's unthemed section, how we represent nonhuman animals or use their bodies to create aesthetic displays may misrepresent those animals as consumable products or call attention to the animals' own creative, productive abilities.⁴²

The possibility that aesthetics are evolutionary adaptations implies a complex connection between ourselves, ancient proto-humans, and nonhumans: a connection with beauty in or very near its heart, which is therefore an emotional connection as well as a physical one. The profound sense that for millions of years, so many different beings have participated in beauty, the sense that we are part of that movement, is as awesome as the idea of hyperobjects or spooky quantum actions at a distance. The first stirrings of this sense — the realization that aesthetic behaviors are universal among humans — is a starting point for most of the evolutionary theories I've touched upon here, including Davies', Dutton's, and Dissanayake's.


But this is not to suggest that any of our behavior is purely biologically determined, that every human everywhere for evermore will always behave in exactly the same way under certain conditions, that any kind of human being or way of being is more "authentically" human than any other. Nor does

the idea that aesthetics may be evolutionary adaptations necessarily entail that we evolve according to some grand design. Furthermore, although evolutionary aesthetics may have something to say about the evolution of aesthetics — Davies suggests, for instance, that written literature may have become as widespread as oral storytelling because each of these forms of storytelling “displays evolutionarily relevant traits” that the other does not — this does not mean that the only “correct” narrative of aesthetic history is that which connects every aesthetic work to biological features and requirements or suggests that each aesthetic practice must be or evolve in a particular biologically relevant way.⁴³

In an almost Epicurean manner, natural selection depends as much on contingency as on any kind of determination. A peahen may choose the peacock with the largest number of colorful circles in his tail, but she need not necessarily do so. I by no means intend to undermine the importance of subjectivity, as it is commonly understood, to aesthetic practice and experience. However, I am not a relativist either. I would rather suggest that we cannot adequately think about aesthetics or evolution without considering contingency: the fact that anything could be otherwise. We cannot consider arguments grounded in the basic premise of evolutionary psychology without considering that any apparent fact about our distant ancestors may in fact have been otherwise. We cannot irrefutably verify our ideas about them, especially about their ways of thinking, through either empirical observation or intersubjective agreement among ourselves.⁴⁴

So in evolutionary aesthetics and art-historical narratives based on evolutionary ideas and processes, contingency will always be influential. In this issue, for example, **Trevor Mowchun** considers how cinema may have evolved in response to widespread secularization which, by undermining notions of divine providence, brought contingency to the foreground of thought in certain Western visual-artistic spheres.⁴⁵ In a different but related vein, **Dominic Smith's** discussion in the unthemed section analyzes the work of Torsten Lauschmann, who demonstrates through art that many of our aesthetic and non-aesthetic behaviors would not be as they are if the technological objects that we've come to take for granted were not as they are.⁴⁶ Smith examines Lauschmann's oeuvre through the critical lenses of phenomenology and the philosophy of technology.

Is aesthetic behavior an evolutionary adaptation?

One thing I can say, which is evident throughout the targeted and unthemed sections of this issue of *Evental Aesthetics*, is that the issues at stake in evolutionary aesthetics — from questions about morality to interrogations of human-nonhuman relations, from questions about history and inheritance to speculations on the functions of contingency — are in some manner vital to many aesthetic inquiries. 

Notes

- 1 For a nuanced discussion of aesthetic behavior, see Ellen Dissanayake, *What is Art For?* (Seattle: University of Washington Press, 1988).
- 2 Denis Dutton, *The Art Instinct: Beauty, Pleasure, and Human Evolution* (New York: Bloomsbury, 2009), 90-91.
- 3 Charles Darwin, *On the Origin of Species: A Facsimile of the First Edition* (Cambridge: Harvard University Press, 1964), 88.
- 4 Jonathan Smith, "Evolutionary Aesthetics and Victorian Visual Culture," in *Endless Forms: Charles Darwin, Natural Science, and the Visual Arts*, eds. Diana Donald and Jane Munro (New Haven: Yale University, 2009), 245.
- 5 Dutton, 6.
- 6 Ibid., 19-20.
- 7 Ibid., 97.
- 8 Ibid., 98.
- 9 Ellen Dissanayake, "Aesthetic Experience and Human Evolution," *Journal of Aesthetics and Art Criticism* 41, no. 2 (1982): 148. Emphasis in original.
- 10 Ibid., 150. Emphasis in original.
- 11 Ibid., 148-149.
- 12 Stephen Davies, *The Artful Species* (Oxford: Oxford University Press, 2012), 133.
- 13 Ibid., 132.
- 14 Ibid., 124.
- 15 Ibid., 123. Emphasis in original.
- 16 Ibid., 42.
- 17 Ibid., 95-100.
- 18 Ibid., 41.
- 19 Ibid., 152.
- 20 Ibid., 147.
- 21 Ibid., 134.
- 22 See for example Ibid., 101.
- 23 Ibid., 129.
- 24 Ibid., 182.
- 25 Ibid., 6.
- 26 Ibid., 182.
- 27 Ibid., 6.
- 28 Ibid.
- 29 Ibid., 186.
- 30 Ibid.

- 31 Rebecca Bedell, "The History of the Earth: Darwin, Geology, and Landscape Art," in *Endless Forms*, 49-80.
- 32 Elizabeth Edwards, "Evolving Images: Photography, Race, and Popular Darwinism," in *Endless Forms*, 174.
- 33 Diana Donald, "Introduction," in *Endless Forms*, 1.
- 34 Smith, "Evolutionary," 237.
- 35 Ibid., 239.
- 36 Eoin O'Connell, "Can We Wrong a Work of Art?" *Evental Aesthetics* 4, no. 2 (2015): 116-137.
- 37 Smith, "Evolutionary," 245.
- 38 Mariagrazia Portera and Mauro Mandrioli, "Tastes of the Parents: Epigenetics and its Role in Evolutionary Aesthetics," *Evental Aesthetics* 4, no. 2 (2015): 46-76.
- 39 Dutton, 7.
- 40 Smith, "Evolutionary," 240, quoting Ruskin's *Proserpina*.
- 41 Stephen Davies, "How Ancient is Art?" *Evental Aesthetics* 4, no. 2 (2015): 22-45.
- 42 Christina Colvin, "Bass Pro Shops, Environmental Thought, and the Anima(l)tronic Dead," *Evental Aesthetics* 4, no. 2 (2015): 105-115.
- 43 Davies, *Artful*, 134.
- 44 In this idea, I'm following Quentin Meillassoux although I might not embrace his argument in its entirety. Quentin Meillassoux, *After Finitude: An Essay on the Necessity of Contingency*, trans. Ray Brassier (London: Continuum, 2008).
- 45 Trevor Mowchun, "A Machine's First Glimpse in Time and Space," *Evental Aesthetics* 4, no. 2 (2015): 77-103.
- 46 Dominic Smith, "On Technological Ground: The Art of Torsten Lauschmann," *Evental Aesthetics* 4, no. 2 (2015): 138-170.

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Evolution

and Aesthetics

How Ancient is Art?

Stephen Davies

ABSTRACT

In this paper I suggest that music and dance of an artful kind could pre-date the emergence of our species by several hundred thousand years. Our progenitor, *H. heidelbergensis*, had the necessary physiological resources and social capacities. And she inherited older modes of moving and vocalizing that could have laid the foundations for dance and music. Admittedly, for her, these artistic activities would have been more about sharing and expressing emotions than about symbolizing abstract ideas or conveying complex thoughts. But that is something for which song and dance are ideally suited. Accordingly, the common assumption made by many paleoarchaeologists in discussions of the origins of art and of psychological modernity — that art is a distinctively *sapiens* attribute presupposing the kind of complex mentality that may be unique to our species — is mistaken. As well, there are some philosophical morals about the nature of art to be teased from the facts of its ancient origin.

KEYWORDS

evolution
Homo heidelbergensis
beauty
music
dance



Analytic philosophers of art have shown comparatively little interest in the deep origins of art. The same applies, though to a lesser degree, to their consideration of non-Western art. Their concern was more often stimulated by the challenge to traditional conceptions of the nature of Fine Art generated by the avant-garde of the twentieth century, beginning with Duchamp's readymades and going on to conceptual art.¹ Fair enough. But in this paper I will draw some philosophical morals from reflections about the conditions under which the earliest art — the art of prehistory — arose.

Admittedly, claims about the earliest art cannot avoid being speculative. We are in the domain of paleoarchaeology, which deals with shards and fragments the significance of which is often controversial and hotly debated. And we will focus on song and dance, the existence of which usually must be a matter of inference rather than of artifactual record. Inevitably, the conclusions reached should be understood to be conditional and qualified.

Though we are in the domain of paleoarchaeology, we must be wary of what paleoarchaeologists say about art. They use the term so liberally that it denotes any marked surface, decorated object, or item of adornment. For instance, crudely perforated shells that may have been strung together are referred to as "art".² In fact, for these scientists "art" serves as a term of art.³ By contrast, our interest will be in items and behaviors that are much nearer to our ordinary notion of art. They may not be complex or sophisticated, but they should invite the label "art" in a fashion that is coextensive with what we reserve the term for in its normal, broad use.

As will be outlined presently, paleoarchaeologists also tend to assume that art is a marker of symbolic thinking and advanced intellectual capacities. Philosophers of art tend to share this assumption. We will examine and reject this idea later.

We will turn to the philosophical morals at the close. First, we need to hunt out early candidates for art-status, to assess their plausibility, and to locate their earliest examples.



How Ancient is Art?

The tradition of European cave art (painting, engraving, etc.) extended from 36-11,000 years ago in the Upper Paleolithic.⁴ It coincided with the creation of carved figures,⁵ purpose-made musical instruments,⁶ the decoration of practical objects,⁷ the adornment of the person and her clothing,⁸ burial with grave goods,⁹ ritual observances,¹⁰ and “spiritual self-awareness.”¹¹

It used to be held that Neanderthals (*H. neanderthalensis*) in Europe did not behave in this fashion, or anyway, not until they encountered our species, *H. sapiens*, not long before their eventual extinction about 35-30,000 years ago.¹² But there is evidence at least of the use of body adornments,¹³ including an eagle talon necklace pre-dating the arrival of Cro-Magnon *H. sapiens* in Europe by 80,000 years.¹⁴ Still, by comparison, Neanderthals were not driven, as were Cro-Magnons, to be artistic.

Yet this Upper Paleolithic flowering of cultural activity was apparently unprecedented in our earlier *sapiens* ancestors. Our species first emerged about 195,000 years ago, but evidence of behavioral modernity — of symbolic, abstract thinking — was not obvious in the archaeological record before the “creative explosion” that took place in Europe in the Upper Paleolithic.¹⁵

To explain the suddenness of this alteration in the absence of outward anatomical change — for instance, in brain size — it has been posited both that a mutation led to the rewiring of our brain¹⁶ and that the mirror-neuron system had achieved its modern form.¹⁷

Many elements in this story about the dawning of modern modes of cognition in our *sapiens* forerunners have been challenged, however.¹⁸ Art of similar antiquity is found in Asia and Africa.¹⁹ And evidence of earlier isolated periods of advanced lithic technologies, ritual behaviors, abstractly marked items, such as ochre crayons and shell necklaces, can be found in Africa and the Middle East going back more than 100,000 years.²⁰ Accordingly, some have claimed the existence of art in these earlier times — for instance, the engraved ostrich shells of Diepkloof rock shelter dated to 65-55,000 years ago.²¹

With respect to music, we might apply more abstract reasoning.²² Sophisticated but different forms of music are found in *every* culture and people though the groups concerned have often been isolated for a very long time.²³ Our species originated in Africa and later spread to other parts of the globe. Together, these facts suggest that sophisticated forms of music must

have existed earlier in Africa. Given its ubiquity and complexity, music must have left Africa with *H. sapiens* emigrants rather than being invented subsequently in every isolated community.²⁴ So when did members of our species leave Africa? After an earlier visit by *H. sapiens* to the Middle East and perhaps further, the current consensus puts the primary global spread of our species as initiated from Africa about 60,000 years ago.²⁵ Sophisticated forms of music must have pre-dated that.

It is now widely thought that there was not a sudden light-bulb moment in Europe. Either modern ways of thinking emerged gradually in our species over scores of millennia, or our first *sapiens* ancestors were psychologically modern from the outset but could express this in only limited, temporary ways given the fragile life-circumstances under which they existed.²⁶

However these competing accounts are to be reconciled, it is worth noting an assumption about art that they seem to share: namely, that it presupposes a mind like ours; one that can explore fictional and counterfactual scenarios, manipulate abstract symbols, coin metaphors, and make unexpected cross-domain connections. It undoubtedly took imagination to discern the form of a bison in the bulge of a cave wall and creativity to sketch the animal in charcoal with a skill that captured its inimical likeness and brought it vividly to life. And it took planning and sophisticated knowledge to appreciate where to place holes in a vulture's wing-bone in order to produce a flute with the favored musical scale. Art, it is implied, is the product of clever thinkers, such as we are and our previous hominin forebears were not.

We will now query that assumption for the cases of music and dance.



One way of questioning the *sapiens* origin of art would be by arguing that our predecessor species were more intellectually capable than is widely assumed. Certainly, there is scope for suggesting that they must have had

considerable practical intelligence.²⁷ Multi-part, composite tools are at least 300,000 years old.²⁸ Moreover, about a million years ago, *H. erectus* executed horse hunts that must have required forward planning and the assignation to individuals of different functional roles within the overall enterprise.²⁹ At about the same time, exchange networks for trading goods over scores of miles began to develop, suggesting that sophisticated communication between groups was possible.³⁰ About 500,000 years ago, *H. heidelbergensis* — the ancestor we share with Neanderthals — also used complex, cooperative hunting techniques.³¹ Some people think that these ancients had complex languages.³² But even if they did not, they were apparently capable of planning and sophisticated interpersonal communication.

It has only recently been discovered that *H. erectus* in Java engraved shells with geometric patterns not less than 430,000 years ago.³³ So if the carved ochre crayons at Blombos cave dating from 75-100,000 years ago testify to the advanced psychology of African *Homo sapiens*, as is generally thought, these Javanese shells might suggest that abstract and symbolic thinking is more ancient even than our species.³⁴



The other way of arguing that art might pre-date our species involves demonstrating that in at least some of its forms, it does not require abstract or symbolic modes of thought. A sense of beauty or awesomeness and an urge to express emotion might suffice. This is what we now consider.

The creation of “special” bifacial hand axes from 400,000 years ago suggests that craftspeople of the time were sometimes motivated by aesthetic goals. About two percent of axes were worked on far beyond what practicality required.³⁵ They were finely worked to be highly symmetrical. Some made a feature of fossils or crystals. Others were of unusual or colorful material. Some were outsized and not easily used. And many of the most striking examples do not seem to have been used as butchering tools.

Some writers identify these as the first artworks.³⁶ That is possible, I think. But in any case, we can discern aesthetic motives (among others, perhaps) behind their production. These were people who were drawn to beauty and took the time to create it. Indeed, seemingly they gave it priority over more practical matters on some occasions.

An even better candidate for the earliest pre-*sapiens* art, I would suggest, is non-artifactual. It is vocal music and dance.³⁷ *H. heidelbergensis* possessed the physiological prerequisites for song: fine tongue and thoracic breath control, descended voice box and appropriate hyoid bone structure, hearing geared to detect and process the pitchbands in which the species vocalized, the neural resources to process and store patterned sound strings, and so on.³⁸ Moreover, these hominins lived in social groups and depended on coordination, communication, and cooperation,³⁹ so they had the social capacity to make group music and could benefit from doing so.⁴⁰ If they had language, their songs might have articulated simple thoughts. But just as easily, their songs could have been composed of meaningless, repeated vocables.

Since *H. heidelbergensis* belonged to a hunter-gatherer community, she probably shared with us an instinctual predilection for entraining to music, that is, to match and share movement to a regular musical pulse. As in hunter-gatherer communities everywhere, this would mean that music regularly evoked dance.⁴¹ This form of dance need not have been highly choreographed or designed to convey a narrative. It might have been more like a rumba line with people swaying, moving, and stomping in time to the music, say, around a fire. Such music may have been accompanied by percussion, generated by items that came readily to hand, by body slaps, or by the rhythmic rattle of adornments on the dancers' limbs.

Music-making of a quite developed kind is often more about emotional expression and group entrainment and coordination than about abstract or symbolic thought.⁴² Individuals with mental deficits can be highly musical.⁴³ Very young children can participate in group dancing and singing. Music-making is a practical skill that calls for "know-how" but need not require "knowing that," the capacity to verbally cognize and articulate what is done.⁴⁴ What matters, then, is not whether *H. heidelbergensis* qualified as what we would nowadays call an intellectual but whether she was inclined to vent her feelings in a musical fashion, perhaps while interacting with her baby or while cooperating with her fellows. If her group

celebrated their successes and mourned their losses, these ancients would have found applications for the musical capacities that they possessed. And if she danced and sang, the Neanderthals that later descended from her species likely did as well.⁴⁵



There is considerable overlap in the many neural regions involved with music and language.⁴⁶ We do not know which aptitude came first. Some authors regard music as an evolutionary by-product of language.⁴⁷ Others see music as prior.⁴⁸ Indeed, it is possible that language is best seen as a special case of music.⁴⁹ In any event, there obviously were vocal precursors to music; and if music is ancient, these must be even older.

Of course, our hominin predecessors vocalized as do much older species. They issued alarm and contact calls; perhaps they defended their territories or attracted mates by vocalizing; they cooed and clucked at their babies; they vented their rage, despair, and grief with howls, sobs, and screams.⁵⁰ One suggestion is that what distinguished the vocalizations of hominins from those of the more distant ancestors we share with apes was the hominins' adoption of synchronous chorusing, which led eventually to music.⁵¹

Another candidate precursor for music is infant-directed speech (aka motherese), the melodically inflected, highly repetitive mode in which we address our babies and pets.⁵² Infant-directed vocalizing — which obviously need not take the form of speech in the sense of language — was likely practiced by hominin species pre-dating our own.⁵³ And it must have provided a natural source, if not for the coordinated group singing and dancing described previously, then for the lullaby, which universally displays soothing expressive qualities and smooth, descending melodic contours.⁵⁴

The main alternative hypothesis is that both music and language had a common ancestor, known as protolanguage or musilanguage.⁵⁵ On the standard account, this was not confined to interactions with infants but

employed as part of a more general form of (verbal-cum-gestural-cum-facial-cum-behavioral) communication between all members of the group. It is reasonable to see some version of this ancestral form of communication existing between ancient pre-*sapiens* species, given their cooperative hunting and social practices as described above. Over millennia, expressive slides and glides, fragmentary melodic phrases, beats, and rhythms were combined, repeated, and developed until something recognizable as music emerged.⁵⁶ Meanwhile, joint action and cooperation laid down the basis for beat-entrained movement, behavioral mimicry and coordination, turn-taking, and complementarity in mutual actions, which were the facilitators for dance.⁵⁷

Perhaps music has more than one prehistoric source. But in any case, given the number of very ancient potential forerunners, it is plausible to think that the earliest music itself was made as much as 500,000 years ago.



In this paper it has been suggested that music and dance of an artful kind could pre-date the emergence of our species by several hundred thousand years. Our progenitor, *H. heidelbergensis*, had the necessary physiological resources and social capacities. And she inherited older modes of moving and vocalizing that would have laid the foundations for dance and music. Admittedly, for her, these artistic activities would have been more about sharing and expressing emotions than about symbolizing abstract ideas or conveying complex thoughts. But the expression of emotion is something for which song and dance are ideally suited. Accordingly, the common assumption made by many paleoarchaeologists in discussions of the origins of art and of psychological modernity — that art is a distinctively *sapiens* attribute presupposing the kind of complex mentality that may be unique to our species — is mistaken.




What philosophical lessons, apart from a wariness of *sapiens* chauvinism about art-creation, can we draw from this discussion, assuming it to be sufficiently convincing?

The first art was made by people who could not (yet) have had the concept of art; they might also have lacked a language in which to express that concept. They aimed at prominent aesthetic effects and thereby succeeded in making art even if they could not have thought of themselves as doing so.⁵⁸ In addition, they made art in the absence of the kind of institutional scaffolding and artworld backdrop that we take for granted.

Art had many kinds of precursors. Its emergence via bootstrapping may not have been clearly acknowledged. Nevertheless, at some point, someone recognized a difference between the aesthetic effects of art and those of its precursors. The objects that became known as bona fide artworks perhaps displayed higher levels of technical skill, originality, and complexity than their merely artifactual precursors. And the earliest music and dance perhaps achieved a higher degree of emotional arousal and required a level of group coordination and entrainment that was somehow more involved than what other forms of interpersonal communication called for. Philosophers of art ought to take into account that the powerful aesthetic effects which distinguished art from its predecessors did not demand of the participant great cognitive sophistication. Children surely joined in the singing and dancing. We tend to think of art as cognitively sophisticated and lexically centered, which it often is. But not all art has to be like this, and at its outset these qualities might not have been central. In addition, we tend to assume that art is created by the few for distanced, disinterested contemplation by the many, which it often is. But not all art has to be like this. Many of the attributes identified as art-central in Europe's eighteenth century might apply to high-end Fine Art, but art is broader in its use and appeal than that. At its origins, art was more likely functional and community-involving.⁵⁹

Bearing this last point in mind, we can see that it will be more appropriate in considering art to work out what capacities it calls for, the

occasions for their application, and the benefits that might result, rather than focusing narrowly on the artifact produced (if there is one), especially if we are to give music, dance, and oral traditions of drama, poetry, and storytelling their due. Art is as much a matter of behavior and interpersonal interaction as it is a matter of material culture. 

Notes

- 1 For elaboration, see Stephen Davies, "Defining Art and Artworlds," *Journal of Aesthetics and Art Criticism* 73 (2015): 375–384.
- 2 Typical here are Randall R. White, "Production Complexity and Standardization in Early Aurignacian Bead and Pendant manufacture: Evolutionary Implications," in *The Human Revolution*, ed. P. Mellars and C. Stringer (Edinburgh: Edinburgh University Press, 1989), 366–390, and Marian Vanhaeren, "Speaking with Beads: The Evolutionary Significance of Personal Ornaments," in *From Tools to Symbols: From Early Hominids to Humans*, ed. by F. d'Errico and L. Blackwell (Johannesburg: Witwatersrand University Press, 2005), 525–553.
- 3 As is conceded by Andrew J. Lawson, *Painted Caves: Paleolithic Rock Art in Western Europe* (Oxford: Oxford University Press, 2012), 10–11.
- 4 Note that those who painted Lascaux cave were as far from those who painted Chauvet cave as they are from us today.
- 5 Discussed by Jill Cook, *Ice Age Art: Arrival of the Modern Mind* (London: British Museum, 2013).
- 6 See Nicholas J. Conard, Maria Malina, and Susanne C. Münzel, "New Flutes Document the Earliest Musical Tradition in Southwestern Germany," *Nature* 460 (2009): 737–740; Iain Morley, *The Prehistory of Music: Human Evolution, Archaeology, and the Origins of Human Musicality* (Oxford: Oxford University Press, 2013).
- 7 See Cook, *Ice Age Art*.
- 8 See Paul Pettitt, *The Paleolithic Origins of Human Burial* (London: Routledge, 2011); Erik Trinkaus, et al., *The People of Sunghir: Burials, Bodies, and Behavior in the Earlier Upper Paleolithic* (Oxford: Oxford University Press, 2014).
- 9 See Robin I. Dunbar, *The Human Story: A New History of Mankind's Evolution* (London: Faber & Faber, 2004); Pettitt, *The Paleolithic Origins of Human Burial*; Trinkaus, et al., *The People of Sunghir*.
- 10 See J. David Lewis-Williams, *The Mind in the Cave* (London: Thames & Hudson, 2002); Dunbar, *The Human Story*.
- 11 As discussed by Ian Tattersall, *Masters of the Planet: The Search for our Human Origins* (London: Palgrave Macmillan, 2012).

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- 12 Skeptics about Neanderthal mental abilities include Brian M. Fagan, *Cro-Magnon: How the Ice Age Gave Birth to the First Modern Humans* (London: Bloomsbury Press, 2010); Chris Stringer, *Lone Survivors: How We came to be the Only Humans on Earth* (New York: Times Books, 2012); Tattersall, *Masters of the Planet*. On the timing of Neanderthal extinction: Clive Finlayson, *The Humans who went Extinct: Why the Neanderthals died out and We Survived* (Oxford: Oxford University Press, 2009) suggests that the last Neanderthals lived at Gibraltar and died out 28-24,000 years ago.
- 13 Those claiming Neanderthals employed body decorations include Francesco d'Errico and João Zilhão, "A Case for Neanderthal Culture," *Scientific American* 13 (2003): 34–35; M. Peresani, et al., "Late Neandertals and the intentional removal of Feathers as Evidenced from Bird Bone Taphonomy at Fumane Cave 44 ky B.P., Italy," *Proceedings of the National Academy of Sciences USA* 108 (2011): 3888–3893; João Zilhão, "The Emergence of Language, Art and Symbolic Thinking: A Neanderthal Test of Competing Hypotheses," in *Homo symbolicus: The Dawn of Language, Imagination and Spirituality*, ed. C. S. Henshilwood and F. d'Errico (Amsterdam: John Benjamins, 2011), 111–131; Clive Finlayson, et al., "Birds of a Feather: Neanderthal Exploitation of Raptors and Corvids," *PLoS ONE* 7, no. 9 (2012): e45927.
- 14 See *The Independent*, "Neanderthals made jewellery from eagle talons in Europe 80,000 years before *Homo sapiens* arrived," Accessed March 15, 2015, <http://www.independent.co.uk/news/science/neanderthals-made-jewellery-from-eagle-talons-in-europe-80000-years-before-homo-sapiens-arrived-10101493.html>. See also J. Zilhão, "The Emergence of Ornaments and Art: An Archaeological Perspective on the Origins of 'Behavioral Modernity'," *Journal of Archaeological Research* 15 (2007): 1–54; C. Q. Choi, "Heavy brows, high art? Newly unearthed painted shells show Neandertals were *Homo sapiens*'s mental equals," *Scientific American* (March 2010): 18–19a; and Ker Than, "World's oldest Cave Art Found — Made by Neanderthals?" *National Geographic*, June 14, 2012, <http://news.nationalgeographic.com/news/2012/06/120614-neanderthal-cave-paintings-spain-science-pike/>.
- 15 As alleged by John E. Pfeiffer, *The Creative Explosion: An Inquiry into the Origins of Art and Religion* (New York: Harper and Row, 1982).
- 16 As held by Richard G. Klein, *The Human Career: Human Biological and Cultural Origins* (Chicago: University of Chicago Press, 2009).
- 17 As argued by Vilayanur Ramachandran, *The Emerging Mind* (London: Profile Books, 2003).
- 18 Critics of the "creative explosion" hypothesis include Sally McBrearty and Alison S. Brooks, "The Revolution that Wasn't: A New Interpretation of the Origin of Modern Humans," *Journal of Human Evolution* 39 (2000): 453–563; Kim Sterelny, *The Evolved Apprentice* (Cambridge, MA: MIT Press, 2012).
- 19 As discussed by Paul Mellars, "Rethinking the Human Revolution: Eurasian and African Perspectives," in *Rethinking the Human Revolution*, ed. P. Mellars, K. Boyle, O. Bar Yosef, and C. Stringer (Cambridge: McDonald Institute for Archaeological Research, 2007), 1–11; Robert G. Bednarik, "Pleistocene Palaeoart of Asia," *Arts* 2, no. 2 (2013): 46–76; M. Aubert, et al., "Pleistocene Cave Art from Sulawesi, Indonesia," *Nature* 514 (2014): 223–227.
- 20 See Christopher Henshilwood, "The Origins of Symbolism, Spirituality, and Shamans: Exploring Middle Stone Age Material Culture in South Africa," in *Becoming Human: Innovation in Prehistoric Material and Spiritual Culture*, ed. C. Renfrew and I. Morley (Cambridge: Cambridge University Press, 2009), 29–49; Stringer, *Lone Survivors*; Tattersall, *Masters of the Planet*.

- 21 Ostrich shell art: Johan De Smedt and Helen De Cruz, "A Cognitive Approach to the Earliest Art," *Journal of Aesthetics and Art Criticism* 69 (2011): 379–389.
- 22 Here I adapt an argument that has been applied to the history of syntactically complex languages in Christopher Collins' *Paleopoetics: The Evolution of the Preliterate Imagination* (New York: Columbia University Press, 2013).
- 23 As noted by, among others, John Blacking, *How Musical is Man?* (Seattle: University of Washington Press, 1973); Donald E. Brown, *Human Universals* (Philadelphia: Temple University Press, 1991); Bruno Nettl, "An Ethnomusicologist Contemplates Universals in Musical Sound and Culture," in *The Origins of Music*, ed. N. L. Wallin, B. Merker, and S. Brown (Cambridge, MA: MIT Press, 2000), 463–472.
- 24 Gary Tomlinson disagrees in *A Million Years of Music: The Emergence of Human Modernity* (New York: Zone Books, 2015). He proposes that pitch-structured, metrically organized music was independently created by different human groups between forty and twenty thousand years ago.
- 25 As documented in Spencer Wells, *The Journey of Man: a Genetic Odyssey* (New York: Random House, 2002); Finlayson, *The Humans who went Extinct*; Fagan, *Cro-Magnon*; Stringer, *Lone Survivors*; Tattersall, *Masters of the Planet*.
- 26 See John J. Shea, "*Homo sapiens* is as *Homo sapiens* was: Behavioral Variability versus 'Behavioral Modernity' in Paleolithic Archaeology," *Current Anthropology* 52 (2011): 1–35.
- 27 Steven J. Mithen, *The Prehistory of the Mind: A Search for the Origins of Art, Religion, and Science* (London: Thames & Hudson, 1996) has argued, however, that pre-*sapiens* hominin species lacked an integrating general intelligence. It has been suggested, though, by Ian Cross, "The Evolutionary Nature of Musical Meaning," *Musicae Scientiae* 13, 2 Suppl. (2009): 179–200, that music helps break down the barriers between modularly separate modes of thinking. For discussion of this last hypothesis, see Stephen Davies, *The Artful Species: Aesthetics, Art, and Evolution* (Oxford: Oxford University Press, 2012), 179–181.
- 28 Ibid.; Tattersall, *Masters of the Planet*.
- 29 See Collins, *Paleopoetics*.
- 30 See Ben Marwick, "Pleistocene Exchange Networks as Evidence for the Evolution of Language," *Cambridge Archaeological Journal* 13 (2003): 67–81.
- 31 For discussion, see Bo Gräslund, *Early Humans and their World*, trans. N. Price (London: Routledge, 2005); Finlayson, *The Humans who went Extinct*; Stringer, *Lone Survivors*.
- 32 As argued by Spencer Wells, *Pandora's Seed: the Unforeseen Cost of Civilization* (New York: Random House, 2010); Collins, *Paleopoetics*.
- 33 See Josephine C. A. Joordens, et al., "*Homo erectus* at Trinil on Java used shells for tool production and engraving," *Nature*, Accessed December 3, 2014, doi:10.1038/nature13962. Their abstract notes: "The manufacture of geometric engravings is generally interpreted as indicative of modern cognition and behavior ... Together, our data indicate that the engraving was made by *Homo erectus*, and that it is considerably older than the oldest geometric engravings described so far ... [T]his discovery suggests that engraving abstract patterns was in the realm of Asian *Homo erectus* cognition and neuromotor control."
- 34 See Henshilwood, "The Origins of Symbolism, Spirituality, and Shamans."
- 35 See Raymond Corbey, Robert Layton, and Jeremy Tanner, "Archaeology and Art," in *A Companion to Archaeology*, ed. J. L. Bintliff (Oxford: Blackwell, 2004), 357–379.

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- 36 Biface hand axes as art: Marek Kohn and Steven Mithen, "Handaxes: Products of Sexual Selection?" *Antiquity* 73 (1999): 518–526; Geoffrey F. Miller, *The Mating Mind: How Sexual Choice Shaped the Evolution of Human Nature* (New York: Doubleday, 2000); Riva Berleant, "Paleolithic Flints: Is an Aesthetics of Stone Tools Possible?" *Contemporary Aesthetics* 5 (2007): <http://www.contempaesthetics.org/newvolume/pages/article.php?articleID=488>.
- 37 For reviews of theories on the evolutionary origins of music, see Steven Brown, "Evolutionary Models of Music: From Sexual Selection to Group Selection," *Perspectives in Ethology* 13 (2000): 231–281; Elvira Brattico, Pauli Brattico, and Thomas Jacobsen, "The Origins of the Aesthetic Enjoyment of Music — A Review of the Literature," *Musicae Scientiae* 13, 2 Suppl. (2009): 15–39; Ian Cross and Iain Morley, "The Evolution of Music: Theories, Definitions and the Nature of the Evidence," in *Communicative Musicality: Exploring the Basis of Human Companionship*, ed. S. Malloch and C. Trevarthen (Oxford: Oxford University Press, 2009), 61–82; Aniruddh D. Patel, "Music, Biological Evolution, and the Brain," in *Emerging Disciplines*, ed. M. Bailar (Houston: Rice University Press, 2010), 91–144; Morley, *The Prehistory of Music*.
- 38 As discussed by Dunbar, *The Human Story*; Robert A. Foley, "Music and Mosaics: The Evolution of Human Abilities," in *Music, Language, and Evolution*, ed. N. Bannan (Oxford: Oxford University Press, 2012), 27–57; Morley, *The Prehistory of Music*.
- 39 See Dunbar, *The Human Story*; Finlayson, *The Humans who went Extinct*.
- 40 See Morley, *The Prehistory of Music*.
- 41 On the intimate connection between music and dance, see Dunbar, *The Human Story*; Ian Cross, "The Nature of Music and its Evolution," in *The Oxford Handbook of Music Psychology*, ed. S. Hallam, I. Cross, and M. Thaut (Oxford: Oxford University Press, 2009), 3–13; Morley, *The Prehistory of Music*.
- 42 An idea that is recognized in Ian Cross, "Music as an Emergent Exaptation," in *Music, Language, and Evolution*, ed. N. Bannan (Oxford: Oxford University Press, 2012), 263–276; Clive Gamble, "When the Words Dry Up: Music and Material Metaphors Half a Million Years Ago," in *Music, Language, and Evolution*, ed. N. Bannan (Oxford: Oxford University Press, 2012), 81–106; Morley, *The Prehistory of Music*.
- 43 Sufferers of the form of autism known as Williams syndrome are often drawn to and skilled at music. See David Huron, "Is Music an Evolutionary Adaptation?" in *The Cognitive Neuroscience of Music*, ed. I. Peretz and R. Zatorre (Oxford: Oxford University Press, 2003), 57–75; Daniel J. Levitin, *This is your Brain on Music: The Science of Human Obsession* (New York: Dutton, 2006), 259–260; Aniruddh D. Patel, *Music, Language, and the Brain* (Oxford: Clarendon Press, 2008), 371.
- 44 See Stephen Davies, "The Know-how of Musical Performance," *Philosophy of Music Education Review* 12, no. 2 (2004): 56–61.
- 45 For discussion of Neanderthal singing, see Steven J. Mithen, *The Singing Neanderthals: the Origins of Music, Language, Mind, and Body* (London: Weidenfeld & Nicolson, 2005); Edward D. Hagen and Peter Hammerstein, "Did Neanderthals and other Early Humans Sing? Seeking the Biological Roots of Music in the Territorial Advertisements of Primates, Lions, Hyenas, and Wolves," *Musicae Scientiae* 13, 2 Suppl. (2009): 291–320.
- 46 For reviews, see Patel, *Music, Language, and the Brain*; Philip Ball, *The Music Instinct* (London: Bodley Head, 2010); Stefan Koelsch, *Brain and Music* (Chichester: Wiley-Blackwell, 2012); Patrick Rebuschat, et al., eds., *Language and Music as Cognitive Systems* (Oxford: Oxford University Press, 2012), pt. 4; Michael A. Arbib, ed., *Language, Music, and the Brain: a*

- Mysterious Relationship* (Cambridge, MA: MIT Press, 2013), pt. 4; Morley, *The Prehistory of Music*.
- 47 For example, Steven Pinker, *How the Mind Works* (London: Penguin Books, 1999); Dean Falk, "Hominid Brain Evolution and the Origins of Music," in *The Origins of Music*, ed. N. L. Wallin, B. Merker, and S. Brown (Cambridge, MA: MIT Press, 2000), 197–216; John D. Barrow, *The Artful Universe Expanded* (Oxford: Oxford University Press, 2005); Johan De Smedt and Helen De Cruz, "Toward an Integrative Approach of Cognitive Neuroscientific and Evolutionary Psychological Studies of Art," *Evolutionary Psychology* 8 (2010): 695–719.
- 48 Such as Morley, *The Prehistory of Music*.
- 49 Ibid.
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57 For instance, see Roger T. Dean, Tim Byron, and Freya A. Bailes, “The Pulse of Symmetry: On the possible Co-evolution of Rhythm in Music and Dance,” *Musicae Scientiae* 13, 2 Suppl. (2009): 341–367.

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Tastes of the Parents: Epigenetics and its role in Evolutionary Aesthetics

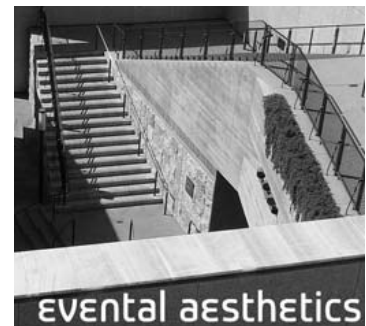
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ABSTRACT

Evolutionary Aesthetics is a burgeoning and thriving sub-field of Aesthetics, the main aim of which is “the importation of aesthetics into natural sciences, and especially its integration into the heuristic of Darwin’s evolutionary theory.” Scholars working in the field attempt to determine through the adoption of an interdisciplinary research methodology whether and to what extent Darwinian evolution can shed light on our capacity to have aesthetic experiences, make aesthetic judgments (both of art and natural beauty), and produce literary, visual, and musical artworks. Notwithstanding Evolutionary Aesthetics’ growing popularity in the past two decades, a look into the state of current research suggests a significant degree of haziness in the field from both epistemological-methodological and theoretical points of view. The main aim of the present paper is to make a first step towards a revision and extension of the discipline by assessing the role and potential of epigenetics in evolutionarily inspired aesthetic research. Epigenetics is among the youngest and most fascinating research fields in contemporary biology. But one of the most significant occurrences of the word “epigenesis” (the closest “ancestor” of contemporary “epigenetics”) is in Immanuel Kant’s third *Critique*, his aesthetic masterpiece. What might be the relationship between epigenetics and aesthetics? What is the role of epigenetic mechanisms in the development and functioning of aesthetic behavior in humans?

KEYWORDS

aesthetic preferences
epigenesis
environmental inheritance
brain development
evolutionary psychology



Biology and aesthetics: a twin birth in the eighteenth century¹

The first uses of the words “aesthetics” and “biology” to indicate autonomous disciplinary branches within the humanities and the natural sciences respectively are traditionally traced back to the second half of the eighteenth century with Alexander Baumgarten on the one hand² and Theodor Georg August Roose³ on the other — although Karl Friedrich Burdach, Jean-Baptiste Lamarck, and Michael Christoph Hanov are also given credit for coining the term “biology” more or less at the same time.⁴

The *simultaneous* birth of the two disciplines approximately two hundred and fifty years ago is not just a chronological coincidence. As Winfried Menninghaus argues, “From Alexander Gottlieb Baumgarten ... the founder of aesthetics as a separate branch of philosophy, to Kant and beyond, aesthetics is *molded* and *transformed* by this kind of overlap with biological discourses.”⁵ Aesthetics and biology have consistently interacted with each other since their first emergence, and Immanuel Kant’s *Critique of the Power of Judgment* (1790), undoubtedly one of the milestones in the history of Western aesthetics, witnesses this mutuality in a most compelling way: whereas the first part of the work — “Critique of Aesthetic Judgment” — deals with the problems of beauty and aesthetic experience, the second part — “Critique of Teleological Judgment” — is devoted to the analysis of biological organisms, their fundamental properties, and the epistemology of life sciences.⁶ Kant is persuaded of the relevance of his aesthetic theory for the understanding of biological phenomena. In recent years, a number of interpreters have also spoken in favor of an interpretation of the third *Critique* as a consistent whole, focusing on the continuity between its first and second parts.⁷

Evolutionary aesthetics: the state of the art

In the main works of Charles Darwin — the “father” of modern evolutionary biology and the first (together with Alfred Russell Wallace) to formulate a

theory of evolution by means of natural selection — the aesthetic and the problem of beauty play relevant roles as well.⁸ The *Origin of Species* (1859) is “aesthetically constructed,” according to David Kohn;⁹ and particularly in *The Descent of Man* (1871), Darwin frequently uses key concepts from philosophical aesthetics.¹⁰ Drawing on Darwin’s interest in aesthetics and the pervasive affinity between biological discourses and aesthetic reasoning, Evolutionary Aesthetics is today a burgeoning and thriving sub-field of Aesthetics, the main aims of which are “the importation of aesthetics into natural sciences, and especially its integration into the heuristic of Darwin’s evolutionary theory.”¹¹ Scholars working in the field attempt to determine, through the adoption of an interdisciplinary research methodology, whether and to what extent Darwinian evolution can shed light on our capacity to have aesthetic experiences, make aesthetic judgments (both of art and natural beauty), and produce literary, visual, and musical artworks.

Despite the growing popularity of Evolutionary Aesthetics — we have witnessed an increasing number of publications in the past two decades — there is a still significant degree of haziness in the field. Firstly, as Dissanayake persuasively stated,¹² more than a few scholars in Evolutionary Aesthetics conceptualize the aesthetic in a vague and partial way, frequently overlooking the relevant differences between the terms “aesthetic” and “artistic,”¹³ reducing the aesthetic to the mere expression of adaptive preferences of one thing over others and considering these preferences to be mainly sexual or environmental.¹⁴ Secondly, today Evolutionary Aesthetics’ research program — as opposed to Darwin’s comparative approach — is mainly restricted to *Homo sapiens*: so far there hasn’t been much research on aesthetic or proto-aesthetic behavior in nonhuman animals although a trans-specific perspective would be very helpful for understanding the evolution of aesthetic behavior in humans.¹⁵

Thirdly, although the vast majority of scholars in principle declare a deep commitment to the rules and models of interdisciplinary research programs,¹⁶ current research in Evolutionary Aesthetics does not always live up to expected standards mainly because scholars still seem to refer to a simplified version of evolutionary theory, largely structured along the model and patterns of so-called *narrow* Evolutionary Psychology.¹⁷ As a result, most studies in Evolutionary Aesthetics focus on *shared* responses among aesthetic perceivers, attributing these responses to hypothetical universal human adaptations rather than exploring individual differences between

perceivers — for example the influence of individuals' biographies and experiences — on the development of their aesthetic behaviors and attitudes. This is a critical point: actually, what makes an object — a face, a landscape, a flower, or an artwork — interesting and fascinating from an aesthetic point of view is mostly its *specialness*, its *sudden* and *surprising* appearance to the individual perceiver as worthy of being looked at, touched, listened to, or tasted. As will become clearer in the following sections, throughout this paper we adhere to a largely Kantian perspective on the aesthetic and the beautiful: we understand the aesthetic as something that escapes subsumption under any pre-established rule, norm, or principle — including “biological” norms, i.e., in this context, beauty-determining genes — and still demands “a universal voice.” As Kant puts it:

If one judges objects merely in accordance with concepts, then all representation of beauty is lost. Thus there can also be no rule in accordance with which someone could be compelled to acknowledge something as beautiful. Whether a garment, a house, a flower is beautiful: no one allows himself to be talked into his judgment about that by means of any grounds or fundamental principles.¹⁸

As members of the species *H. sapiens* and as a result of the specificities and constraints of their perceptual devices, although humans certainly have some general sensorial inclinations and predispositions towards what they find beautiful or worthy of attention, nevertheless aesthetic experience proceeds along largely unpredictable and individual tracks. Individual differences matter, specifically that individual variation that Charles Darwin himself aimed to make sense of with his theory of evolution by means of natural selection.¹⁹

All things considered, and taking for granted that going further on the interdisciplinary path between biology and aesthetics is a promising goal, it seems that Evolutionary Aesthetics requires an in-depth revision from both theoretical and epistemological-methodological points of view.²⁰ With this in mind, the main aim of the present paper is to make a first, fairly restricted but significant step in this direction by assessing the role and potential of the notion of “epigenetics” for a reviewed and updated Evolutionary Aesthetics.

Epigenetics is one of the youngest and most fascinating research fields in contemporary biology,²¹ “portrayed by the popular press as a revolutionary new science — an antidote to the idea that we are hard-wired

by our genes.”²² As Bird argues, however, the word has “several meanings with independent roots.”²³ So what is epigenetics? And what is — or could be — the relationship between epigenetics and aesthetics? One of the most significant occurrences of the word “epigenesis” — which, as we will see, may be the closest “ancestor” of contemporary epigenetics — is in Kant’s third *Critique*, his aesthetic masterpiece. What then might be the role of epigenetic mechanisms in the development and functioning of aesthetic behavior in humans?²⁴

From epigenesis to epigenetics: a look at the historical debate

The term “epigenetics” dates back to classical antiquity. In his *De Generatione Animalium*, Aristotle speaks in favor of an epigenetic view of embryonic development as opposed to preformationism. Whereas according to preformationism, all characters of the adult organism are simultaneously present in the fertilized egg and only need to grow into their full expressions, epigenesis interprets embryonic development as an incremental process that unfolds gradually over time and in close interaction with the environment. Asking whether the parts of the animal body “are all formed simultaneously — heart, lung, liver, eye, and the rest of them — or successively, as we read in the poems ascribed to Orpheus, where he says that the process by which an animal is formed resembles the plaiting of a net,” Aristotle puts forward theoretical and empirical arguments (a result *inter alia* of his own biological research) to support the epigenetic view.²⁵ Aristotle’s biology and his theory of epigenetic embryonic development exercised an extraordinarily deep influence on scientific debates in Europe until at least the seventeenth century. For example, William Harvey (1578–1657), the first scientist to describe extensively the systemic circulation of blood in animals (in his *Exercitatio Anatomica de Motu Cordis et Sanguinis in Animalibus* of 1628), explicitly referred to Aristotle in the embryological theory which appeared in *Exercitationes de generatione animalium* (1651), arguing that development proceeds as a cumulative formation and differentiation out of non-structured raw material.

At the end of the eighteenth century, while witnessing a renewed intensification of the debate between preformationist and epigenetic views of development, Immanuel Kant lent his support to Johann Friedrich Blumenbach's epigenetic understanding of embryonic development in the *Critique of the Power of Judgment*.²⁶ In turn, when Conrad Waddington (1905–1975) invented the term “epigenetics,” he referred to the seventeenth- and eighteenth-century debate on epigenesis *versus* preformationism.²⁷ In his interpretation, preformationism and epigenesis were complementary.²⁸ But the traditional meaning of “epigenesis” — as it appeared in Kant and Blumenbach for instance — was renewed, partly retained and partly transformed, in light of modern genetics. In Waddington's words:

We know that a fertilized egg contains some preformed elements — namely, the genes and a certain number of different regions of cytoplasm — and we know that during development these interact in epigenetic processes to produce final adult characters and features that are not individually represented in the egg. We see, therefore, that both preformation and epigenesis are involved in embryonic development.²⁹

The conjunction between epigenesis and genetics resulted in the new field of *epigenetics*, originally defined by Waddington as “the branch of biology which studies the causal interactions between genes and their products, which bring the phenotype into being.”³⁰

Epigenetics today

In recent years, an increasing number of biological phenomena has been explained in terms of epigenetics, including seemingly unrelated processes such as paramutation in maize, the position effect variegation (PEV) in the fruit fly *Drosophila melanogaster*, and the “imprinting” of specific paternal or maternal *loci*, i.e., specific locations or positions of a gene, in the mammalian genome. In a broad sense, epigenetics is the bridge between genotype and phenotype, a set of molecular mechanisms that change the final outcome of a *locus* without changing the underlying DNA sequence.³¹ More specifically, epigenetics may be defined as the study of any potentially stable change in gene expression or cellular phenotype that occurs without changes in Watson-Crick base-pairings of DNA.³²

As is commonly acknowledged, Waddington's original approach to epigenetics — which he defined as the discipline dealing with the mechanisms of interaction between genes and their intra-cellular and extra-cellular surroundings to produce a phenotype — was still fairly genecentric. Trying to overcome Waddington's original formulation, contemporary “epigenetics gradually expands the range of molecular processes influencing the genome, thereby decentralizing the sovereign role of the genome.”³³ It is not just genetics that matter for the development and functioning of an organism. Contemporary epigenetics mainly focuses (albeit not exclusively) on the transgenerational transmissibility of epigenetic modifications as a second, autonomous, non-DNA-based inheritance system.³⁴ No evidence of this idea of epigenetics as a non-genetic inheritance system can be found in Waddington's work.

However, in the 1970s and 80s, the terms “epigenesis” and “epigenetics” were extensively used by neuroscientists such as Jean Pierre Changeux,³⁵ Gerald Edelman,³⁶ and Stanislas Dehaene³⁷ in a sense somewhat close to Waddington's. Changeux's theory of the epigenesis of neuronal networks by selective stabilization of synapses is primarily intended to make sense of the interactions that take place between the brain and its physical, social, and cultural environments in the course of development. This theory therefore links variations in synaptic connections within the brain as well as variations in behavior between individuals with differences in the environments to which they are exposed. Changeux uses the two terms “epigenetics” and “epigenesis” interchangeably; but in the context of his synaptic discussion, “epigenesis” refers to the processes not directly under genetic control by which the environment affects the organization of synaptic connections in the postnatal period of brain maturation by either stabilizing or eliminating synapses, depending on the activity of the neural networks.³⁸ Synaptic epigenesis is of particular significance in the context of *H. sapiens*' brain development because, in Changeux's view, it enables social and cultural evolution as a result of the extraordinary extension of the postnatal period of brain maturation, a unique adaption with consequences of the highest relevance for our species. Inspired by Changeux's achievements, Stanislas Dehaene's recent work has shown that it is precisely thanks to epigenetic processes — processes that take place *over the course of individual development* — that we acquire highly cultural abilities such as reading and writing.

Changeux's and Dehaene's epigenetic theories on the postnatal development of the human brain have been fruitfully applied to aesthetics. Drawing on the idea that reading and writing are epigenetically acquired skills, Desideri has recently argued that human aesthetic behaviors — specifically our aesthetic preferences and rules of selection, which take the form of highly flexible, plastic, and context-dependent patterns of aesthetic orientation towards the world — stabilize in an epigenetic way, actively shaping the “inner landscape” of our aesthetic minds.³⁹ In other words, far from being encoded in our genome or the result of an innate psychological module inherited from our Pleistocene ancestors — as the vast majority of evolutionary aestheticians seem to claim, heavily relying on *narrow* evolutionary psychology — human aesthetic schemes seem to be actively *shaped and molded* as fruits of the experiences we undergo most frequently in our physical, social, and cultural environments.⁴⁰ Repeated rules of selection, habits, choices, and preferences for certain tastes, smells, figurative styles, and so on stabilize in the brain's epigenome throughout the individual lifespan, allowing a person to distinguish and exercise a judgment between beautiful and ugly things, between cuteness and awkwardness, and so forth.

The question is now: are these epigenetically stabilized aesthetic schemes and rules of selection also transgenerationally transmissible? In other words, is it possible to draw a connection between the *Waddingtonian* meaning of epigenetics as it has been taken up by Changeux and Dehaene and applied to the brain — i.e., “epigenetics” as the interplay between the actions of genes and the experience unique to each individual — and the *molecular* meaning of epigenetics, where the latter is more focused on the transmissibility of epigenetic modifications? In order to answer this question, we need to look in more detail at the molecular level of epigenetic processes.

The regulative genome: the epigenome

Each mammal possess some hundreds of different cell types deriving from a single fertilized egg. The differentiation of each cell type is achieved not via changes in the organism's DNA sequence but through the coordination of subsets of genes.⁴¹ In order to achieve the proper temporal and spatial

regulation of these genes, the cell employs a set of epigenetic mechanisms, including DNA methylation and histone modifications.⁴²

DNA methylation is the most commonly studied epigenetic mark in the mammalian genome. It consists of the transfer of a chemical group (methyl group) to a cytosine, which is one of the four DNA bases (the “rungs” of a DNA “ladder”) in the DNA strand.⁴³ DNA methylation patterns should be faithfully inherited during mitosis, i.e., the process by which a cell divides into two identical daughter cells. The failure to maintain the correct methylation patterns leads to aberrant cell functioning, which is often observed in human neurodevelopmental defects; neurodegenerative, neurological, and autoimmune diseases; and cancers.⁴⁴

Another form of epigenetic regulation is the modification of histones: the small proteins involved in “packaging” DNA within the nucleus of each cell into structural units called nucleosomes.⁴⁵ Biologists use the term “chromatin” to refer to the complex of DNA and the histones that package it. Histones can be modified in a number of ways by adding chemical groups,⁴⁶ which alter the histones’ interaction with the DNA molecule in a manner that influences gene activity and DNA transcription. Roughly, DNA transcription is the process by which DNA is copied into messenger RNA during the production of proteins, which make up the structure of the body.⁴⁷ If, as Nessa Carey writes, we may conceive of our DNA as a script, then:

DNA methylation represents semi-permanent additional notes ... histone modifications are the more tentative additions. They may be like pencil marks, that survive a few rounds of photocopying but eventually fade out. They may be even more transient, like Post-It notes, used very temporarily.⁴⁸

Whereas the genome is all the DNA in the nucleus of a cell, the complex profile of DNA methylation and histone modifications is known as the epigenome.⁴⁹ The interplay between DNA methylation and histone modifications underlies the so-called “epigenetic memory” of each somatic cell. In the last decade, our understanding of the different epigenetic layers and their participation in gene expression has rapidly improved. Following Changeux’s and Edelman’s work on the epigenetic processes that shape the mammalian brain, today’s researchers have identified the biochemical mechanisms underlying these modifications. For example, in a recent paper Tsigelny et al. used molecular genetics to map the expression patterns of the

genes involved in synaptic epigenesis over the lifespan of a rat. They noticed that a huge change occurs at birth when many genes that were active in the embryo are switched off and thousands of other genes involved in the regulation of chromatin modifications become active as the animal goes through the dramatic experience of birth.⁵⁰

Reprogramming genomes and inherited epigenomes: towards an environmental inheritance

As mentioned in the previous section, every mammal develops from a single cell, the zygote, which is made up of an egg and a sperm, each of which contains a haploid genome. When fertilization occurs, the genomes of both egg and sperm already have their own epigenetic “states,” the characteristics of which are determined by the parents’ epigenetic conditions.⁵¹ This means that each zygote receives a male *imprinted* genome from the father and a female *imprinted* genome from the mother. After fertilization, these epigenetic marks are usually stripped off very quickly as the zygote undergoes the extensive reprogramming which allows a new, complex, multicellular organism to develop. However, during the past decade, a handful of studies carried out in mammals suggested that some *loci* can escape reprogramming and that epigenetic changes due to environmental stimuli can therefore be inherited, passing from the parents to at least one generation of offspring.⁵² A key study of this sort of “environmental” inheritance showed that the exposure of pregnant female rats to an endocrine disruptor affected male fertility in subsequent generations and that these effects were associated with epigenetic changes in the germ line.⁵³ Other studies also reported the occurrence of an epigenetic transgenerational inheritance in the next generation,⁵⁴ but results were very controversial about the occurrence of effects through more than one generation.⁵⁵ Transgenerational inheritance of epigenetic marks has also been reported as a consequence of the exposure of male parents to stresses.⁵⁶ For example, offspring of male mice that had been fed a low-protein diet showed changes in the expression of genes involved in cholesterol biosynthesis and DNA methylation.⁵⁷ Similarly, it has been suggested that abnormal phenotypes in humans, even those caused by

stressors such as low nutrient intake, might be passed on for many generations through epigenetic marks on the gametes of one parent.⁵⁸

At present the most remarkable evidence for the possibility of epigenetic inheritance in the mammalian genome is the study conducted by Brian Dias and Kerry Ressler, who showed that when mice are taught to fear an odor, both their offspring and the next generation are born with the fear of the same smell. Dias and Ressler modeled an ecologically relevant exposure by pairing an odor with mild foot shocks, thereby training mice to fear the odor of acetophenone — which is recognized by the receptor Olfr151 — and then measured the behavioral response to this odor in the offspring. As a control, they used a different odor (propanol) that was not paired with shocks, which acts on a different receptor, Olfr6. The authors found that when mice were trained with acetophenone, their offspring as well as the subsequent generation showed a heightened startle response in the presence of acetophenone but not in the presence of propanol. When ancestors were instead trained with propanol, their descendants were fearful in the presence of propanol but not acetophenone. In the molecular analysis, the authors found that the gene coding for Olfr151 (but not Olfr6) was differentially demethylated when the mice were trained to fear acetophenone in respect to the control odor. This is an exquisite demonstration that DNA methylation in sperm can be targeted in specific *loci* in response to a specific exposure and that sperm's methylation signature is transferred to the next two generations, indicating that the methylation signature evades erasure at both the primordial and post-fertilization phases. Dias and Ressler also provided strong evidence that these changes are even transmitted through the germ line during *in vitro* fertilization. Sperm from a specific odor-conditioned mouse resulted in the transmission of an anatomical feature: the increased size of odor-specific glomeruli in the offspring's olfactory bulb.

Dias and Ressler's most intriguing conclusion is that although the environmental stimulus does not access the genome directly, it induces *behavioral* changes that are passed down. The authors' data suggests that epigenetic, transgenerational, germline-transmitted adaptations to threats occur in a predictable and organized fashion similar to that of other physiological responses. Hence it seems that there are mechanisms which can translate adult experience and environmental exposures into inherited phenotypes without affecting the genotype. And it seems we must rethink

our understanding of phenotypic adaptation as well as entrenched ideas on how species respond to new challenges. The research we have described — which unravels the molecular link between experience and the gamete epigenome and explores the relationship between gametes and the development of behavioral brain circuitry in response to experience — poses a formidable challenge to several other research fields, suggesting that epigenetics may serve as a link between apparently distinct disciplines from molecular genetics⁵⁹ to psychology⁶⁰ and aesthetics.⁶¹

Epigenetics and aesthetics: overcoming narrow evolutionary psychology

Mammals seem to be equipped with mechanisms that respond specifically and efficiently to novel experiences, such as odors and predator threats, and transmit this information effectively to their offspring without the need for the typically slow process of natural selection. Even if the molecular machinery involved in such a process is unclear, the germ line can serve also as a vector for transmitting information from adults across generations, making future studies necessary to determine how common these environmental-based epigenetic changes are and which types of “knowledge” can be fixed into our genome through epigenetic marks. From the perspective of Evolutionary Aesthetics, although we know that the human brain does not possess distinct regions, genes, or gene complexes which are specifically responsible for processing and decoding aesthetic stimuli,⁶² it is possible that such stimuli are processed by brain areas whose molecular pathways, structure, and functioning are modified at an epigenetic level by the environment.⁶³

In the last two decades, a considerable amount of literature has been published on the emergence and functioning of human aesthetic behavior, including preferences, rules of selection and tastes. Evolutionary aestheticians have suggested that *Homo sapiens* has evolved general standards of beauty directly derived from the fitness value of the opposite sex and environmental aesthetic preferences correlated with survival chances in specific habitats.⁶⁴ The mainstream position in Evolutionary Aesthetics is that our aesthetic preferences are in a certain sense “encoded” in

our brains as a legacy of the adaptive aesthetic choices (mate choices and habitat choices) made by our ancestors in the Pleistocene era.⁶⁵ More than a few scholars in Evolutionary Aesthetics have argued for the existence of a proper “aesthetic module” innate to the brain, carefully forged by natural selection over the course of evolution.⁶⁶

However, given the work of Anjan Chatterjee and others, the existence of a brain module devoted to aesthetics seems unlikely.⁶⁷ In that case, a key concept for a more effective understanding of the emergence, functioning, and inheritance of our aesthetic behavior may be epigenetics. On the one hand, following Changeux and Dehaene, it seems reasonable, lacking any evidence of aesthetic genes or aesthetic modules innate to the human brain, to conceive the development of our aesthetic customs as a plastic and incremental process that takes place over time. In this sense, it seems that our aesthetic dispositions are in no way fixed at birth (even though of course they are constrained by our evolutionary history as a species). From this perspective, brain epigenetics can be used to account for the extraordinary variability in human aesthetic behavior.

On the other hand, however, following the most recent research on the transmissibility of epigenetic modifications from the parents to the offspring and beyond, we can explain how at least some of the epigenetically stabilized preferences and schemes may be inherited and propagated, leading to changes in aesthetic behavior over generations. From the latter perspective, epigenetics could provide an interesting window onto the relationship between the unique components of aesthetic schemes and shared predispositions constraints. In other words, epigenetics could provide an analysis of how aesthetic experience — in its multifaceted declinations and components, both local and shared — structures itself over the course of an individual lifetime. After all, the word “aesthetics” comes from the Greek “*aesthesis*,” which means “sensation,” “perception”; and as Dias and Ressler showed, sensorial preferences and repulsions (olfactory ones at least) are developed and inherited *in an epigenetic way* in mammals. Their study may be a starting point for future research on the epigenetic development and transgenerational transmission of (proto-)aesthetic rules and schemes in humans.

Although the molecular nature of inherited epigenetic marks is still unknown in most cases, recent innovative technologies make this problem tractable, enabling us to fully characterize epigenetic marks across the entire

genome. However, even if DNA methylation is still the most popular candidate for the molecular basis of transgenerational epigenetic inheritance via gametes, future studies should be focused not only on epigenetic marks but also on the processes and factors that may bring brain-induced epigenetic changes into gametes. For the latter, microRNAs and RNA piwi-interacting RNA (piRNA) seem at present to be the best candidates.⁶⁸

Stephen J. Gould argued that “human cultural evolution, in strong opposition to our biological history, is Lamarckian in character. What we learn in one generation, we transmit directly by teaching and writing.”⁶⁹ He was right, but it is also possible that we transmit at least a part of what we learn in one generation — for instance, aesthetic schemes and rules or some of their basic components — via our inheritable epigenome: a second inheritance system that functions alongside cultural transmission.⁷⁰

Towards a new evolutionary aesthetics

At a conference held at the University of Uppsala in March 2015, epigenetics was presented as the “meeting point between nature and nurture,” the intersection zone between biology and culture.⁷¹ It is in consideration of its “hybrid” nature — on the boundary between organism and environment, genes and the world, internal biological dispositions and external environmental influences — that epigenetics may play a significant role in a renewed and updated Evolutionary Aesthetics.

Modern and contemporary explanations of human aesthetic experience have traditionally oscillated between two conflicting foci: a subjective understanding (Humean for instance), claiming that beauty is not a quality of things themselves but exists merely in the mind which contemplates them; and an objectivistic understanding, according to which beauty should be conceived as a property of objects, which compel people to agree on their aesthetic value. Neither of these explanations fully accounts for the complexity of aesthetic experience. Although there can obviously be no aesthetic experience without a subject — for the simple reason that the aesthetic is a certain kind of relation between the individual subject and the world — and although aesthetic tastes vary significantly between

individuals, it seems that under certain conditions, we tend nevertheless to converge upon the same aesthetic values and judgments. Why and how is this possible?

Answering this question requires getting rid of traditional dichotomies—such as nature/culture, universalism/relativism, and objectivism/subjectivism—the overestimation of which has created most of the pitfalls that aesthetic theory has fallen into over the course of its history. In Evolutionary Aesthetics, the dichotomy between an “innate” account (i.e., in this context, based on genes) and the “externalist” reduction of the aesthetic to a matter of cultural differences is, as we have been suggesting in this paper, a *misleading* dilemma.

Undercutting dualisms, particularly the dualistic view of nature *versus* culture, was one of the main features of John Dewey's philosophy, particularly his aesthetics. Largely inspired by Charles Darwin's biological views, Dewey always regarded the live creature interacting with its environment as the starting point of his philosophical investigations. In this sense, as he argued in *Art as Experience* (1934), Dewey understood the emergence and unfolding of aesthetic experiences in humans as a strongly “relational” process, a matter of inherent interaction and perceptual trade between the organism involved and its surroundings. According to Dewey, the environment with which the organism interacts and in relation to which aesthetic experience unfolds is both physical and socio-cultural. Nature and culture are so fully integrated, Dewey says, that in the aesthetic experience, each disappears. In *Art as Experience*, we find the following general definition of experience, which also applies to the specific case of human aesthetic experience:

Experience is a matter of the interaction of organism with its environment, an environment that is *human as well as physical, that includes the materials of tradition and institutions as well as local surroundings*. The organism brings with it through its own structure, *native and acquired*, forces that play a part in the interaction ... [E]very experience is constituted by interaction between “subject” and “object,” between a self and its world.⁷²

There is no room for dichotomies in Dewey's approach. In perfect syntony with Darwin's views, Dewey sees culture as the result of a continuous and cumulative interaction with the environment. Both culture and nature contribute to the unfolding of the aesthetic experience to such a point that the distinction between the two concepts seems to dissolve. As Dewey

remarks, the dichotomies between nature and culture, the mind and the world, subject and object collectively constitute “a bias, and one, which, most unfortunately, is just the one most fatal to aesthetic understanding.”⁷³

Dewey’s view could not be closer to the recent perspectives emerging from the field of epigenetics, which show how our “culture,” defined in a broad sense, leaves a physical trace on our (epi-)genome — i.e., on our “biological nature” — modifying its phenotypic expression and thus undercutting the dichotomies between genotype and phenotype, biology and culture. Indeed, epigenetics provides a new, effective lens through which we can appreciate from *within* evolutionary theory this synergy between the organism and its physical, social, cultural environment.


Recent studies have suggested that the relative emotional impact of certain artistic styles — i.e., the fact that certain figurative styles or sound patterns trigger stronger emotional responses than others — may be interpreted in light of “epigenetic memory,” in which associations between experiences and emotions are formed.⁷⁴ In the same way, the stabilization of individual preferences and the sedimentation of aesthetic patterns within a population may be understood as a case of epigenetic transmission with the potential of reversibility. Aesthetic preferences and behaviors are thus neither genetically inherited nor solely the result of cultural transmission but the fruits of interactions between the organisms and their surroundings. Other studies discuss epigenetic mechanisms which influence the production and secretion of hormones and neurotransmitters (e.g., dopamine) as potential foundations of artistic creativity and perception.⁷⁵ The way seems to be open for a broader interdisciplinary research program working on the boundary between philosophical aesthetics, psychology, evolutionary biology, and molecular biology.

Although Dewey was very critical of Kant’s aesthetics, describing Kant’s theory as “a thoroughly anemic conception” of the arts and aesthetic experience, the considerations we have developed so far on the basis of the most recent research in epigenetics point conclusively to Kant.⁷⁶

As we briefly discussed in the introduction, Kant’s *Critique of the Power of Judgment*, while inaugurating the new course of aesthetics as an autonomous discipline within the broader field of philosophy, simultaneously attests to an intrinsic intertwinement between aesthetic reasoning and biological reasoning. Kant claims that the same transcendental, regulative principle — the principle of purposiveness —

grounds both our understanding of biological entities and our aesthetic judgments.⁷⁷ In other words, when dealing either with organisms or with beautiful objects (whether the latter are natural or artistic), the human mind works more or less according to the same principles.

Moreover, as Elisabeth Schellekens has remarked, Kant provides a clearly “relational” account for the aesthetic experience, overcoming the object/subject dichotomy.⁷⁸ Despite his emphasis on the “uniqueness” of the interaction between the human mental faculties which occurs during aesthetic experience—the “free play” of imagination and understanding—Kant does not claim that the aesthetic resides solely in the subject of experience.⁷⁹ Rather, the free play *within* the subject is triggered by something in the *object’s* character, namely its form. In other words, according to Kant, as a consequence of the absence of “rule[s] in accordance with which someone could be compelled to acknowledge something as beautiful,” aesthetic judgments must be grounded in the subject’s experience of pleasure.⁸⁰ Nevertheless, such judgments demand a “universal voice” on the basis of a shared common sense.⁸¹

In one of the most fascinating passages of his third *Critique*, Kant writes that the experience of beauty is *ein glücklicher Zufall*, “a happy accident”: the experience of beauty is contingent, singular, and reversible, but it demands objective agreement.⁸² As a new facet of the intertwinement between biology and aesthetics which has its roots in the history of both disciplines, epigenetics may help us understand how the exemplar contingency and singularity of beauty emerge and how the perspectival experience of the individual person contributes to the emergence of shared schemes and preferences at the intersection between our biologically evolved nature and the environment and culture in which we are embedded. 

Notes

- 1 The authors have both contributed to the conception and design of the entire work; Mariagrazia Portera is responsible for paragraphs 1, 2, 3, 4 (second part), 7 (first part), 8; Mauro Mandrioli is responsible for paragraphs 4 (first part), 5, 6, 7 (second part). We would like to thank Alessandro Minelli for his insightful comments that helped improve the manuscript.
- 2 See Alexander G. Baumgarten, *Aesthetica/Ästhetik* (Hamburg: Felix Meiner Verlag, 2007).
- 3 Theodor Georg A. Roose, *Grundzüge der Lehre von der Lebenskraft* (Braunschweig: Christian Friedrich Thomas, 1797).
- 4 See Peter McLaughlin, "Naming Biology," *Journal of the History of Biology* 35, no. 1 (2002): 1-4; Gerhard H. Müller, "First use of biologie," *Nature* 302 (28 April 1983): 744; Armen Avanesian, Winfried Menninghaus, and Jan Völker, *Vita aesthetica. Szenarien ästhetischer Lebendigkeit* (Zürich-Berlin: Diaphanes, 2009); Robert Richards, *The Meaning of Evolution: The Morphological Construction and Ideological Reconstruction of Darwin's Theory* (Chicago: University of Chicago Press, 1992), particularly the first chapter.
- 5 Winfried Menninghaus, "Biology à la mode: Charles Darwin's Aesthetics of 'Ornament,'" *History and philosophy of life sciences* 31 (2009): 265, emphasis added.
- 6 See Winfried Menninghaus, *Kunst als «Beförderung des Lebens». Perspektiven transzendentalen und evolutionärer Ästhetik* (München: Carl Friedrich von Siemens Stiftung, 2008).
- 7 See Hannah Ginsborg, "Kant on Aesthetic and Biological Purposiveness," in *Reclaiming the History of Ethics: Essays for John Rawls*, ed. Andrew Reath, Barbara Herman, and Christine Korsgaard (Cambridge: Cambridge University Press, 1997), 329-360; also "Kant's Biological Teleology and Its Philosophical Significance," in *A Companion to Kant*, ed. Graham Bird (Oxford: Blackwell, 2006), 455-469.
- 8 Charles Robert Darwin, *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life* (London: John Murray, 1859); and *The Descent of Man, and Selection in Relation to Sex* (London: John Murray, 1871).
- 9 David Kohn, "The Aesthetic Construction of Darwin's Theory," in *The Elusive Synthesis: Aesthetics and Science*, ed. Alfred Tauber (Dordrecht: Kluwer, 1996), 13-48.
- 10 See Menninghaus, "Biology à la mode" and *Wozu Kunst? Ästhetik nach Darwin* (Berlin: Suhrkamp Verlag, 2011). Also Wolfgang Welsch, "Animal Aesthetics," *Contemporary Aesthetics* 2 (2004); and *Blickwechsel. Neue Wege der Ästhetik* (Stuttgart: Reclam, 2012).
- 11 Eckhart Voland and Karl Grammer, *Evolutionary Aesthetics* (Berlin: Springer, 2003), 5; see also Eckhart Voland and Hannes Rusch, "Evolutionary Aesthetics: An Introduction to Key Concepts and Current Issues," *Aisthesis. Pratiche, linguaggi e saperi dell'estetico* 6, no. 2 (2013): 113-133.
- 12 See Ellen Dissanayake, "The artification hypothesis and its relevance to cognitive science, evolutionary aesthetics, and neuroaesthetics," *Cognitive Semiotics* 5 (2009): 148-173.
- 13 On this point, see Steve Brown and Ellen Dissanayake, "The arts are more than aesthetics and aesthetics is more than the arts: Neuroaesthetics as narrow aesthetics," in *Neuroaesthetics*, ed. Martin Skov and Oshin Vartanian (Amityville: Baywood, 2009), 43-57. Useful suggestions also in Helmut Leder and Marcos Nadal, "Ten Years of a Model of Aesthetic Appreciation and Aesthetic Judgments: The Aesthetic Episode — Developments and Challenges in Empirical Aesthetics," *British Journal of Psychology* 105, no. 4 (2014): 443-

464. For a critical assessment of Evolutionary Aesthetics see Stephen Davies, *The Artful Species. Aesthetics, Art, and Evolution* (Oxford: Oxford University Press, 2012).
- 14 For the adaptive approach and the focus on aesthetic preferences, see Voland and Grammer, *Evolutionary Aesthetics*; David Buss, *The Handbook of Evolutionary Psychology* (London: Wiley, 2005); David Lewis et al., "Lumbar Curvature: a Previously Undiscovered Standard of Attractiveness," *Evolution and Human Behavior*, 36, no. 5 (2015): 345-50; Gordon H. Orians, "An Ecological and Evolutionary Approach to Landscape Aesthetics," in *Landscape Meanings and Values*, ed. Edmund C. Penning-Roswell and David Lowenthal (London: Allen and Unwin, 1986), 3-25. See also Joseph Carroll, "The Adaptive Function of the Arts: Alternative Evolutionary Hypotheses," in *Telling Stories: Literature and Evolution*, ed. Carsten Gansel and Dirk Vanderbeke (Berlin: De Gruyter, 2012), 50-63; and "Dutton, Davies and Imaginative Virtual Worlds: The Current State of Evolutionary Aesthetics," *Aisthesis. Pratiche, linguaggi e saperi dell'estetico* 6, no. 2 (2013): 81-93.
- 15 An ethological-comparative approach to the aesthetic is in Desmond Morris, *The Biology of Art* (New York: Knopf, 1962) and Irenäus Eibl-Eibesfeldt, "The biological foundation of aesthetics," in *Beauty and the Brain: Biological Aspects of Aesthetics*, ed. Ingo Rentschler, Barbara Herzberger, and David Epstein (Basel: Birkhäuser Verlag), 29-68.
- 16 For the notion of "interdisciplinary" and the legacy, rules, and evaluation of interdisciplinary research programs, see Veronica Boix Monsilla, "Interdisciplinary Work at the Frontier: An Empirical investigation of Expert Interdisciplinary Epistemologies," *Issues in Integrative Studies* 24 (2006a): 1-31; Ead., "Symptoms of Quality — Assessing Interdisciplinary Work at the Frontier: An Empirical Exploration," *Research Evaluation* 15, no. 1 (2006b): 17-29.
- 17 The most famous "handbook" of Evolutionary Psychology is still Jerome Barkow, Leda Cosmides, and John Tooby, *The Adapted Mind: Evolutionary Psychology and the Generation of Culture* (New York: Oxford University Press, 1992). For critical approaches: Robert C. Richardson, *Evolutionary Psychology as Maladapted Psychology* (Cambridge: MIT Press, 2007); Steven J. Scher and Fredrick Rauscher, *Evolutionary Psychology: Alternative Approaches* (Berlin-Heidelberg: Springer, 2003); David Buller, *Adapting Minds: Evolutionary Psychology and the Persistent Quest for Human Nature* (Cambridge: MIT Press, 2005); Johan Bolhuis et al., "Darwin in Mind: New Opportunities for Evolutionary Psychology," *PLoS Biology* 9, no. 7 (2011): e1001109.
- 18 Immanuel Kant, *Critique of the Power of Judgment (The Cambridge Edition of the Works of Immanuel Kant)*, trans. P. Guyer and E. Matthews (Cambridge: Cambridge University Press, 2000), 101 (§ 8).
- 19 Laura Germine et al., "Individual Aesthetic Preferences for Faces Are Shaped Mostly by Environments, Not Genes," *Current Biology* 25, no. 20 (19 October 2015): 2684-2689.
- 20 See Mariagrazia Portera, "Toward an integrated science of aesthetics: Getting rid of the main misunderstandings in evolutionary aesthetics," *Aisthesis. Pratiche, linguaggi e saperi dell'estetico* 8 (2015): 194-203. Also Dissanayake, "The artification hypothesis."
- 21 Robin Holliday, "Epigenetics: A Historical Overview," *Epigenetics* 1, no. 2 (2006): 76-80.
- 22 Adrian Bird, "Perceptions of epigenetics," *Nature* 447 (24 May 2007): 396. See also Gerd B. Müller and Lennart Olson, "Epigenesis and Epigenetics," in *Keywords and Concepts in Evolutionary Developmental Biology*, ed. Brian K. Hall and Wendy M. Olson (Cambridge: Harvard University Press, 2003), 114-123.
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A Machine's First Glimpse in Time and Space

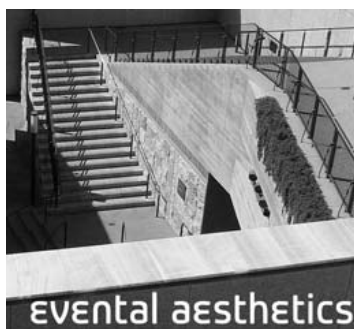
Trevor Mowchun

ABSTRACT

The primary objective of this two-part essay is to theorize the relationships between religious disenchantment, the autonomy of art, and the phenomenon of contingency. These connections are held to be vital for an understanding of modern aesthetics in general, and the possibility is put forth that they come to a head in the most modern of all the arts: cinema. In the first part, an account of the contemporary rift between the immanence of art and the transcendence of the divine announces the end of the absolute and the beginning of the reign of contingency — a liberating yet catastrophic turning point where artists are responsible for creating meaning with the full knowledge that all meaning is a creation. In the second part, the secular autonomy of art is fully realized in the medium of film, particularly in the camera machine whose first glimpse in time and space reveals a disenchanted world or “contingency in the flesh.” The medium of the moving image and its modes of experience at the turn of the century are here understood as ontologically determined or overdetermined by the great symbolic threat against the powers of human agency — the world in its *own* image as opposed to the world in *our* image. However, at the same time this material threat against our will to power is counteracted by the desire to control the shock and indeterminacy of cinematic contingency, a desire fulfilled at the expense of acknowledging the implications of the new anti-absolute.

KEYWORDS

modern art
automatism
contingency
disenchantment
cinematic ontology



Part 1. The aesthetic automatisms of disenchantment

When thinking the history of a given phenomenon, we can find ourselves sliding as if on ice past its apparent givenness and into a time and space, a world where the object of our understanding speaks in a different language and may not respond to the same name. The history of art, if it's to be accurate and interesting, must therefore face up to the following fact about itself, a metaphysical fact: there was not always such *thing* as what we call "art." Our concept of art, if indeed such a concept can be extracted from our consciousness intact, is born just as these very objects are produced for their own sake. The capacity to produce something for its own sake in excess of all prescriptive functionalities and traditions is not exactly rudimentary: it is a historically warranted, timely possibility and, as we shall soon see, a psychologically inescapable, untimely one as well. Familiar notions such as "the work of art" (the material manifestation of art or the material worked over by the artist), "the creative process" or "the beginning" (the intentional or contingent origins of the work within a conscious action), and a subject position as routine and inextricable as that of the "viewer" or "spectator" — all of them taken for granted today as fundamental to what art is and as conditions of possibility for works of art *to work* — are at the same time irreversible outcomes of a great psycho-historical event, a paradigmatic turning point in the Western experience of art. This is the moment where the work of art turns to face itself, a moment which triggers the various passages, confrontations and epiphanies of "modern art."

The consequences of this epic event are equal parts success and sacrifice. I will summarize it as the complete reversal or radical upset of the hierarchical relation between art and the divine, culminating in the extrication of art from ritual and the resulting secularization of the artwork's ontology. For the longest time art would serve the sensible and expressive needs of religion, and while the relationship between the two is extremely troubled and complex, the basic principle of their mutual affinity seems relatively transparent: religion as institution is committed to exploring and regulating the threshold between the visible and the invisible, which is also the liminal province of art. As early as the time of ancient Greek civilization, art and religion were all but indistinguishable from each other.¹ Now we distinguish them all too clearly, almost automatically, and not just because one is tied to the senses while the other seeks to transcend them. A gradual parting of ways has left a hole too deep to be filled with anything less than

complete reconciliation on those old unspoken terms — a “black hole” of disenchantment. Here we are faced with the eclipse of the divine aura of presence, in other words with the assertion of presence as a purely material phenomenon cut off from the transcendental. Any hopeful mediator of the two sides risks grotesque parody and is susceptible perhaps to the melancholy of an incurable nostalgia. And where even the most steadfast non-believer may sometimes catch himself “looking for the light” in an object whose artistic beauty or sublimity briefly converts it back into a private idol, echoing the lost age of enchantment, his bristling fervor is still without metaphysical foundation: the sweet silent rapture of the devoted art lover is too idiosyncratic, gratifying, and often self-serving to count as anything resembling proper worship.

That the spirit of religion has left the body of art, splitting in the Cartesian manner of mind and body, is a phenomenon internal to the nature of art itself: a shock at the level of the absolute whereby the transcendence of the divine becomes secondary to the immanence of the aesthetic. What is called modern art is understandable as the autonomy of art; and if in the pre-modern period art lacked this sense of autonomy, it is because its creators lacked the Enlightenment’s conception of reason and the formation of the autonomous subject at the helm of human consciousness. The autonomous nature of art is therefore established and perhaps even cultivated by what philosophers like Heidegger and poets such as Hölderlin call “the flight of the gods.”² Now, the apocalyptic tone and cold sense of abandonment tempting the philosopher and poet into the abyss of nihilism are not all despairing and do not incite or justify the vengeance of nihilism in the form of misguided and compensatory acts of deification or dogmatism. For the flight of the gods as a philosophical event associated with the various phases of modernist self-definition may constitute a transformative turning point and point of no return, where the human being takes flight, as it were, undergoing existential revolution by dwelling in a world of his or her own making, rivaling the gods and taking responsibility for the death of gods as Nietzschean “overmen.” This act of “taking flight” is a precarious experience in which the floor of faith drops beneath one’s feet; and whether we fly or fall, create or destroy, there is a crisis to be undergone that takes the measure of the modern subject’s newfound autonomy and responsibility. So perhaps art cuts loose from religion when humanity itself *becomes* a religion. The modern artist — by accepting an irredeemable freedom subject to the creative whims and ecstasies of the new religion of humanity — has lost the

key to the representation of the divine; he can no longer derive from the conditions of his practice the contractual destiny of representation to revere the inimitable through imitation and acts of deference. This ancient “contract” that underlies and guides artistic production in the pre-modern era — mandating a sensible architecture of manifestation and preservation for the divine absolute — has been irrevocably broken seemingly beyond the capacity for renewal. From this point on, starting with the Enlightenment and culminating with Nietzsche’s declaration of the death of God, the nature of art becomes a question that each and every artist must answer for himself; and in order to create, the modern artist begins by bearing the burden of *self-questioning* as a perilous rite of passage.

Giorgio Agamben speculates on the psychology of the modern artist and describes him as “the man without content,” borrowing the peculiar phrase from Robert Musil’s unfinished novel *The Man Without Qualities*.³ Agamben pays tribute to the novel’s specifically modernist predicament by embracing the idea of an individual whose burden of freedom and inexhaustible potential is based upon a heightened sense of detachment, dispersion, and psychic neutrality. In the figure of the man without content, we have a kind of “infant-man” marked by the absence of a past and future that begins not tomorrow but today — in a present of pure and naïve potentiality bound to go unrealized. As an artist in the modern sense and a metaphor for the work of art, the man without content hints at something paradoxical, even uncanny, regarding the disappearance or death of any aesthetic content that is intrinsic and therefore vital to the nature of art. For what art has become is precisely a rootless nature that is now in perpetual discovery of its own nature, forever compensating for the fact that tradition has been relinquished for experimentation, the ultimate experiment being that which the artist performs upon himself. According to Agamben, the artist has to a certain extent *become* the work of art by which he lives or dies.⁴

But who or what is the man without content? My sense is that he is someone who practices the asking of a question with no answer. Here the plot of artistic modernism thickens as it spirals more inwardly. From the perspective of the modern artist, the arbitrariness of content — call it contingency — that stems from the blanket questioning and incommensurability of content signifies a paradigmatic shift in emphasis from *content to form* within the domain of aesthetics and from *objectivity to subjectivity* within the phenomenological conditions of consciousness.

Amidst these modernist reversals and in the absence of divine determinations, “form” emerges as a zero-degree “remainder,” the only content capable of constituting viable criteria for artistic production and therefore theoretically justifying art. But since this content is nothing but form taking its cue from the lack of any intrinsic content at the heart of modern consciousness (except for its own subjectivity, its own sense of self-possession), the modern artist is without a ground on which to stand where he might stake cultural authority over the creative process. In this sense he lacks grounds for an impetus or calling that is not the unmistakable sound of his own secret appeal to be summoned, chosen, and not merely self-appointed. During this process, this hall of mirrors of wild self-reflexivity, the modern artist may recognize this counterfeit inspiration as a surge of ambition, feeling a sense of purpose deep within his bones, perhaps gnawing away. He alleviates the pangs of purpose whispering of them into his own ear or shouting them to the deafening of all ears. When rehearsed in private or declared in public, his intentions may awkwardly flirt with doctrine or decree, slipping into the rant or at least carrying the ring of a manifesto. And when it’s all said and done, he must complete his work by signing it on the front, not the back, for all to see as a significant part of the work’s content, not just its cache. As sole author he resides at the source of what he creates, with formal responsibility for the work as a whole.⁵

Upon closer inspection, the “autonomy of art” is a mythical idea, for it isolates the canvas of creation and fancies it blank in an almost primordial sense. The criterion of form raises the potential of the medium and insists on its resonance across all instances; and with the medium fully exposed, form, the very face of autonomy, delivers to consciousness a mirror image of itself as perpetually conscious of itself. While an image, like consciousness, is always *of* something, this peculiarly self-conscious “something” can be, at least in principle, “anything whatsoever.” But in reality, how can these wild notions of openness, indeterminacy, and *tabula-rasa* blankness be anything more than powerful illusions or fantasies, the mirages of artistic modernism? For all its freedom, creative consciousness seems fated to wander in an inhospitable desert wasteland where the will to create is coaxed by sheer solitude yet simultaneously crippled by the absence of redemptive powers beyond the horizon. Artistic action thus becomes a strangely hypothetical situation within which all things are perceived as possible: it’s as if the beginning of the creative process commences all possible processes, appearing as a fixed point with the widest possible view, a sweeping

panorama. Here lies what would be a great opportunity or inauguration if it did not have the form of an internal command emanating from deep within the man without content: *Venture at your own risk, you who are on your own ... and beware: where there is no fate, there is only chance, so make chance your fate — guide it and grant it the necessity of your wildest whims!* The prospect of a beginning that is not resolved in a finished work but rather *realized* in an unfinished work, forcing the artist to use or at least acknowledge chance as the price of his existential freedom, stands as a succinct sign and monolithic testament to the disappearance of the absolute from the realm of aesthetics. Art that relies on chance as a technique indulges in this disappearance — dancing on a grave — by necessitating the freedom it affords.

A significant existential provocation of art upon its departure from religion and entry into modernism is the establishment of a standard for freedom that surpasses the reach of any single artist, outstretching the will to power so as to empower, as it were, *power itself*. Stranded and alone, courageous yet doubtful, standing straight and trembling on the threshold of absolute freedom, the “contentless” artist has absolutely nothing which he ought to conceive, express, or honor in the name of art. And yet everything that enters the horizon of his consciousness within a culture that disseminates information much faster than it can incorporate it, the great flood of a collective and never-ending dream from which no one can fully awaken, is built into the very fabric of the fateful moment of creation, filling the air with the amorphous and ambiguous *substance* of possibility. And when the concept of possibility is understood as a determinant structure of the infinitely meaningful that cannot be fully resolved or exhausted, the concept is thereby transformed and functions as a condition: the condition of possibility. We can think of this as the material analogue of the psychic condition that Sartre and the existentialists describe as our condemnation to freedom. In this picture, the concept of chance must also undergo transformation from the factor of probability into one of the primary forces that *conditions* possibility, functioning as its perpetual motor and resilient openness to sudden movements, activations, and reconciliations of difference.⁶

With chance as a guiding principle of such various and vertiginous possibilities, art comes to resemble the actions of the *automatic*: this is an event where meaning self-regulates, thwarting the compass of human intentionality. It is precisely through chance amidst the clutches of its

clandestine and autonomous operations that one can discover elements of significance and forms of affect seemingly untouched by any established system of signs or recognizable modes of consciousness in what I referred to earlier as the mirage of artistic modernism. The influence of chance on the creative process is also potentially productive insofar as it activates art's newfound autonomy and abstracts the spirit of process from the products which await it. We can say that it enchants the process with a pulse of organic vitality, which appears in certain hands to work itself out or fall into place by dint of a logic whose meaning need not be determined in advance and which remains to a certain extent *unknown*. The motive behind the method, if we can call it one, is not about finding order in chaos but rather a way to acknowledge chaos, endure it, and in the process come through the crisis of meaning not necessarily "in the know" so much as comfortably in the dark. Art's secular turn is ultimately a disorienting one: the ancient appetite for meaning lingers in the wake of progress and all pretense of having at last overcome the lure of teleology.

Despite all the ambitious projects of self-realization surrounding art's uncharted autonomy and secularization, there is actually nothing inherently at stake in the work of art except the stakes raised in honor of work itself, that is, of *production* (Agamben uses the term "praxis").⁷ Only by beginning the work — by getting *to* work and *working out* an act of thought — can the artist raise the stakes of art on its own terms and avenge the missing absolute without relapse. Hence the very act of beginning, more daring and decisive than reaching an end, is the great emancipatory gesture, a suspension of the tangled reasons and external orders for beginning at all. And since beginnings do not temporally precede the modern artwork but remain spatially synchronized with it, they persist throughout its creation, shadowing or haunting it, granting the "workly" character in the form of traces and tones so that something is *at work* in the work of art rather than *worked through* and brought to an irrevocable close. The work as work grows out of its beginning as if the latter were a pot of earth, and in some cases it comes full circle as if returning to the earth. There is a subtle yet significant difference between "rooted" artworks and those which exploit the beginning to erect an edifice indifferent to its origins. This might explain why artists routinely come upon the predicament of having to face the beginning and pass its test of will as a kind of prerequisite for reaching the end and declaring definitive closure — a great departure from the radical deferrals of will required in dignified servitude to something "higher" and

“unrepresentable.” The beginning becomes a hands-on, almost topographic exploration of the parameters of subjectivity as conditioned by an artistic medium; yet because the conditions of a medium are conditions of possibility or contingencies, their limits can be transgressed once the beginning gets underway and takes on a life of its own.

I believe the provocative pressure of the beginning as pure unredeemable potential is the most dramatic expression of the autonomy of art, an autonomy which fuels the “contentless” psychology of artistic creation in the absence of a so-called Creator. This magnified sense of endlessness and drift within the self-consciousness of modernity may spiral into the idea, however untenable, that consciousness has content in and of itself. What the relational perspective of phenomenology exposed as a fantasy (that consciousness, even self-consciousness, is never without an object about which to be conscious) is further called into question by Agamben’s notion of a man *without* content and the tendency towards solipsism in high modernist art. But the conditions of the artist’s self-consciousness are not strictly phenomenological but also *ontological*, for they seem to be reinforced by the virtual ground of art as an alternate or framed world — a world that we have, according to Nietzsche, as a reminder that truth is better served as a creation of *new* worlds rather than a mere correspondence with *the* world. In describing art as the opening of another world or a parenthetical suspension of the world as we know it, Nietzsche acknowledges the possibility for artists and spectators to experience a vibrant and habitable refuge from the harsh impossibility of absolute truth.⁸ In this way the activities of art making and viewing provide a much needed break from compulsive attempts to know the external world: the artist as philosopher is fascinated by the complex surfaces of things and never tempted by what is presumed to be hidden beneath those surfaces, the truth-core that reduces surfaces into layers to be peeled away in search of mythical essences beyond all reckoning. The work of art provides a basis and critical energy not for discovering or creating truth but rather for leaving the realm of truth altogether and, in leaving it, ensuring that one never arrives at a truth in disguise. I suggest that the modern artist is perfectly positioned to reclaim the necessity of creating truth; and in moments of great inspiration or rebellion, he can expose the “createdness” of all truths starting with his own. Yet the artist’s pursuit of the depths of surfaces, analogous to the pursuit of form as content, forecloses the actual creation and destruction of truth as aesthetic possibilities. And where truth no longer holds sway, where even revelation is an act of creation,

the stage is set for contingency (a Dionysian drama): the unnecessary nature of truth, the fixed plurality of truth, or the contradiction of truth and its aftermath.⁹ It is in this aftermath, reckless and irrevocable, where the self-consciousness of the artist and the autonomy of the artwork come together in passages and eruptions of becoming that refuse to harden into states of being.

My emphasis on the psychic dynamics of an artwork's beginning — i.e., the vertiginous topography of blankness and the empowered folly of the artist's secular leap into darkness — is based on a reading of creative consciousness as liberated and threatened by the palpable phenomenon of contingency weaving its way through much of modern art in numerous forms and guises, ranging from Botticelli to Pollack in painting, Sterne to Chekhov in literature, Rodin to Caro in sculpture, and arguably epitomized in the avant-garde music of John Cage. An appreciation of the relationship between art and contingency will be crucial for an understanding of the complex psychology of modern art and the man without content. First, the concept of contingency will help us account for those aspects of artworks which exist in between form and content: unintended or unfinished gestures and resonant "becomings," extraneous to the content and deforming of the form yet somehow essential to the life of the work. Second, the freedom relished in even the most spontaneous improvisation is ultimately a postponement of the responsibility of freedom, for it shifts the weight of artistic decisiveness from the beginning, where chance holds sway, to the difficult task of reaching a legitimate end (not to mention a masterful one), where contingency might dawn as paradoxically necessary. Third, once contingency renders the creative process both playful and automatic, the idea of relative value takes the place of absolute belief, which means there will no longer be clear objective standards of artistic worth. I am most struck when creative inspiration precedes any practical knowledge or precise plans for its aesthetic realization, for if they are to be genuinely autonomous such expressive acts must proceed without the security of a prepackaged motivation or obligation. And since expression can even occur without the stability of conscious intention — for example as a negotiation with contingency's esoteric appeals to the automatisms of the unconscious — the will to create art, which for Nietzsche is the highest and most affirmative exercise of the will to power, can assume the form of an *a priori* mood: a mood in which one is no longer in complete possession of one's will throughout the act of creation. Indeed one may find oneself *in the mood* to

wield the will to create and desire creation for its own sake without knowing why or to what end. But if the point of departure is actually little more than a desire to depart, a strong yet abstract desire to exercise the will regardless of direction (which Fernando Pessoa describes in appropriately casual terms as “keeping busy”), then the door to the maze of contingency is an equally dead end, an unsurpassable threshold — for the beginning as an arbitrary catalyst extends in many directions at once, and the temptation may be to take all of them.¹⁰ In this context, contingency encompasses the mood of indecision suffered by the will, which seems pressured to pursue several creative paths simultaneously, as if only the paths themselves have power of conviction for the man without content.

If contingency and its necessitation have dodged the religious absolute, functioning as aesthetic criteria for new “anti-absolutes” and creative processes sufficient unto themselves, then in a disenchanted age characterized by the devaluation of all values, how exactly does contingency function in the realm of aesthetics, a realm where human values are dramatically enacted and routinely subverted? Furthermore, to what extent might the movement of chance and the principle of contingency actually serve to demonstrate or reconstitute the necessity of art, perhaps to rethink the premodern values of metaphysical presentness and timelessness which strike us as old only because they seem irretrievably lost?

A preliminary theoretical response is that once contingency materializes into necessity and the process of devaluation gives way to the perpetual prospect of reevaluation — and once contingency is acknowledged as the psychological condition of the man without content who finds freedom in the paradox of unscripted fate — then necessity shall be stripped of its brutal command as the great dictator of ontological determinism, becoming at last a thing of beauty. Seeing the beauty in necessity makes possible what I wish to call “the enchantment of contingency” and marks an act of will *acting against* its own lust for power over the world. The enchantment of contingency, however, is not something for artists to accomplish but rather for art itself to embody via the evolution of the aesthetic, which artists and spectators may then choose to acknowledge or not. These acts of acknowledgment can come to take the place of knowledge and form a vital part of our aesthetic experience; however, the enchantment of contingency can only be embodied through a mechanical rather than chance-based process of automatism, meaning that

the medium itself must be “enchanted.” Though modern art is characterized by various types of self-reflexive investigation and scrutiny of its media — investigations that often draw deliberately on chance as a means of activating the autonomous ground of the aesthetic — there is one medium whose artistic status was not at first sufficiently secure to support such investigations because it fundamentally lacked and seemed incapable of earning the necessary condition of autonomy. For this medium which grew out of urban modernity and in some sense grew up in modernism, an actual mechanical automatism usurped the position and labor of human artistry to such an extent that the man without content started to lose, as it were, the form of man. The mechanical medium of cinema with its transparent animation of the photographic record of the real and promiscuous inheritance of the distinctive features of its artistic predecessors ushers in like a wind or wave an epochal birth of contingency in aesthetics. By naturalizing the world in its own image rather than in the image of the divine, cinema displaces the modern artist and perhaps also heralds his transformative death, better known as metamorphosis.

Part 2. A machine’s first glimpse in time and space

If we can accept, after the art historian T.J. Clark, that contingency “is an issue of representation [and] not empirical life-chances,” then it can emerge, first, as a historical process where representation adapts to ruptures or crises of meaning by becoming more and more susceptible to meaninglessness, and, second, as the last step representation must take in order to enter and withstand the chaotic void of the unrepresentable.¹¹ The paradoxical passage of representation into the condition of non-representation is characterized by the (im)possibility of a self-effacing amalgamation with the excesses and exigencies of the object represented. This object has roots in the external world, and the uncanny power of cinematic representation in particular is to replant those roots in the realm of the image.

Before proceeding with an analysis of cinematic contingency along these lines, it is important to acknowledge that the dense history of moving images is short on concrete examples of pure contingency running amok at

the expense of artistic intention and various logics of perception, though perhaps surveillance imagery bears the aimless yet potentially volatile realism of contingency better than the conventional elements of surprise and coincidence utilized by narrative fiction. According to Mary Ann Doane's insightful study of cinematic contingency, the so-called chaos of the contingent as captured by a faithful and unthinking camera-eye is always tempered by some sense of order — an order that she describes metaphorically as “the brake of the film frame.”¹² In my hypothesis that cinema marks the first attempt to transcend representation through representation, the first aesthetic embodiment of contingency sufficient to question the paradigm of representation itself, I am also taking seriously Andre Bazin's notion that cinema is by nature the medium yet to be invented, forever on the cusp of transcending its mediation and progressing towards its origins in totality.¹³ I further suggest that the medium's ontological claim upon the world, claiming it as its own, is enacted phenomenologically in a constant pursuit of the perfect spectacle — but time and again we learn that the world in its own image just isn't spectacular beyond our initial gasp of astonishment. And so *more world* — in higher fidelity and with greater doses of contingency — is always needed to fuel our great fantasy of reality.

When cinema reached a point in its rapid technological and aesthetic evolution where it could open its representational doors more widely, gathering in more world with more means at its disposal (automatic cameras, color, and the synchronization of sound, to name only a few), for the first time the object of representation seemed to survive intact and even flourish in all its particularity; we could perceive as well as feel the very “presencing” that consciousness routinely reduces to the presence of “this” or “that,” complete with a name and ready-to-hand, as Heidegger might say. As the machine's first glimpse in time and space matured, representation could present the world in the light of its own image, a phrase which evokes at least three unprecedented possibilities. First, an image can be created out of the very light by which objects are perceived. Second, that which makes an image of itself must be *allowed* to do so, if not by a human hand then by mediums indifferent to humans like machines or mirrors; and the result of this allowance is an image that is not only distinguished by the singularity of what it shows, but also illuminated by the pulse of its aura, the atmospheric quality of the quantities depicted automatically. Third, an image of the world forged from such automatism will be in a sense free of thought; for

thought, while undoubtedly active, has not entered the image by overtaking the logic of mechanical reproduction. I'm tempted to say that to film the world is to get outside of our heads, deferring to automatic processes not unlike the drop into dreamland. But what's most essential is that within cinema's mechanical conditions and aesthetic possibilities, the contingency afflicting the creative process in modern art is shown to infiltrate the radical automatisms of a new artistic medium, signaling a seismic shift from the manmade image to what I have been calling the world in its own image. Both the infiltrating world and the act of infiltration itself are carriers or harbingers of contingency. Peter Geimer in his brief essay on photographic contingency describes this event succinctly and with a nod to Aristotle as "an *occurrence*: something in the image *occurs* or something *falls into* the image."¹⁴

But the cinematic representation of contingency, captured by the camera's unseeing, unblinking, unfeeling "eye and ear," is not only thoroughly gripped and occupied but also deeply moved, as if it were emotionally stirred by the subtle whims of nature, the bustle of crowds tearing through the background, the inconspicuous winking of minor details with major consequences, and perhaps above all by the resonant and receding soundscapes of the off-screen dimension whose limits are known only by the imagination. While the photographic basis of cinema is undoubtedly of the order of representation, the representation of contingency is, it seems to me, precisely a *disordering* of representation. Perhaps the world represented through cinema's powers of representational embodiment is best described as fundamentally unstable, breaking free of the chains of identification, iteration, and objectification that tend to accompany most conceptions of representation. The sense of contingency I have in mind is akin to a natural force, and in the moving image it is at its peak of pervasiveness: the uncertain condition of an occurrence, all occurrences, rather than the exceptional occurrence of an uncertainty. For viewers of cinema, the crystallized chaos of a life sliced indiscriminately and presented as a structured, comprehensive representation, a monumental ambiguity that invites and deflects our efforts to express it, unfolds as a symbolic threat against the powers of human agency, specifically over the production and reception of art. The human and non-human stand in a reciprocal, perhaps symbiotic relation as a machine becomes indispensable for seeing the world disenchanted, the world from which the gods have taken flight. And this machine, which affirms our existential condition, at

the same time becomes a surprisingly powerful tool for cultivating contingencies of nature into what I will call necessities of culture.

We can understand this complex relationship between contingency and culture by coming to terms with exactly what and how film represents and where it places us — perhaps displacing us — regarding this notion of the world in its own image and the overturning or undoing of conventional patterns of representation that it entails. As Stanley Cavell puts it in *The World Viewed*:

Film takes our very distance and powerlessness over the world as the condition of the world's natural appearance. It promises the exhibition of the world in itself. This is its promise of candor: that what it reveals is entirely what is revealed to it, that nothing revealed by the world in its presence is lost.¹⁵

For film to follow through on its promise of candor, a promise which it keeps automatically, amounts to a responsibility of ontological depths and proportions. The responsibility is towards what Cavell calls “the world as a whole”; and while cinematic representation fulfills this promise of absolute revelation in photographic terms, according to Cavell our capacity to experience this image as “natural” equally depends on the psychological terms of our distance from and powerlessness over the world as we know it.¹⁶ But how can film keep its promise of candor if the world in all its presence exceeds the limitations of any representational medium, even one as faithful as film? On my reading of Cavell, film's promise has more to do with fidelity or honesty (an ethics of representation) than accuracy, objectivity, or mastery (a logistics of representation). Viewers become distant and powerless in an experience of passivity before the world in its own image, perhaps miming the gesture of the camera's fundamental passivity, and the appeal of the silver screen is that for all it shows, it ultimately *screens us*: at last we are no longer viewing the world in *our* image.

The promise of candor and our consent to passivity in the theater or on the couch makes the ontology of film, over and above the content of a given film, essentially *melodramatic*: in excess of itself, in love with the world, anxious over the loss of its love, willingly powerless over forces beyond its control. From the simplest one-take film to the most formally elaborate narrative or avant-garde epic and from those halfhearted glances on our part to the most sustained and open-minded forms of engagement, moving

images *bear too much of the world* — the small piece of the world that they bear is *kept whole*. But in the face of cinema's constant movement, abundance, surprise, repetition, revelation, and irrevocability, in the presence of the absence of any absolute and the unshakable necessity of contingency as our calling, we viewers are perfectly *at home*, affirming what we might otherwise deny by facing and often relishing that which our daily fears and psychic homeostasis help us to avoid. This sense of being at home *before* the world rather than *inside* it, that is, in a place outside it and looking in, aligns the experience of film with the experience of modern life. Cavell describes this experience intimately in the first-person as one in which the world is felt to be complete without me; however, because this world is defined by contingency, I would add that it too is incomplete. It's almost as if the modern condition of contingency, epitomized or at least materialized by the modern medium of film, transforms the world in its own image from a solid into a gas such that we are no longer perturbed by the question of how its concrete particulars might fit together into a meaningful whole. They do not fit because there is nothing that they would fit into — the world is not a container. And they do not fight because there is nothing that they would rather be — their being as such is all that matters. A scattered sense of simultaneity now stands as a substitute for a fortified sense of unity.

To return to Clark's inquiry into the connection between contingency and modernism in painting, he offers an illuminating analysis of contingency as a means of rediscovering lost pictorial unities through disfiguration and abstraction as opposed to conventional standards of realism:

Contingency was a fate to be suffered, and partly to be taken advantage of, but only in order to conjure back out of it — out of the false regularities and indiscriminate free flow — a new pictorial unity. Out of the flux of visual particles would come the body again (says Cézanne) — naked, in Nature, carrying the fixed weaponry of sex. Out of the shifts and transparencies of virtual space (says Picasso) would come the violin and the mandolin player. Tokens of art and life.¹⁷

While contingency manifests in painting through abstraction and in cinema through a kind of hyperrealism, I wish to suggest that the two aesthetic practices despite their extreme differences in appearance may share the same underlying ambition of aesthetic unification. As distinct sets of tools for both the “retooling” or reconstruction of commonplace figures (painting) and the radical acknowledgment of the world as a whole (cinema) — tools

for the creation of what Clark calls “tokens” (the currency, stock, or grammar of representation as an aesthetic practice) — they come together through the underlying therapeutic function of contingency in aesthetics: the conjuring of new pictorial unities and new standards for what constitutes unity, integrity, or sense in the work of art. And my hunch is that cinematic contingency in particular is what allows the world to appear or *reappear* in its own image and as a whole under seemingly impossible conditions, that is, in the absence of absolutes which had previously determined it and buttressed its unity metaphysically.

I am tempted to proceed here by claiming that every art form, not just painting and cinema, is driven as if subconsciously towards some form of unity, for even disunity is a rethinking of the form or grammar of figuration. This drive is premised on the fact that the pictorial unities of conventional representation cannot be taken for granted and may over time lose their ability to speak to us as viable figures of artistic expression. Even worse, they may provoke indifference, skepticism, or even contempt towards the rhetoric of symmetry and the calcification of the cliché, which for some marks a hopeless cheapening of artistic value. The courageous act of breaking down familiar unities not only “defamiliarizes” them (e.g., Cézanne’s particle nude, Picasso’s virtual musicians, Bacon’s effaced faces, Pollack’s all-over line, etc.) but also resuscitates them, breathes new life into them, inviting us to gaze at a provisional unity still wet from the process by which a fixed unity was reevaluated for or against the times.

Indeed one wonders what kind of pictorial unity can stem from a destabilizing surge of contingency. The magician-like *conjuring* of new pictorial unities from the critical reassessments and backstage experiments of contingency would appear, at least when successfully executed, to conjure away the very processes which for Clark are instrumental for reviving the old tokens of art and life. These traditional figures may come back to us primed for persistence only after passing through the trials of contingency. Think of it as the order of tradition being taken to the court of chance where it is asked to explain itself to a skeptical jury. It is clear from the work of Picasso, Cézanne, and other moderns that traditional artistic subjects and unities have only survived by irrevocably changing, undergoing timely revision and seeking new criteria of justification, demonstrating the essential paradox that modern art’s manner of respecting tradition is either by breaking with it or breaking it down, allowing contingency to reign supreme. Since the

conditions of possibility for new tokens of tradition are inflammatory contingencies, the figures of art can assume as many forms as the imagination permits; but no single figure can emerge as necessary relative to others, perhaps as a consequence of the storm of relativity unleashed by consistency. This is how I understand the value of artworks that retain a sense of the formlessness of their making as a call for new forms to continually arise. Such works are prevented from reaching representational “resting places” lest their aesthetic unity come at the expense of the aesthetic process, whose contingencies have the power to reinvigorate aesthetic experience and forge new traditions with the fuel or spark of experimentation.

Clark’s conception of contingency as a way for painters to reconstitute new pictorial unities from abstract fluxes and flows and dispersals of form is reversed by Cavell’s conception of the ontology of film where the filmmaker is secondary to the machine and abstraction replaced by a certain over-determination or idealization of representation. In the spirit of Clark’s insistence that contingency is specifically an issue of representation over and above mere chance — an issue that seems temporarily resolved when abstraction and its openness to chance give way to the discovery of new modes of representation better equipped to acknowledge our everyday experience — I would like to track the evolution of contingency from something that is worked through in representation (an epistemology of painting) to something that inhabits the very ground of representation (an ontology of film). What if this epic revelation that Cavell terms “the exhibition of the world in itself” could be seen not just as emerging from contingent processes but also as casting the world in all its contingent concreteness? Perhaps this condition of cinematic representation ultimately renders the experience of cinema abstract by placing spectators at a distance from the world in its own image — as if it were perceived as foreign or alien — and also powerless over it as if cinema’s projected rush of events onscreen and the mosaic of anonymous details tugging away at the unity of the image constituted what Clark might call “tokens of chance.” But if most films strike us as lacking the variables of contingency, dictated by literary principles of narrative and falling neatly into codified and contractual genres, my sense is that for film, it’s not a matter of using chance to thwart cliché (a specialty of the avant-garde) but using clichés to cope with the contingencies of *this* world — which, beginning in the twentieth century, saw wave after wave of artistic and political utopias

flooding the social fabric and culminating more often than not in disappointment or disaster. While all modern art is subject to contingency (all modern artists *face* contingency as a possibility), for film, contingency is a *necessity* (all filmmakers are faced with it, whether they realize it or not).¹⁸ Film's share in the contingencies of reality entails that its mode of mediation is contingent upon reality, that the medium derives the better part of its existence from something that cannot permanently guarantee it. Therefore the medium is less a form of mediation than a type of subjection.

Cinema seems to begin provocatively as though it were a kind of global experiment on representation, showing us a world whose fundamental contingency disfigures the meanings we have come to expect from images. This mode of disfiguration — a machine's first glimpse in time and space — is altogether different from Cézanne's color patches or Seurat's pointillist dots operating simultaneously with figurative elements. The machinic gaze of the cinema has been conceptualized and in some cases romanticized by classical film theory as a source of revelation, a sign of defiance against anthropocentrism, or the wild tangent of an art that begins radically in non-art — as if a planet that showed no signs of being able to support life suddenly proved hospitable to us.¹⁹ Bazin goes even further in his claim that the machinic gaze predates cinema and photography and perhaps cannot be traced back to any particular mode of representation, suggesting that the cinematic incarnation of the myth of a total representation or simulacrum introduces yet again in its absolute futility the possibility of definitive pictorial unity in art, awakening one of humanity's deepest desires and oldest myths: the impossible preservation of a perishable world.²⁰

What does the cinematic machine see with its one eye when we decide to see through it, with it, and by its lights, giving shape to our perceptions and the collective orientation of memories and fantasies, which are not as private as we once thought? The movie camera sees everything there is to see from a circumscribed albeit porous point of view — gathering the light by which all things coalesce into points of emphasis and obscurity within a finite horizon of intelligibility — generating concrete images of lush labyrinthine forests of detail and yielding experiences that no human being could encounter outside of a dream. But the machine's condition of unbridled seeing also derives its optical sophistication from absent-mindedness: an innocent, hypothetical, or mythical kind of seeing

which undergoes an act of exposure so pervasive and piercing that for us it would amount to the blinding of consciousness. To see without directly seeing or to see without being able to direct the sense of sight is *to be seen*; and the recording of this “being seen” takes the form, I suggest, of a *revelation*. However, in a disenchanted age this revelation must be technological or perhaps “techno-theological”; it is a revelation that we ordain be carried out *without* us while we sit back and watch our wish for the world-as-such and the resonant structure of things unfold *as planned*. Cavell described this power of cinema as a promise to reveal everything that is revealed to it, nothing less than the world as a whole; and now, in a bold move from ontology to psychology and the intimation of ethics, he diagnoses this brute mechanical operation as a refined human action: “letting our actions go out of our hands.”²¹ The human decision to hand ourselves over to something without hands sums up the machine’s first glimpse. Unlike the self-reliant and sentimental gesture typically known as “letting go,” the machine’s first glimpse as an exemplary automatism of modernism is a displacement or disorientation of human action. Cinema’s invitation to let our actions go out of our hands is an invitation precisely to *do nothing*: conscious unconsciousness, mechanical miracles, the knowledge of acknowledgment — paradoxically passive actions stemming from the will’s decisive moment of wild abandon where it takes a reverse leap of faith into its own wide openness.

But let’s not forget that the machine’s first glimpse in time and space is glimpsed by *us*, we who oppose contingency with insatiable appetites for meaning yet suffer contingency when we become skeptical of or disillusioned with the meta-value of meaning making. It seems to me that cinema’s melodramatic display of contingency to the spectator — so overwhelming when unleashed onscreen at the end of the nineteenth century in the liminal realm between art and amusement where raw recordings of the everyday world could captivate with minimal embellishment — was in turn overwhelmed by a siege of creative appropriation and commercial exploitation. The rawness of this revelation would ultimately require the near-impossible acknowledgment that in the everyday world, nothing is more important or worthwhile than anything else because *everything* is important (albeit only things, the being of things). The machine seems to say, “You can see for yourself just *how* I see: the shepherd and his herd, the flag and the pole on which it is pinned, a briefcase of bills and a pot of earth, a pair of eyes and a pair of hands and those pears on the

window sill, ha! All are equal and free to be, to come and go and come back again, for in my eyes everything makes the same impression or else it does not even make an appearance. You see, when I 'see,' I am thoroughly *touched*, and it's the same for you before you start with your scanning and grasping and occasional fetishizing." Here we have the spirit (though I can't quite justify the attitude) of democracy grounding the ontology of the moving image, a democracy rendered self-evident by the camera's neutrality and discovered "in nature" rather than instituted by culture.


Because the machine's first glimpse is invariably glimpsed by us, this radical decentering of human subjectivity appears to become the source of an almost reflexive *re-centering* through the eagerness of filmmakers, viewers, and critics to structure, domesticate, and in many cases repress the very miracle or disaster of representational embodiment in cinema as if its mechanical nature strikes its human inventors and supporters as some sort of original sin. As a full swing from exposure to expression, the usurping of the machinic gaze by the human gaze through the point-of-view shot is perhaps the most dominant act of appropriation, transforming the necessity of contingency into an instance of rational subjectivity. For example, even in the earliest films, the Lumière brothers filter and arrange their images in order to imply linear narratives. Their filmic record of a toddler learning to walk becomes an exercise in suspense: a rugged sidewalk stands as an obstacle between her and a doll positioned in the foreground seemingly within our reach — yet of course viewers are unable to intervene (the price of cinematic voyeurism). In another example, a brick wall is demolished by a group of workers only for their efforts to be shown in reverse. In a puff of smoke, the wall reconstitutes itself and throws the authentic moment of collapse under an uncanny microscope. The reasoning behind such collaborative resistance against the irrationality of cinematic contingency is historically and psychologically complex; the concept of contingency has always posed a threat to reason itself, which is responsible for setting and sometimes overstepping limits of control. With respect to cinema at least, I believe this resistance amounts to the desire to *control* the world and its images rather than *let* the world happen because a world abandoned to the contingencies of disenchantment by a machine, one that appears to see right through the aura of necessity surrounding human values, which since the undermining of religion have yet to be thoroughly reevaluated, seems to us an *intolerable* world, a pleasure to view and a horror to inhabit. The containment, concealment and sterilization of cinematic contingency's

explicit disenchantment is in a sense a psychological necessity difficult to overcome.

From the very beginning, film's formal invitation to contingency has been largely declined in favor of theatrical and literary legacies — such as the technique of scripting the apparently candid or structuring time and space in narrative terms — which are evident even in the observational actualities of the Lumières. Perhaps the contingent event was hastily checked because it overwhelmed sensation and was recalcitrant to interpretation, as Maxim Gorky implied in his enthusiastic yet skeptical review of the inaugural Lumière films: “The extraordinary impression it [cinema] creates is so unique and complex that I doubt my ability to describe it with all its nuances.”²² While there is no direct reference to cinematic contingency in this early account of 1896, Gorky's intimidated disposition and the strange feelings aroused in him by the cinematic spectacle — particularly in response to the absence of color and sound in the Lumières' representation of everyday life — lead him to an interpretation of the moving image that resonates with our discussion of contingency: “Before you a life is surging, a life deprived of words and shorn of the living spectrum of colours — the grey, the soundless, the bleak and dismal life.”²³ The absence of color and sound aside, Gorky's experience appears to be simultaneously inspired and deflated by the film's teeming excesses of worldly detail which, combined with the fleetingness and exchangeability of those details, drains from cinema the unmistakable marks of artistic conviction: the radiant colors of meaning and purpose which buoy the spirit and guide the ethical life. Gorky's attempts to find meaning in these images seemed upon reflection to *bounce back* as if the screen were as much a barrier as an opening to the sensibility and psychic interior of the spectator.

Should one succeed in finding a way to return the gaze of the machine without oneself becoming machine but rather a “man without content,” this unique point of view will mark the *limit* of the human will beyond which all persistence, change, and repetition run free, clamor, and storm about by dint of powers recalcitrant to attribution and every type of voluntary lording. Film catches contingency in the flesh as intractable plentitude, meaningful meaninglessness, nature's uprooting and culture's alienness to itself, the anarchic drift of Being after the flight of the gods; and in catching it only to be caught by it in turn, this modern medium demonstrates that the human will is our ability to affect our lives and those

with whom we share or refuse to share them — not “life itself”: not the resonant effects of innumerable crisscrossing causes, forces within which I am what I am regardless of my will. The desire to alter what exists is exposed by the “moral center” of cinema as the desire to alter what once existed (the shot) or determine what has yet to come into existence (montage). In film, the presencing of the world to itself — a world where humans figure not only as agents but also as objects — is the luminous threshold that the will cannot cross without faltering, overstepping its bounds, and slipping into its own conditions of projection — on the one hand longing for oneiric identification or on the other hand a nihilism bent on the destruction of established, perhaps worn-out world views. It's almost as if from film's promise of candor comes the breaking of the promise of desire we call fantasy or hope, calling us out as despisers of the real. This is why the harsh “reality check” of cinema will never cease to tempt us into the exploitation of reality for the sake of fantasy by using concrete camera views in the construction of abstract world views, counter-projections based on “need” rather than “truth.”

But if film wants us to let our actions go out of our hands and know, as Cavell would say, by way of acknowledgment, then perhaps it is only natural for those committed to thinking their experience of film to react against this restraint, this reticence, and grab hold of the new aesthetic transport in a spirit of discovery and conquest. If one were to regard film solely as an artistic form of expression, then realism would become a style like any other and contingency a technique among many. However, for those who take seriously the logic of cinema's “hand-tying” injunction, the alternative to an aesthetic or political rationalization of contingency is to strive headlong for a certain ideal of knowledge or “non-knowledge”: the acknowledgment that our world is contingent despite all our efforts to make it our own. 

Notes

- 1 See James Elkins, *On the Strange Place of Religion in Contemporary Art* (New York and London: Routledge, 2004), 5-20.
- 2 For this double-reference and resonant dialogue between philosophy and poetry on the question of post-metaphysical godlessness, I refer the reader to Heidegger's essay on Hölderlin and Rilke. Martin Heidegger, "What Are Poets For?" in *Poetry, Language, Thought*, trans. Albert Hofstadter (New York: Perennial Classics, 2001), 89-139.
- 3 See Giorgio Agamben, *The Man Without Content*, trans. Georgia Albert (Stanford: Stanford University Press, 1999).
- 4 Ibid., 5.
- 5 This is why the signature can end up being, strangely enough, the work's most valuable pictorial quality, referencing the author's survival at the hands of his achievement. Hence the remarkable range in personality from modest to grandiose to highly eccentric signatures.
- 6 We may be acquainted with these tangled ideas of freedom from Jean Paul Sartre's existential account of our human condition, elaborated at great length in *Being and Nothingness*, in which humans are condemned to a freedom whose discovery entails maximum responsibility and ironically very little freedom. See Sartre, *Being and Nothingness*, trans. Hazel E. Barnes (New York: Washington Square Press, 1992), 559-711.
- 7 Agamben, *The Man Without Content*, 68-93.
- 8 Friedrich Nietzsche, *The Will to Power*, trans. Walter Kaufmann and R.J. Hollingdale, ed. Walter Kaufmann (New York: Vintage Books, 1968), 435.
- 9 The definition of contingency in this context has changed very little since Aristotle grappled with it over 2000 years ago. What's more, he is also the first to broach the paradoxical nature of contingency in terms which remarkably anticipate the Nietzschean critique of metaphysics: "It can occur, that once it exists, given that it is not necessary, there will be no potential in it not to be." *Aristotle in Twenty-Three Volumes*, vol. 1, trans. Hugh Tredennick (Cambridge: Harvard University Press, 1983), 32.
- 10 Fernando Pessoa, *The Book of Disquiet*, ed. and trans. Richard Zenith (London: Penguin, 2001), 12.
- 11 T.J. Clark, *Farewell to an Idea: Episodes from a History of Modernism* (New Haven: Yale University Press, 2001), 11.
- 12 Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge: Harvard University Press, 2002), 22.
- 13 Andre Bazin, *What is Cinema?*, vol. 1, ed. and trans. Hugh Gray (Berkeley: University of California Press, 1967), 21.
- 14 Peter Geimer, "Notes from the Field: Contingency," *The Art Bulletin* 94, no. 3 (2012): 352. Emphasis original.
- 15 Stanley Cavell, *The World Viewed* (Cambridge: Harvard University Press, 1979), 119.
- 16 Ibid., 80-101.
- 17 Clark, *Farewell to an Idea*, 11.

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- 18 Mark Ledbury's account of the paintings of Jacques-Louis David also reaches for the phrase "necessary contingency." I believe his reluctant and self-conscious tone, placing the phrase in scare quotes and tacking an apology to professional philosophy, is due to the fact that necessary contingency is actually something that conditions creation regardless of the creator, making its application to the work of an ambitious painter quite incredible. Mark Ledbury, "Notes from the Field: Contingency," 355.
- 19 See Jean Epstein, "Photogénie and the Imponderable," in *French Film Theory and Criticism: A History/Anthology 1907-1939*, vol. 2: 1929-1939, ed. Richard Abel (Princeton: Princeton University Press, 1988), 188-192, and Siegfried Kracauer, *Theory of Film* (Princeton: Princeton University Press, 1997).
- 20 The cinematic apparatus would seem to make this preservation at least technically possible if it were not for the fact that its images degrade over time. Digital images don't degrade, you say? They are immaterial? Their mode of preservation is an exception to perishability? Let's wait and see. See Bazin, "The Myth of Total Cinema," in *What Is Cinema?*, 17-22.
- 21 Cavell, *The World Viewed*, 159.
- 22 Maxim Gorky, "On A Visit to the Kingdom of Shadows," trans. Leda Swan, quoted in Jay Leyda, *Kino: A History of the Russian and Soviet Film* (London: George Allen and Unwin, 1960), 407.
- 23 Ibid.

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Aesthetic

Inquiries

Bass Pro Shops,
Environmental
Thought, and the
Anima(l)tronic
Dead

Christina M. Colvin

ABSTRACT

This essay collides with the aesthetic of wilderness cultivated by the North American retail chain Bass Pro Shops. Through elaborate displays and décor that render each store part rustic lodge, aquarium, amusement park, natural history museum, and hunting simulator, the stores represent the natural world and its inhabitants as abundant resources for human consumption. The stores' aesthetic is primarily wrought through the arrangement of taxidermied animals. These animals include both traditional wildlife mounts posed in lifelike attitudes as well as animatronic taxidermy that becomes “alive” in response to players' achievements in a shooting range game. By exploring the stores' traditional and animatronic taxidermy as well as its conflation of animal and machine, this essay explores the conception of environmental conservation and animal ontology upheld by Bass Pro Shops.

KEYWORDS

animals
environmental philosophy
visual culture
taxidermy
animatronics





Figure 1. A section of interior of a Bass Pro Shops Outdoor World store with taxidermy and a live-animal aquarium (C. Colvin)

Bass Pro Shops Outdoor World stores immerse visitors in manmade wildernesses. In addition to hunting, fishing, and camping merchandise, the stores display elaborate décor representing North American backcountry. Murals of rivers and mountains, stone fireplaces, ubiquitous foliage, carved wooden signage as well as canoes and prop planes suspended from high ceilings bespeak a wish for outdoor exploration.

Natural objects further provide an aura of authenticity. Across the sales floor, waterfalls and streams run and ripple, trees loom, and turtles and freshwater fish swim in thousand-gallon aquariums. Central to their construction of an ample wilderness are Bass Pro stores' taxidermied animals. Full-body mounts of grazing pronghorn and vigilant foxes top shelves of flannel shirts and camouflage-patterned throw blankets. In the tradition of hunting trophies, dozens of white-tailed deer heads spiral the circumference of a column. Additionally striking are the taxidermied animals arranged in scenes of interspecies interaction. Spanning the edge of one store's second story, white wolves pursue a trio of elk. One of the elk loses his footing to hang in an arrested tumble above the faces of visitors.

This essay explores the relationship between taxidermy and imagination, hunting and environmental thought. Taxidermy designates the practice of preparing and mounting skins for art, preservation, education, and exhibition. For Rachel Poliquin, "[t]axidermy exists because of life's inevitable trudge toward dissolution. Taxidermy wants to stop time. To keep life. To cherish what is no longer as if it were immortally whole."¹ The desire to maintain environmental vitality seems especially urgent during the present era of natural resource depletion, mass species extinction, and global climate change. For Bass Pro Shops, however, taxidermy's uncanny ability to depict "life" after death serves the stores' central aesthetic goal: to portray a consumable natural world. Integrating outdoor scenes and retail, taxidermy and firearms, Bass Pro stores render merchandise and wilderness as available for human use. Through an encounter with the stores' aesthetic choices, I ask: what conception of animal ontology does Bass Pro Shops' taxidermy endorse? And what manner of animal being does the company's environmental philosophy permit?

Bass Pro Shops invests in both keeping and taking life. The founder of Bass Pro Shops, Johnny Morris, has avowed an interest in making his company a "corporate conservation leader." For Morris, the "future of our industry, the sports we serve, and the sports we personally enjoy are absolutely more dependent upon our conservation efforts or how we manage our natural resources than anything else."² The connection between hunting and conservation enjoys a long history in the U.S. and Canada. After sportsman and President Theodore Roosevelt founded the first North American conservation organization in 1887, hunter-conservationists developed the North American Model of Wildlife Conservation, principles designed to guide

wildlife management decisions. In addition to the Model's first tenet — wildlife is public property — the Model proposes that all citizens should have freedom to hunt and fish.³ These tenets oppose preservationist views of the environment that suggest the natural world and its inhabitants should be protected from use.⁴ The philosophy of conservation espoused by the North American Model continues to enjoy support in hunter-conservationist societies today. Some state and federal wildlife agencies, including the National Wildlife Refuge System, advance an understanding of wildlife that echoes the Model: the System's website calls animals hunted in healthy habitats "surpluses that are a renewable resource."⁵ Criticisms of the North American Model of Wildlife Conservation certainly exist and are worth consideration.⁶ For the purposes of this essay, however, I want to consider how Bass Pro Shops stores' taxidermied animals express the conservation philosophy that understands wild creatures as consumable, renewable resources.

Taxidermy reflects a number of human attitudes toward animals, including the desire to endow singular animals with emblematic status. The taxidermy that Bass Pro stores display may reveal what Kenneth Shapiro calls an animal's "deindividuation" or the tendency to "refuse to live toward an animal as an individual."⁷ As hunting trophies or natural history museum specimens, single animals are positioned as representatives of their species. Using deer as an example, Shapiro suggests that, for many, the term "the deer" "refers to a species as a reified entity rather than as an aggregate of individual deer," making a buck killed by a hunter not "a concretely present individual, for any one deer is largely lived toward as part of that reification, 'the deer.'"⁸ Even though it can depict animals as stand-ins for a reified abstraction — a species — taxidermy can also encourage contemplation of animals as concrete, ecological, and singular. Glenn Parsons suggests that the aesthetic value of animals arises from their "functional beauty," that an animal is beautiful "when its form appears suited to ... its function."⁹ Parsons continues, "Take the cheetah, a creature whose body ... appears 'built for speed.' Virtually every feature or part of the cheetah is manifestly geared to that end: its long legs bespeak a formidable stride, its non-retractable claws reveal its gripping and steering ability, its narrow body and small head bespeak an aerodynamic movement."¹⁰ As aesthetic objects, taxidermied animals invite consideration of the relationship between their physical features and how an environment shaped those features. The absence of motion central to taxidermic representation uniquely encourages

contemplation of how an animal moved precisely because taxidermy implies but cannot capture such movements. Further, a dead animal re-presented provides an opportunity to imagine that singular animal's life — her history, her plans, and her preferences — those incomprehensible experiences that helped make her a distinctive creature. While this individuating approach does not negate that taxidermy requires an animal's death, it does offer an alternative to encountering taxidermy as simply a demonstration of human dominance: the unknowable animal histories to which taxidermy can gesture confront viewers with a limit to human knowledge. As Poliquin suggests, taxidermy has "imaginative potency and potential," features that should not be overlooked lest animals be deindividuated without critical rejoinder.¹¹

While some natural resources can be renewed, particular organisms certainly cannot be. Therefore, Bass Pro Shops' conservation philosophy — animals are renewable resources — demands the deindividuation of animals and, by extension, the generalization of their behavior. Such a process, for Shapiro, "invests the aggregate of ... non-individuals with a kind of unified being that allows members of the species to be killed as if they were so much grass being mowed."¹² Bass Pro Shops represents animals as if they possess such a unified being, a fact made clear when we consider the stores' animatronic taxidermy. Animatronic taxidermy combines two typically separate technologies of representation. Jane Desmond distinguishes traditional taxidermy from animatronics: "In taxidermy, humans kill animals and then manipulate their dead bodies to look alive. In animatronics, humans build fake animal bodies, get inside them, and, through their own bodily motions, 'bring them to life.'"¹³ For Desmond, traditional taxidermy differs from animatronic animals due to the former's use of actual skins to represent dead animals and the latter's use of imposed motion in entirely manmade animal forms. Bass Pro Shops' combination of these two mediums allows the company to represent not only "lifelike" animal bodies through the use of the skins of dead animals, but also animal behaviors through an animatronic simulation of their movements. Whereas traditional taxidermy invites viewers to contemplate that which humans cannot know, moving taxidermy represents animal behaviors and actions as if they were fully known and representable.

Through its imposition of motion, the animatronic taxidermy offered by Bass Pro stores carries the company's philosophy of animals as renewable

resources to a logical extreme. For one dollar per play, visitors can select one of a dozen imitation rifles that border a replica of a woodsy outpost. After paying, a series of bulls-eye targets lights up throughout the outpost's interior. A shootable object corresponds to each target: the rear bumper of an old, rusted automobile, a lopsided piece of steel awning, a whisky barrel. When a player hits one of the targets, the game rewards her with a sound or animation: the car's tail lights flash, or the whisky barrel resounds with a




Figure 2. Shooting range game with animatronic taxidermy (C. Colvin)

metal clank. Several targets, however, correspond to animatronic, taxidermied animals. These targets also respond with a sound or animation in reward for a successful “shot.” When a player hits the taxidermied coyote, his head, tilted upward in a howl, swivels from side to side. When a player hits a tree stump with a woodchuck suspended above it, the woodchuck spins rapidly on a vertical axis. Hit the bobcat, and the noise of a cat’s cry plays as if the bobcat is in pain. Hit the skunk, and his tail will lift and spray a fine mist in the player’s general direction.

All of the stores’ animatronic, taxidermied animals, when struck with a player’s “bullet,” exhibit reactions that imitate or hyperbolize behaviors often associated with the represented species. By portraying animals that repeat the same reactions again and again, the stores suggest that animals do not possess capacities for flexible behavior. Communication, threat response, and capacities to suffer are represented as mechanical, predictable, even humorous reactions. The singular coyote, skunk, woodchuck, and bobcat whose skin is displayed become collections of generalized, knowable habits. Moreover, within the context of the shooting range game, the animatronic taxidermy asserts that animals exist to be killed: they “activate” or become alive only when a player has successfully shot them. These animals are, as Donna Haraway would likely agree, ontologically available for killing.¹⁴

As Bass Pro Shops’ animatronic taxidermy shows, an understanding of animals only as natural resources — as *products* of natural systems — discourages recognition of their role as *producers*: as architects and engineers of diverse, lived environments. Repudiating longstanding theories that equate living beings to machines, biologist Jakob von Uexküll declared in 1934 that “[w]hoever wants to hold on to the conviction that all living things are only machines should abandon all hope of glimpsing their environments.”¹⁵ For Uexküll, animals cannot be thought independently of their unique perceptual worlds, a conception of animal being that calls attention to animals’ involvement in complex systems of interdependency and flux. Despite Bass Pro Shops’ dedication to environmental conservation, their animatronic, taxidermied animals — preserved from decay, predictable in behavior, and available for killing — embody a fantasy of continuously renewed, undifferentiated, consumable creatures untethered to dynamic ecological forces and overlapping lived environments. The stores’ reduction

of animals' concrete materiality and ecological importance undermines any realism in its wilderness aesthetic.

As what Friedrich-Karl Holtmeier calls "ecological agents," animals shape environments, and environments shape animals. Ecological thinking therefore necessitates a consideration of animal agency: of the perceptible and imperceptible, representable and unrepresentable acts of animals. As evinced by Holtmeier's book, *Animals' Influence on the Landscape and Ecological Importance*, animals act as builders, pollinators, transporters, parasites, producers, consumers, and more. Holtmeier suggests that "[t]he influence of some species on their habitats is hardly perceivable, while the effects of others may even be spectacular."¹⁶ Reducing animal being to an invariable set of traits cannot capture the fullness of animals' contributions to ecological systems, nor does such a reduction account for the "hardly perceivable" acts of animals that flicker on the edge of human awareness.¹⁷ The limits of human experience and knowledge prevent full comprehension of the extent of animals' contributions to their (and our) environments. Rather than claim nonhuman acts to be few, might we turn our imaginations toward barely-perceptible wildernesses and landscapes, animal worlds we live among yet cannot fully understand? 

Notes

- 1 Rachel Poliquin, *The Breathless Zoo: Taxidermy and the Cultures of Longing* (University Park: Penn State University Press, 2012), 6.
- 2 "How an Outdoor Store Became a Conservation Leader," Accessed July 12, 2015, <http://media.basspro.com/pdf/Conservation.pdf>.
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- 4 John Muir is perhaps the best-known advocate of preservationism. For a nuanced distinction between conservation and preservation, see Bryan G. Norton, "Conservation and Preservation: A Conceptual Rehabilitation," *Environmental Ethics* 8, no. 3 (Fall 1986): 195–220.
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Can We Wrong a Work of Art?

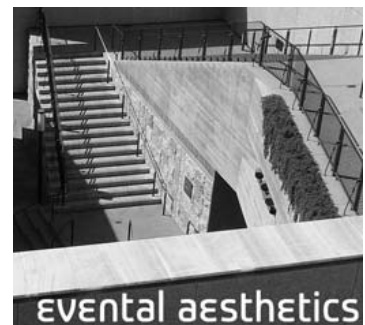
Eoin O'Connell

ABSTRACT

If we can wrong a work of art, then it has moral status. This paper considers two examples of putative wrongings of works of art, but in both cases, the claim that the work of art itself is wronged cannot be vindicated. The sense that a work of art has been wronged arises when that work has a special meaning for us or has a special standing in a cultural context. There is nothing intrinsic to works of art that can confer moral status upon them, and so they are not moral patients.

KEYWORDS

moral status
Spem in Alium
Fifty Shades of Grey
Woody Guthrie
“This Land is Your Land”



Introduction

Thomas Tallis' motet, *Spem in Alium*, is perhaps less well known than it ought to be.¹ Wishing to introduce it to an acquaintance, I searched on YouTube, and up it popped along with black and white images of stylized sex, the kind of soft porn that is as ubiquitous as once was wallpaper. On further investigation it turned out that the images were from the movie version of E.L. James' popular erotic novel *Fifty Shades of Grey*. I was not dismayed about all of this from prudishness but because it seemed wrong that this wonderful piece of music should be degraded through an association with what I consider aesthetic trash. And though I know that this kind of reaction and the attitude upon which it is based are often considered a kind of stuffy aesthetic elitism, I nevertheless decided to more carefully inquire whether the thought or feeling that this is wrongful can be vindicated. And this led me to ask whether we can wrong a work of art.

The most obvious candidate for an action-type that wrongs a work of art is the intentional destruction or defacement of paintings, sculptures, or similar objects of material culture. However, prompted by my encounter with the *Fifty Shades of Grey* soundtrack, I am interested in the possibility that the mere use of an artwork — one that does not inflict any material damage — might constitute a wrongful act. Moreover, I am interested in the possibility that the use of the artwork might have an aesthetic justification — for example, the inclusion of *Spem in Alium* in *Fifty Shades of Grey* might actually improve the movie — and yet we would still consider it a wrongdoing. To explore this question I consider two cases: the use of *Spem in Alium* in *Fifty Shades of Grey* and the use of Woody Guthrie's "This Land is Your Land" in an advertisement for subprime mortgages. The latter is an imaginary example, but it is less tainted with the suggestion of aesthetic elitism. I present these cases as plausible *prima facie* examples of wrongful uses of works of art. They are actions the contemplation of which I could imagine arousing some disapprobation; that is to say, a negative reaction or judgment.² Nevertheless, I am unable to establish the conclusion that artworks can be wronged. I argue briefly at the end of the paper that the results established here can be generalized to include the defacement and destruction of paintings and sculpture.

Wronging and moral status

An object can be wronged if and only if it has moral status. So to ask whether an artwork can be wronged is to ask whether it has moral status. But we must first ask whether artworks are the kind of thing that can have moral status since there will be an initial skepticism about that very possibility.

If an object has moral status, then it is possible to do something that can be considered a moral wrong to the object itself. The qualification that the moral wrong is to the object *itself* is meant to exclude cases of wrongdoing in which the wrong is done to someone who owns or cares about the object directly affected by the action. If we damage someone's property—confining ourselves here to non-sentient property, such as land, buildings, furniture, etc., and not livestock or other sentient property—then we wrong the property's owner, not the property itself. Property owners are moral patients, but (non-sentient) property is not usually so considered.³ Property that is affected by a damaging action can be said to be a patient of that action, but nonetheless it would be a non-moral patient. Property can be damaged but not wronged. We reserve the notions of moral status and moral patient for a subset of objects. Our question is whether artworks should be included in this set.

The obvious reason for being skeptical about the possibility of wronging a work of art is that works of art cannot feel or have any kind of experience. For the purposes of this discussion, we can distinguish “damage” from “harm” as follows: non-sentient patients can be damaged whereas only subjects of some kind of experience can be harmed. The objection under consideration is based on the idea that you cannot wrong something unless you can harm it, and you can only harm things that are subjects of an experience. Since artworks cannot be subjects of an experience, artworks cannot be harmed; and therefore they cannot be wronged.

Nevertheless, it is possible to imagine cases in which an action causes no harm but still seems wrong. For example, imagine there is a group of people who are suffering from injustice, and there is nothing you can do to alleviate their situation. (Assume for the sake of the example that there really is nothing *you* can do, such as donating money or organizing on behalf of the victims.) You can pay attention to what is happening to them by

watching harrowing news reports, but doing so is upsetting and makes you feel unhappy. Therefore you are strongly tempted to avoid the news and focus instead on the many pleasant aspects of your own life. And yet you feel obligated to “bear witness” to their plight. If you avoided taking an interest and were later to meet one of the victims, you would feel guilty. And because you have this sense of obligation, you believe that to ignore what is going on is like turning your back on them and therefore wrongful.

Now, one might argue that there is no real obligation here and the sense of obligation is mistaken. Nevertheless, this is a plausible account of a moral experience, which shows that we can make sense of the possibility of non-harmful wrongs. Other possible candidates for non-harmful wrongs are betting on and thereby attempting to profit from the occurrence of a disaster (where your betting is not causally connected to the occurrence of the disaster or any future disasters) and disobeying or insulting God (where we assume both that God exists and cannot be harmed).

We can also generate an abstract characterization of non-harmful wrongs. The principal component is the idea of an object that has a status in virtue of which we are under an obligation concerning our orientation towards the object. To say that an object has moral status in this sense means not only that one should refrain from harming it but also that one should adopt the right attitude towards it. On this characterization, one can adopt a wrongful orientation towards certain objects even if one does not do something harmful or damaging to them. So our question is whether a work of art can have this kind of standing.

If anything has moral status, then persons have moral status. In support of the claim that sentient nonpersons have moral status, we can appeal to their capacity to suffer. The fact that there are laws against cruelty to nonhuman animals shows that this appeal can gain support. So it is not unusual to say that all sentient beings have moral status. Extending moral status beyond this to living things in general is more controversial, but we can at least appeal to the idea of life. It could be argued that the possession of life endows a certain degree of value. And the fact that life can so easily be snuffed out — that living things are fragile — might be grounds for moral concern. We usually value our own lives, and it does not take a great leap of the imagination to feel sympathy for other living things even quite far down the phylogenetic tree. So there is at least some basis for arguing that we can extend moral status to living things in general. But wherever we draw the

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line, moral status is usually predicated of living things or to a subset of living things. So it might seem that organic life is at least a necessary condition for moral status.

However, the claim that we should honor the dead seems to accord moral status to deceased persons — or perhaps to their memories. How do we account for this extension of moral status beyond the realm of the living? One might point to the fact that deceased persons were once alive to explain why we should honor them. But we do not think that we should honor dead, nonhuman, sentient beings; so having once been alive is insufficient. One could argue that, when living, deceased persons could think about and express wishes for the future. So when we respect their wishes, we are respecting the wishes made by living persons. To a certain extent we already do this through wills. But it seems easy to deflate this observation by saying that wills are nothing more than legal entities we want to include in the social contract: wills do not arise from nor are they justified by a belief that the deceased have moral status.⁴ Moreover, honoring the dead is not confined to respecting their wishes. We sometimes honor the dead without knowing what their wishes are or even if they had any.

One might make an appeal to our protensive capacity and argue that we don't just live in the present: we project ourselves into the future. And just as we do this, so we also in a sense live on after death. But such a claim will not bear much scrutiny. Our protensive capacity is mostly concerned with a future in which we expect to still exist. Beyond that, we are simply talking about the wishes of the deceased. We are not obligated to respect or honor all wishes expressed by deceased persons. Sometimes we find it important to do so; at other times we do not. The most obvious explanation is that we respect and honor the wishes of the deceased when the memory of the deceased is important to us. But it is nevertheless significant that we can feel as though we are bound by an obligation to the memory of a deceased person and that certain courses of action would constitute a moral failure in relation to that memory. Plausibly this can be seen as according moral status to the memory of a person now deceased rather than to the deceased person. But to do so is to accord moral status to a mental representation.

There is of course an obvious difference between memories of deceased persons and works of art. The memory is tied to a once-living being whereas works of art are non-living, rather than dead, things. So our investigation here concerns the odd possibility that a non-living object could

have moral status. But despite the fact that this is an odd possibility, we do seem to recognize instances in which non-living things are patients of wrongful actions: the intentional defacement or destruction of paintings and other objects of material culture; the intentional destruction of naturally occurring beautiful or awe-inspiring objects; the sanitization and bowdlerization of texts; the misrepresentation of philosophical doctrines so that they lend support to heinous views they would in fact condemn (as is alleged of Elizabeth Nietzsche's use of her brother's writings); the perversion of ideas (as is sometimes said of Marxism and of the moral content of Islam and Christianity); and the profaning of sacred spaces and sacred objects.

These are all "bad" actions in the sense that they are negatively valued. But *prima facie* they also seem morally bad; that is, wrong. They seem like actions we should not do for moral reasons. But there is a danger of being misled by mere figures of speech or descriptions of actions. If we hear of someone defacing a painting or destroying a statue by Michelangelo, we are inclined to issue a moral condemnation. But to deface a painting or to destroy a sculpture is not necessarily immoral if no one cares about the work and it has no value of any kind. We do not establish that an action is immoral by simply subsuming it under an action-type such as "defacing." Rather, we must consider the details of the action itself and argue from those details to the conclusion that it is immoral. The next section of the paper explores the two examples proposed initially: the use of Woody Guthrie's "This Land is Your Land" to sell subprime mortgages and the inclusion of *Spem in Alium* in the soundtrack of *Fifty Shades of Grey*.

The examples

Both examples concern the superimposition of musical works over images. When a piece of music is paired with images, it can quite easily become associated with those images. For example, the music may become associated with the marketing of some product. We know an advertising campaign was successful when the mere mention of the product causes us to recall the featured music or *vice versa*. But things can become associated for all kinds of fortuitous psychological reasons. Here we are specifically dealing with the creation of a new whole — the sound-image — of which the music

is a part. The sound-image is its own aesthetic object with its own meaning. Discussing what he calls the “audio-visual contract,” Michel Chion shows that in filmmaking, sound is not just mere decoration for images. The audio component changes — in Chion’s language “adds value to” — the meaning of the images. As Chion points out, this effect can be easily tested by simply muting the sound when watching, say, a horror movie.⁵ The music is not merely associated with the sound-image but partly constitutive of this composite aesthetic object. It would seem too strong to claim that any creation of a sound-image using a “great” piece of music is wrong simply because the music no longer stands alone. Some pairings can be “fitting” both aesthetically and morally. Some may be aesthetically bad but morally innocuous. So when would such a pairing be wrongful?

Some preliminary points are in order before I move to the examples. First, I assume that these actions could be wrongful only if the piece of music in question is important or special. I have already begun to talk of “great” pieces of music; and since it sometimes seems natural to say of certain artworks that they are “great,” I will refer to this quality as the work’s “greatness.” The precise sense in which a work of art is important or special such that it would qualify as a great work is discussed below.

Second, a wrongful action does not wrong a piece of music if the moral patient is really the composer. The possibility that a composer might be turning in her grave at the use of her music does not constitute a wrong done to the music itself. In fact, it is possible for a composer to wrong her own piece of music or to approve of actions directed at the piece of music that nevertheless constitute a wrong to the piece of music.

Third, aesthetic failure is not a moral wrong. That a great piece of music is the patient of an aesthetically bad decision is neither necessary nor sufficient to constitute wrongness in the sense intended. As I stated initially, I am interested in the possibility that a great piece of music could be used in a way that achieves an aesthetic payoff, and yet we would nevertheless say that it was wrong to use the work that way.

Finally, the wrongness I have in mind is not that the creator of the sound-image has bought her aesthetic payoff cheaply although she may have done so. As in the following examples, simply superimposing prefabricated music onto imagery may constitute the failure of the artists as creators, but it is not a moral wrongdoing.

The Guthrie example

Using “This Land is Your Land” in an advertisement for subprime mortgages might be characterized as “crass”: ignorant, lacking in sensitivity and refinement. But if the resulting advertisement is successful, then it could be said that this choice of song was clever and sensitive to the forms and mechanisms of effective advertising. I would still be tempted to call this a travesty and could imagine myself grimacing in mild revulsion at such an advertisement. But is there really any wrongdoing here? If there is, then is the song itself the moral patient?

Here we must distinguish between two different issues. The first concerns using or acting towards a work of art such that the action is properly considered morally wrong without any reference to property considerations. I will refer to this as the “misuse” of works of art. The second is a misuse of the work of art when the work of art itself is the moral patient. I will refer to this as “wronging” a work of art. The distinction turns on the question of moral patience. To talk of wronging a work of art is to maintain that a work of art is the moral patient of a wrongful act whereas to talk of misusing a work of art does not imply that a work of art is the moral patient. Indeed, we have not established that all wrongful acts require a moral patient. I will begin by assuming that the use of “This Land is Your Land” to sell subprime mortgages is a misuse in order to consider whether the song itself is being wronged.

Woody Guthrie’s moral, social, and political outlook — his championing of the victims of greedy capitalism — informs the meaning and significance of this song; so one could argue that it is Woody Guthrie’s memory and legacy and not the song itself that are wronged. As previously noted, we seem to think of the memories of deceased persons as if they are moral patients. But consider a possible world that is identical to ours in every respect except that the composer of “This Land is Your Land” is unknown. Here the song would have the same meaning and place in our culture, but we would not know who wrote it. If Guthrie’s memory and legacy are the only moral patients, then the advertisement would involve a misuse of “This Land is Your Land” in the actual world — but not in this possible world. And yet we could imagine the same disapprobation in both worlds. An intuition about this counterfactual is perhaps not very strong

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evidence one way or the other; but if one wanted to explain one's disgust at this use of the song to someone who knows nothing of Guthrie, it would be sufficient to explain what the song means and represents. That is, we could explain our disgust without reference to Guthrie although we might be able to amplify our reasons if we also referred to what Guthrie stood for.

Another reason not to think that Guthrie's memory and legacy are the only moral patients comes into view when we consider Elizabeth Nietzsche's misuse of her brother's ideas. The allegation is not just that Elizabeth misused her brother's writings, but also that she misused his *ideas*—such as his ideas concerning the superman—to promote other ideas including Nazism, a noxious cause which in essence contradicts the spirit of Nietzsche's philosophy. One way we can vindicate the claim that it is the ideas themselves that are the moral patients and not Nietzsche's memory and legacy is with reference to the genetic fallacy. This fallacy is based on the claim that there is a distinction between an idea and its source. Specifically, we do not evaluate ideas based simply on their source. Ideas, as it were, float free of the individual mind and have their own standing. So it is possible to argue that it is not the source of the ideas that is wronged but the ideas themselves.

Now, one might object and say that the genetic fallacy concerns instances in which one avoids an argument or rejects a conclusion. The strength of an inference from a premise to a conclusion or the truth of a conclusion are indeed independent of the person who asserts them. But when we are talking about Guthrie's and Nietzsche's "ideas," we are talking about something different. Nietzsche's writings contain propositions and inferences, to be sure; but the totality of his work is more than just a collection of propositions and inferences: it amounts to an intellectual edifice that is uniquely Nietzsche. We are able to refer to philosophical positions, methodologies, attitudes, and so on as "Nietzschean." Books can be written that spell out the "philosophy of Nietzsche." And thus, the objection runs; its misuse should be understood as just another form of dishonoring his memory and legacy. Furthermore, to talk of Nietzsche's "ideas" or "philosophy" as floating free of his mind and having some standing of their own is to posit a sort of Platonic object. That is bad enough, but it is even worse to claim that this object has moral status.

There is, however, a response to this objection. When we talk about the memory and legacy of people like Nietzsche and Woody Guthrie, we

might talk of what Guthrie and Nietzsche “stood for.” Presumably this phrase does not refer to a simple proposition or inference; rather, it refers to a set of beliefs, desires, and attitudes that can be characterized as “moral” in some sense of the word. This set of beliefs, desires, and attitudes will typically not be a random collection. Rather, it will have some degree of coherence; otherwise it would be of little interest. It will be, to borrow a phrase from Kant, a synthetic unity. Kant uses the term “idea” (*Idee*) to refer to grand syntheses of metaphysical and moral content, and this use of the term fits ordinary English locutions; for we can talk about the ideas for which Nietzsche and Guthrie stood.⁶ Now, we can still distinguish between the idea for which someone stands and the person who stands for the idea. After all, more than one person can stand for the same idea. When a person stands for something, we can identify them with the idea — because to stand for something means to form a particularly close association with the idea — but we cannot identify the idea with the individual person. The distinction also becomes apparent when someone betrays the idea for which she once stood.

“This Land is Your Land” and Nietzsche’s writings are important, at least in part, because they articulate or express the ideas for which Guthrie and Nietzsche stood. But even if it is wrong to use them to give support to heinous ideas and actions that contradict them in spirit and which they would condemn, we have at best cleared some ground for the claim that we can wrong an idea, not a work of art. To get us to the point of being able to say that we would wrong Guthrie’s song itself by using it to sell subprime mortgages, we need to establish that the song is more than just a vehicle for expressing an idea.

This becomes obvious when we reflect on the difference between saying what the song means and actually listening to it. Often it seems futile to speak about the qualitative experience of listening to music. Music is in the listening. Its value or import can only be known when we realize it in some fashion, such as performing it on an instrument, listening to a recording, or imagining it in our mind.⁷ We cannot describe in any satisfying way why a piece of music is great to someone unfamiliar with that piece of music. But when we know a piece of music, we can reflect upon some of the properties that seem to contribute to its special value. In the case of “This Land is Your Land,” the lyrical content and musical form fit together because there are historical, sociological, and political-economic relationships

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between folk music and solidarity for the dispossessed.⁸ We can point out how the lyrics and the simple, sing-along folk style form a satisfying artistic unit. There is, as it were, a unity of spiritual content and artistic form. We could also talk about how this song appeared at an important moment in the history of the struggle against the worst forms of predatory capitalism. These are just some of the reasons we can offer to explain why the song has a value that attaches to it alone. But no enumeration of such properties will necessitate the judgment that the song is valuable or important. A necessary condition for arriving at this conclusion is to actually listen to the song.⁹

Nevertheless, one could still push the objection that the song is valuable only because it crystallizes the idea for which Guthrie stood — that the idea is the source of the value. But even assuming that this is true, it does not mean that we cannot think the song itself can be wronged. It is not unusual to argue that certain objects are valuable and have moral status because they instantiate a more or less abstract property, such as humanity or rationality. Certain properties are often taken to be moral-status-conferring. If a particular object is valuable because it instantiates the property of humanity or rationality, it nevertheless has moral status itself. Similarly, even if “This Land is Your Land” has value only because it crystallizes the idea for which Guthrie stood, it can still have moral status on that basis.

There is another reason for arguing that “This Land is Your Land” is more than just a vehicle for an idea. One can create an artwork to express an idea, but obviously the artwork can be bad art. And if an artwork expresses a noxious idea, then its aesthetic value is diminished. Many people have found themselves alienated by the noxious lyrics of otherwise good tunes. But if an artwork that expresses an idea does not suffer from either of these defects, then it acts as a way of disclosing to us the specifically positive moral quality of the idea. In so doing, the artwork is distinct from the idea it expresses; moreover, it has its own distinct value insofar as it discloses the specifically positive moral quality of the idea. This observation does not beg questions concerning whether these judgments concerning the moral qualities of ideas are objective or subjective: the claim here is just that the relationship between a work of art that expresses an idea and the idea it expresses is not a one-way street.

But there is another implication here that runs counter to the general thrust of the argument we have been exploring: moral status, as remarked previously, has realist commitments. If a thing is to have moral status, then there must be an argument that the value we attribute to that thing is indeed objective. So we can only claim that “This Land is Your Land” has a standing in virtue of which it could be considered a moral patient if we first argue that it expresses an objectively good idea. If the idea is noxious, then the work is aesthetically flawed. If neither is the case and there is no objective valuation here, then the example fails because any standing that “This Land is Your Land” has is closely associated with the idea it expresses. It is not impossible to argue that the idea “This Land is Your Land” expresses is objectively good, but doing so involves a very circuitous path to establishing the different general claim that a work of art can have moral status.

This complication is absent from the next example, but there are a few points worth making before moving on. A thing can be important for more than one reason. We can argue that “This Land is Your Land” is important in itself and because it expresses the idea for which Guthrie stood. So if it is wrong to use “This Land is Your Land” to sell subprime mortgages, then we can distinguish three different possible moral patients: Guthrie’s memory, the idea for which Guthrie stood, and the song itself.¹⁰ Since there can be multiple patients in an action, all three could be wronged by the misuse of the song. All three are non-living objects, and arguably the song is the most concrete of the three because it is an object of sense experience. So on the assumption that this is a misuse, then it is possible to argue that the song itself is a moral patient of the wrong. But as this conclusion is based on the initial assumption of a misuse, it does not establish that the artwork has in fact been wronged. Rather, we have only managed to clear space enough to say that it is plausible to consider the song itself as a moral patient if this counts as a misuse.

But if selling subprime mortgages is in fact wrong, then we can ask whether it is worse to do so using “This Land is Your Land.” If it is worse, then it seems that the song itself must be the patient of the additional wrong. Now, to misuse an object is to do something wrong *with it* whereas to wrong an object is to do something wrong *to it*. But while it does seem worse to sell subprime mortgages using “This Land is Your Land,” this is because there is a certain bitter irony in trying to make money from economically disadvantaged people using an anthem for the movement that opposes

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predatory capitalism. However, this bitter irony emerges only on the basis of the song's meaning and the ideas it expresses. Thus we do not find that the song itself is wronged, but rather the jarring effect of using it to sell subprime mortgages arises from the incoherence, almost amounting to a kind of contradiction, between the ideas to which the song is related through its lyrical content and the goal of the possible advertisement.

Spem in Alium

Spem in Alium is not important because it was composed by Thomas Tallis or for any idea for which Tallis stood. Any importance it might have is due to the aesthetic merits of the composition itself. If we are to vindicate the previously assumed claim that the creation of the sound-image is wrongful, we must be able to say something about why it is wrong or what it is about the creation of this sound-image that is wrong. Initially I will assume that *Spem in Alium* is a masterpiece and has the property of greatness. I will also assume that *Fifty Shades of Grey* is bland and mundane aesthetic junk.¹¹

An initial characterization of the putative wrongdoing then is as follows: the creation of this sound-image takes something mediocre and mundane — aesthetic junk — and tries to raise it up, to give it a false patina of quality. But this is done at the expense of the masterpiece, which is debased by being made a part of a whole, the sound-image, which is less valuable than one of its parts, the motet left on its own. The masterpiece is tarnished through its association with these images; thus the sound-image exists through a debasing of a real value. Since there is a loss of value, the creation of the sound-image has moral disvalue. Indeed, the images on their own would have more integrity if they were not overlaid with the music.

This characterization raises a host of questions and objections: it is surely not the case that *Spem in Alium* ceases to be great simply because it is attached to the images in question. Surely the work of art is in no way compromised if a private individual were simply to put it over some random images for her own amusement. Might not the use of *Spem in Alium* in a potentially very successful film bring more people to enjoy this piece of music as well as Renaissance music in general? Might not the sound-image

itself bring pleasure to many people? And what does it mean to speak of “debasement of real value”? Can we vindicate the claim that *Spem in Alium* has the property of real value and that this use of it involves a loss of value?

The first two objections seem right, but they do not seriously affect the argument: the piece of music remains a masterpiece; nothing about the music has changed. But there is now a possible association between sound and image so that when we hear *Spem in Alium* in the future, we might be reminded of its use in the movie. This association is unlikely to be caused by a private individual creating a sound-image with *Spem in Alium* for her own amusement. The sound-image must be a public offering for it to have this effect. However, we cannot establish that the act is wrongful if we try to construe its wrongfulness consequentially. An association between the sound and image is more likely to take root if the association works at the level of good filmmaking technique. Chion coins the term “synchresis” to refer to the “spontaneous and irresistible weld [that can be] produced between a particular auditory phenomenon and visual phenomenon when they occur at the same time.” Chion notes that synchresis can happen “out of thin air ... with images and sounds that strictly speaking have nothing to do with each other, forming a monstrous yet inevitable and irresistible agglomeration in our perception.”¹² Synchresis is, as Chion notes, something that just happens. But clearly a filmmaker might want to achieve this effect; it is a phenomenon that can be manipulated as part of filmmaking technique. But to do so successfully does not entail that the result is artistically valuable, a fact attested to by all the annoying advertisements that plague our memories. If we condemn the inclusion of *Spem in Alium* in *Fifty Shades of Grey* because of its syncretic quality, then the more successful the association, the more wrongful the action. Sound-images that fail in this technical regard could not then be wrongful; only those that “work” would be wrong. This would be an odd conclusion. It also seems to misconstrue the putative wrongdoing. If we think it is wrong to use *Spem in Alium* in this way, we presumably think there is something akin to a moral rule against doing so. If we share the sense that there is something wrong with using *Spem in Alium* in this way, then the knowledge that it has been or will be done is sufficient to invite our disapprobation. We do not even need to see the relevant sound-image in order to disapprove of it. Furthermore, if we say that *Fifty Shades* is a misuse of *Spem in Alium* because it will make it more difficult for a few aesthetes to enjoy Tallis’ music, then we have lost the argument. For it is likely that the motet’s inclusion in the movie will be

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pleasing to a much larger group of people. Indeed, it might even increase the audience for Renaissance music beyond the confines of a privileged elite.

Now, the claim that this is a wrong perpetrated on the motet requires that this artwork has a standing in virtue of which it would be wrong to simply take it up and use it as we like. This is consistent with our earlier abstract conception of the grounds for the possibility of a wrong that does no harm. *Spem in Alium*'s moral status arises presumably from its putative greatness.

When we say that an artwork is great, it will presumably have some meritorious aesthetic properties, but greatness need not be confined to aesthetic considerations. In our two examples, the properties upon which an aesthetic valuation of the musical works would be based remain intact. The music does not change when it is joined to images. So if something has happened to the work of art as a result of this kind of use, then it must be a change in some other property. And since the music has not been changed, the property in question must be extrinsic to the artwork.

Sometimes when we call an artwork great, we are pointing to a kind of value that is distinct from the value a thing has insofar as it gives pleasure or the value it has because it is judged aesthetically successful. Let us call the first kind of value "hedonic value" and the second kind "aesthetic value." Judgments of hedonic and aesthetic value are based on the perceptible properties of the work in question. Greatness, in the sense intended here, refers to a different kind of value, which I shall call "transcendent value." Transcendent value is a value that is not due to perceptible qualities of the work of art although they may be necessary conditions for the manifestation of this kind of value. Artworks can have very high degrees of hedonic and aesthetic value without having transcendent value. Moreover, an object could have transcendent value, and yet someone with average perceptual capabilities might not be able to apprehend that value.

Now, the claim that an object is great in this sense is analogous to the idea of a sacred object. This analogy is useful because we already have the notion that sacred objects can be profaned and that the profaning of a sacred object need not alter any of its empirical properties. So what changes when a sacred object is profaned?

There are different ways we can articulate the idea of a sacred object; but for the sake of developing the point, let us just say that sacred objects

play a value-manifesting role for believers. That is, in the spiritual lives of believers, sacred objects act as places where transcendent value is manifested. The experience of the sacred object allows the believer to experience this transcendent value, to believe that there is transcendent value, and to be affected by that value. Similarly, certain artworks can also be seen as manifestations of transcendent value. This is possible even within the confines of a secular discourse although the language employed here can often sound somewhat religious. Indeed, one can sometimes hear guardians of religious tradition complaining that art has for some people supplanted the veneration of the traditional deity, a complaint that is not entirely groundless. In any case, to say that a work of art is “great” in the sense intended here means that it can play a role analogous to a sacred object.

Now, if a sacred object is treated in such a way that it can no longer play the role of manifesting spiritual value for a believer, then we can say that it has been profaned. Following the analogy, we can then recharacterize the wrongdoing as consisting in treating the artwork such that it no longer plays a value-manifesting role. Our initial characterization of the putative wronging of *Spem in Alium* was that the creation of the sound-image involved taking something of great value and using it to create something of less value. If we are talking about hedonic value, then the judgment is a cost-benefit analysis. But we cannot vindicate the claim that there is a loss of value on this basis because more people might actually enjoy the resulting sound-image than would have enjoyed the motet left alone. If the value we are concerned with is aesthetic, then we still fail to arrive at our conclusion because the motet’s aesthetic properties remain the same. However, developing the argument in this way locates the putative wrongdoing in the changed relationship we have with the motet. To say that our relationship to this work is changed and that the work can no longer play a certain kind of role in our lives does not tell us that the work itself is wronged. If anything, it seems that it is the person who regards the artwork rather than the work itself that is wronged.


We reach the same conclusion if we approach the question on the basis of the distinction between misusing and wronging. We previously noted that to misuse an object is to do something wrong with it whereas to wrong an object is to do something wrong to it. If *Spem in Alium* is misused but not wronged when incorporated into *Fifty Shades of Grey*, then it must be

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that creating works of erotica is wrong because it surely would not always be wrong to use this piece of music in a film soundtrack. And since to condemn the making of any erotica is a kind of dictatorial prudishness on the face of it, we cannot go down this road. So if there is a misuse here, then it seems that it is because there is a wrong to the piece of music itself. But how can we wrong a non-living thing?

Our earlier abstract formulation of non-harmful wronging was based on the idea of an object that has a status in virtue of which we are under an obligation concerning our orientation towards it. A familiar example of this kind of claim is when personhood is predicated of an object. The claim is that if X is a person, then not only must we avoid harming X, but we should also adopt the right attitude towards X. But on what basis may we make a claim like this in the case of *Spem in Alium*? None seems forthcoming apart from the claim that it is a work of art of transcendent value. But this is, as we have seen, nothing other than the claim that it plays a special role for us; it is not a claim based on the intrinsic properties of the work itself. Hence it seems that the best case we can make is that the work has a kind of pseudo-moral status: we ought to treat the great artwork as if it were a person. The realist orientation of moral-status talk implies that it is always and everywhere wrong to break the normative rules dictated by a thing's moral status, such as treating persons merely as means to an end or inflicting gratuitous suffering on sentient beings. But it would only be wrong to use *Spem in Alium* in the soundtrack for an aesthetically trashy movie because of the standing it has in a particular context; that is, in a context in which it does play a value-manifesting role. We might argue successfully that such a context inheres and that *Spem in Alium* has this standing, but that is not enough to establish that the artwork itself is a moral patient. As with the Guthrie example, the basis for any condemnation of its incorporation in a sound-image is in the context of the meaning the piece of music has for us. If there are moral patients in such cases, then we ourselves, not the works of art, are the moral patients.

This argument can be generalized. That is, while the language of moral status might be deployed to characterize a wrong-seeming action upon a work of art, it will always be possible to argue that the wrongness supervenes on the artwork's meaning and the role it plays for us. It is of course possible to damage artworks such as paintings, but the moral significance of such damage is tied to how this damage affects our

relationship to the artwork. The same argument can be made in relation to the memories of deceased persons discussed previously. It is not the mental representations themselves that are the moral patients; rather, it is the meaning they have for us that grounds any sense of obligation we have towards them. There is a further question concerning why things like artworks and memories can have meanings that take on a normative significance, but this question falls outside the scope of this investigation. 

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Notes

- 1 I would like to thank the four anonymous referees for *Evental Aesthetics* who provided helpful comments on an earlier draft.
- 2 This disapprobation is not the same as what Alan Tormey calls “aesthetic pain” (Alan Tormey, “Aesthetic Rights,” *The Journal of Aesthetics and Art Criticism* 32, no. 2 (1973): 165). Aesthetic pain is the discomfort one might feel from hearing “a violinist play the Debussy Sonata for Violin and Piano with a strident tone and faulty intonation,” or from “reading a trite and worthless novel.” Aesthetic pain is directed at an aesthetic rather than a moral defect.
- 3 See Mary Anne Warren, *Moral Status* (Oxford: Oxford University Press, 1997), 4–9, for a discussion of the “intuitive” sense of the idea of moral status. Warren argues that “people rarely ascribe moral status to entities that they regard as entirely inanimate” (7). According to Warren, “most of us would only regard it as wrong [to destroy an inanimate object] only insofar as it causes harm to human beings, or deprives them of important benefits” (4). Similarly, David DeGrazia, in his analysis of moral status, argues, “We should not shoot at cats for sport, for example. But if the only reason we shouldn’t do so is that hunting cats for sport might damage what is legally regarded as someone else’s property (the cat), or that doing so might upset people who find out about it, that would mean that cats lack moral status.” David DeGrazia, “Moral Status as a Matter of Degree?” *The Southern Journal of Philosophy* 46 (2008): 183.
- 4 The idea of moral status has realist commitments that cannot be accounted for on a purely contractarian basis at least if we take a Hobbesian approach to the idea of the social contract. Self-interest is a degenerate case here in that a Hobbesian egoist could say that I, and only I, have moral status. The moral consideration the egoist extends to others within the contract is not tantamount to the claim that contractual partners have moral status. The Hobbesian egoist extends moral consideration to, or more accurately recognizes the rights of, contractual partners only because it is in her self-interest to do so, not because contractual partners actually possess the property of moral status. Warren brings out these realist commitments indirectly by pointing out that cultural relativism about morality involves the view that “there is no such thing as the moral status that an entity has, or ought to have, for all moral agents” (Warren, *Moral Status*, 6). It is typical in the literature on moral status to ground attributions of moral status in real properties such as sentience (52–57) or other capacities that are taken to be tantamount to personhood (91–95).
- 5 Michel Chion, *Audio-Vision: Sound on Screen*, ed. and trans. Claudia Gorbman (New York: Columbia University Press, 1994), 5.
- 6 Immanuel Kant, *Critique of Pure Reason*, trans. Paul Guyer and Allen Wood (Cambridge: Cambridge University Press, 1999). Kant distinguishes the different kinds of representations at A320/B376–377. He discusses the role of ideas in providing the highest level of synthesis at A298–299/B355. See also *Religion Within the Boundaries of Mere Reason*, trans. George di Giovanni (Cambridge: Cambridge University Press, 1996), 6, where Kant discusses how the idea of the highest good bridges the gap between philosophy and religion.
- 7 I would like to thank one of *Evental Aesthetics*’ anonymous reviewers for pointing out that there are many ways of realizing a piece of music.

- 8 There are also historical, sociological, and political-economic relationships between folk music and fascism.
- 9 It is, however, not a sufficient condition. We can listen to the song and not find that we are compelled to agree that it is important and valuable. But this is a different matter. I have chosen to consider this example, but someone who does not like Guthrie's song could choose a different example.
- 10 There is a distinction between the extra-musical associations that allow us to hear certain acoustic phenomena as music and the extra-musical associations specific to "This Land is Your Land," such as Guthrie's politics, etc. The argument distinguishes "the song itself" from the latter, not the former, and so it does not tacitly presuppose aesthetic formalism. I am grateful to one of *Evental Aesthetics*' anonymous referees for forcing me to clarify this point.
- 11 Both assumptions may be false. A further assumption for which I will not argue is that there are real aesthetic valuations. We do not always know what they are, and we have no formula for discerning them, but over time we tend to converge on the masterpieces and discard the junk. I assume, therefore, that there are artistic masterpieces, and there is aesthetic junk.
- 12 Chion, *Audio-Vision*, 63–65.

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On Technological
Ground:
The Art of Torsten
Lauschmann

Dominic Smith

ABSTRACT

This essay considers the relationship between the work of contemporary artist Torsten Lauschmann and themes in a growing area of research: philosophy of technology. Themes considered include relations between technology and contemporary urban dwelling, technology and the “everyday,” and Heidegger’s problematic but canonical understanding of technology not as a set of “mere means” but as a “way of revealing.” I argue that Lauschmann’s art renders these themes relevant for our increasingly technologically mediated forms of everyday experience by engaging in a paradoxical practice of creating what McLuhan called “anti-environments.”

Part One relates Lauschmann’s art to three concepts surfacing in McLuhan’s late work: “figure,” “ground,” and “anti-environment.” Part Two relates Lauschmann’s art to Merleau-Ponty’s critique of photography in terms of the ontology of dynamic movement. Part Three relates Lauschmann’s art to Heidegger, implying a form of “affective critique” that — by questioning the environmental conditions that constitute works of art — points beyond vexed aspects of Heidegger’s approach, such as its apparent pessimism and tendency to homogenize disparate technologies. The essay’s broader argument is that Lauschmann’s art, like the philosophical reflections to which it is related, is engaged in a practice of challenging settled common-sense notions regarding technologically mediated experience.

KEYWORDS

Torsten Lauschmann
philosophy of technology
Marshall McLuhan
Maurice Merleau-Ponty
Martin Heidegger
anti-environment
figuring
affective critique
paradox



Introduction. Startling Reaction

Torsten Lauschmann is a German-born artist working in Glasgow, Scotland. Perhaps most notorious for the 2006 Internet hoax *World Jump Day*, his exhibition venues include Art Basel Miami Beach (Miami), the Institute of Contemporary Arts (London), Arnolfini (Bristol), and the Galerie Pascal Vanhoecke (Paris).¹ Lauschmann is the recipient of numerous prizes, including the inaugural Margaret Tait award at the 2010 Glasgow Film Festival and a Vital Spark commission from Creative Scotland in 2011 as well as shortlistings for the 2011 Jarman award and the 2012 Samsung Art Plus Prize.² His work has in recent years been a critical focus for important voices on the British art scene, including Sean Cubitt and Esther Leslie.³

Over the course of Lauschmann's career, his art practice has incorporated diverse media from video, sound, and computer programming to photography, installation, oil painting, and print. As this essay aims to demonstrate, however, one of the consistent themes guiding Lauschmann's work is a fascination with the human relationship with technology. Lauschmann's art draws attention to paradoxical dimensions of this relationship, where paradox is understood in the etymological sense of "*paradoxia*" or that which is "against common sense." By "common sense," I have in mind the ancient Greek sense of "*doxa*" as "common belief" or "opinion."⁴ My argument in this essay is that Lauschmann's art subverts common sense beliefs and opinions on what technology is, how it functions, and where it might be leading us. It does so, I argue, by developing forms of what I call "anti-environments" and "affective critique." By working through reflections from three canonical figures in the history of philosophy of technology — Marshall McLuhan, Maurice Merleau-Ponty, and Martin Heidegger — the essay builds the case that Lauschmann's art opens a space for thoroughgoing aesthetic reflection on the roles that technologies have in mediating contemporary existence. To paraphrase the title of a 2011-2012 exhibition by Lauschmann: by "startling reaction" out of the engrained norms, beliefs, and opinions of common sense, his art forces the normally hidden technological ground on which so much of contemporary experience stands to become apparent. It does this, I contend, not to moralize on how we should use technologies but rather to affectively open more wide-ranging philosophical issues that follow from the technological mediation of contemporary ways of

life. Philosophy of technology is a growing and diverse field of research that sets out to address the epistemological, ontological, and ethico-political implications of the technological mediation of contemporary ways of life, whether human or nonhuman. Approaches ranged under this rubric include hermeneutical, phenomenological, object-oriented, and constructivist modes of inquiry and have produced such varied theories as Actor-Network Theory, Cyborg Theory, and Critical Theory of Technology.⁵ The field provides a complementary background for an investigation of Lauschmann's work, I argue, because it undertakes to explore conceptually what he undertakes to explore affectively.

The essay comprises three main parts. In Part One, I relate Lauschmann's art to McLuhan's concepts of "figure," "ground," and "anti-environment." I argue that Lauschmann's art can be viewed as a paradoxical gesture of "figuring" anti-environments that call into question our common sense of how experience is constituted in technologically mediated situations. In Part Two, I relate Lauschmann's 2011 work *Before the Revolution* to Merleau-Ponty's critique of photography in *L'Oeil et l'esprit*—both of which draw upon Gericault's 1821 painting *The Derby at Epsom*. Here I argue that by problematizing a specifically *photographic* common sense of this painting, both Lauschmann's art practice and Merleau-Ponty's remarks can be viewed as highly specific and critical gestures of "figuring." In Part Three, I consider the gesture of "figuring" in broader terms in relation to Heidegger's canonical but problematic philosophy of technology. Lauschmann's art involves a form of "affective critique" that points beyond Heidegger's apparent pessimism and his tendency to homogenize disparate technologies into an essentialist understanding of "Technology." I argue that by staging dramatic gestures of figuring in which disparate technologies and technologically mediated situations collide, Lauschmann's art may provide an affective critique and supplement to the Heideggerian approach to the philosophy of technology.

To conclude, I argue that Lauschmann's gesture of figuring, like the three philosophical reflections to which this essay relates it, can be viewed as a timely affirmation of the passion for paradox against temptations to fall into uncritical forms of technologically-mediated "common sense."

1. Figure and ground. McLuhan

From October 2011 to August 2012, Lauschmann exhibited a collection of works entitled *Startle Reaction* at venues including Dundee Contemporary Arts (Dundee, Scotland), the AV Festival (Newcastle, England), and the John Hansard Gallery (Southampton, England). It was his largest solo exhibition to date. At the head of the gallery notes for *Startle Reaction*, an epithet from Marshall McLuhan's book *War and Peace in the Global Village* (1968) read: "We are all robots when uncritically involved with our technologies."⁶

That Lauschmann cites a figure like McLuhan at all indicates that there are links to be explored between his art and philosophical reflections on technology. It may also indicate something profound about the aims and methods of Lauschmann's practice. A stated aim of *Startle Reaction* was to sidestep "the tension that exists between optimistic and skeptical attitudes towards technology."⁷ This does not mean that Lauschmann aims at something anodyne or uncontroversial; rather, it bespeaks a desire to cultivate a more nuanced critical awareness. Instead of seeking to induce crude forms of optimism or pessimism regarding the "destiny" towards which a deterministic conception of "Technology" might be leading us, perhaps what Lauschmann's art aims at is the construction of spaces in which critical distance can be taken on our immersion in technologically mediated environments and the ways in which these environments — by virtue of the differences between them — contribute to the diverse character of contemporary experience.

A closer look at McLuhan's work might help to clarify this aspect of Lauschmann's practice. Here, for example, is McLuhan appropriating Gestalt psychology's distinction between "figure" and "ground" at the beginning of *Laws of Media* (1988):

All situations comprise an area of attention (figure) and a very much larger area of inattention (ground). The two continually coerce and play with each other across a common outline or boundary or interval that serves to define both simultaneously ... Figures rise out of, and recede back into, ground, which ... comprises all other available figures at once. For example, at a lecture, attention will shift from the speaker's words to his gestures, to the hum of the lights or to street sounds, to the feel of the chair or to a memory or association or smell. Each new figure in turn displaces the others into ground ... The study of ground "on its own terms" is virtually impossible; by definition it is at any moment environmental and subliminal. The only possible strategy for such study entails constructing an *anti-environment*: such is the normal

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activity of the artist, the only person in our culture whose whole business has been the retraining and updating of sensibility.⁸

In its concerns with attention, inattention, and, broadly speaking, “intentionality,” this extract implicitly shows McLuhan at his most “phenomenological.” That said, he goes beyond phenomenology in his concept of the “anti-environment,” which has several political and aesthetic connotations.⁹ Indeed, if we examine McLuhan’s terminology, we may come to view Lauschmann’s art as a way of constructing “anti-environments.”

“Figure” is that to which we are attentive in a situation, “ground” that to which we are inattentive. In McLuhan’s example, “figure” may constitute the words or gestures of a lecturer or “a memory or association.” The key point of his discussion, however, is that whenever a figure becomes the focus of attention, it “displaces the others into ground”: into a state of *latency* or *potentiality*. There is more to this dynamic, however, than the straightforward replacement of one figure by another. Equally important is the role that displaced potential figures play in conditioning awareness of whatever emerges to replace them as figure. In order for awareness of any figure to be possible at all, displaced potential figures must feature as “ground”: as precisely that to which we are *inattentive*.

To consider how this might relate to Lauschmann’s work, we must think through the relation between figure and ground in technologically mediated situations. A situation is technologically mediated if technologies play a necessary role in constituting the character of intentions and behaviors that take place within the situation. In McLuhan’s example, a “technologically mediated situation” could be a lecture that uses PowerPoint or a microphone. Other examples include the situation of an office where the workforce is dependent on a computer network, that of rail passengers dependent on a train’s engine, or that of the audience in a cinema whose experience of the cinema *qua* cinema is dependent on the smooth functioning of the projector and screen.

What is striking about such situations is that the technologies involved nearly always feature as part of their “ground,” rarely as “figure.” In an office, the larger part of the workforce is expected to attend to content exchanged through the network, not to the network itself: to the “message,” not the “medium,” in McLuhan’s more famous terms.¹⁰ On a train, passengers are expected to attend either to the itinerary of their journey or to sanctioned forms of distraction (books, food, smartphones, or daydreams), not to the

workings of the engine itself. In a cinema, the audience is expected to attend to the film, not to the projector or screen *qua* “projector” or “screen.”

Such is the normal state of technologically mediated situations. In contrast, Lauschmann’s art establishes “anti-environments” that force technologies and their normally hidden roles to become “figures.” Of itself, such a contention may seem hackneyed in the wake of Gestalt psychology, phenomenology, and, indeed, McLuhan’s work; attention to how it works in Lauschmann’s art, however, reveals many subtleties in his approach.

Consider for example the 2003 work “Misshapen Pearl.”¹¹ An eight-minute video voiced by the artist, it is, as Lauschmann puts it, a reflection on “the streetlamp’s function in our consumer society.”¹² At the outset, he reads from Vilém Flusser:

What is a streetlamp? I only pay her my attention if she bugs me, or if her light is too intense, or defective, or missing, or like now, if I give her my attention by breaking through the accepted everyday. In every other situation the streetlamp is for me just part of that disrespected environment, which I take for granted and which was created to be disrespected.¹³

The point is that streetlamps are technologies that are intended to feature in the “ground” of contemporary existence: they are not that to which one is supposed to be attentive but something that contemporary urban existence conditions us to “take for granted.” In “Misshapen Pearl,” this normal situation is recognized but immediately transgressed by making the streetlamp the figure. Indeed, the transgression is marked in precise terms: it occurs when Lauschmann states “or like now, if I give her [the streetlamp] my attention.” Here, the word “now,” a veritable speech act, inaugurates a shift from what Lauschmann calls the “accepted everyday” towards immersion into the artwork as a form of “anti-environment.” First, it forces recognition of the streetlamp’s normally subliminal role within the limits of the “accepted everyday.” Second, it commands that these limits be “broken through” by the requested act of attention. “Misshapen Pearl” sustains this “breaking through” by constructing a collage of found and bespoke filmic content, juxtaposed with an incongruous jazz soundtrack and the drawl of Lauschmann’s continuing voiceover: images from across the globe draw attention to the taken-for-granted ubiquity of street lighting in contemporary city spaces, but Lauschmann’s editing is sufficiently dexterous to also highlight cultural specificities (e.g., the neon signs of London’s China Town versus a dimly-lit Glasgow road crossing). Slowed-down and speeded-up

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advertisements clash with Lauschmann's plaintive reflections on the nature of the mind-body relation. And towards the end, the music changes and becomes more insistent, and the streetlamp's function as a metonym for broader clashes between concepts of "culture" and "nature" becomes more explicit in Lauschmann's remarks.

The "everyday" perspective maintains that a streetlamp is too trivial a thing to merit attention. It is for precisely this reason, however, that it works as a focus for Lauschmann. By turning the streetlamp into figure, "Misshapen Pearl" draws attention to the ubiquity of a technologically mediated situation that can nevertheless be highly specific in terms of how it constitutes contemporary urban experiences. The viewer is invited to reflect on the extent to which a city's ubiquitous lights condition specific patterns of behavior: like flames to a moth, these lights can channel nocturnal movement; like artificial suns, they can turn night to day, setting new rhythms for play, work, and rest; like guard rails on a bridge, they can be something that one takes for granted precisely until they are not there.

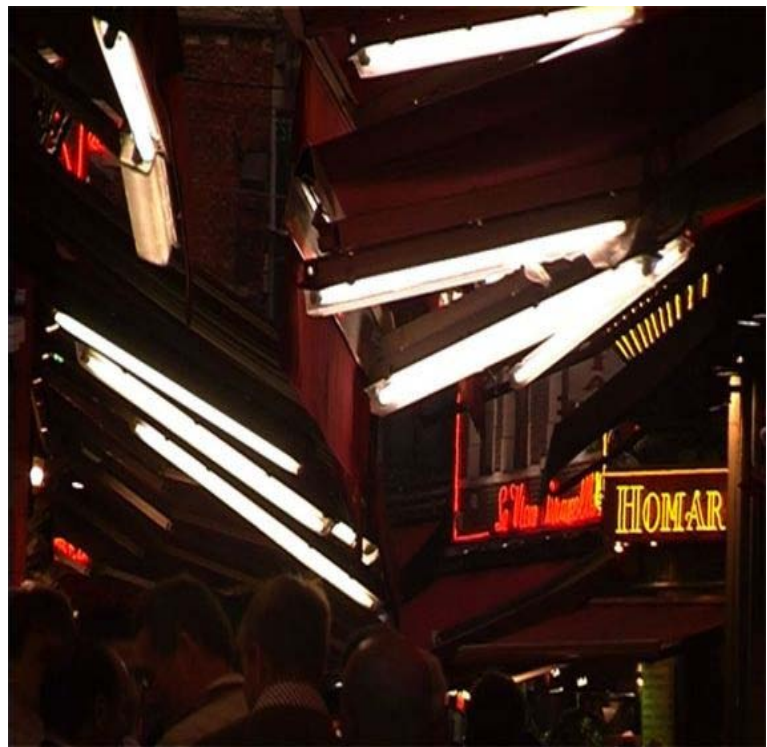


Figure 1. Misshapen Pearl (T. Lauschmann, 2003)



Figure 2. Self-Portrait as a Pataphysical Object (T. Lauschmann, 2006)

Suppose we call this gesture of making a technology emerge from its ground one of “figuring” and undertake to seek further examples of its function in Lauschmann’s art. In *Self-Portrait as a Pataphysical Object* (2006), a chandelier made of cables and audio adaptors harbors a tiny light source.¹⁴ Here, the relation of “figuring” is reversible: if we apprehend the cabling as figure, this calls attention to functional and material aspects of the electrical process that are normally deeply “grounded” in our use of electrical appliances. On the other hand, if we apprehend the light source as figure, this will provoke different reflections. The work has been read, for example, as a comment on the precarious nature of man’s “soul” in a technologically mediated world, but it might equally be viewed in a more ecological sense, perhaps as denoting the sheer scale of the technological infrastructure (the cabling as ground) that stands behind even the smallest use of electricity (the light as figure).¹⁵

In another piece, *The Coy Lover* (2011), a pianola appears to be forced into action by the snow machine suspended above it in order to then be caressed by the resultant flakes.¹⁶ Here, a relation of figuring emerges between this surreal juxtaposition and the compositions Lauschmann has programmed the pianola to play. Normally, situations involving musical instruments, whether considered from the perspective of the musicians or the audience, seem to dictate that the compositions feature as “figure” while the instruments feature as “ground.” *The Coy Lover* complicates this picture considerably. First, Lauschmann’s compositions are recordings emitted by an instrument (the pianola) that was designed to maintain the *illusion* of live performance, blurring the distinction between recording and performance and inviting the viewer to reflect on the forms of technological mediation involved in both situations. Second, Lauschmann’s compositions are juxtaposed with the drone of the snow machine. Is this work therefore an allegory of technology’s tendency to generate “noise” and “interference” — which we hear whenever the snow machine starts, claiming the position of “figure” by force? Alternatively, does *The Coy Lover* indicate the potential for new and creative sonic consequences to follow from unexpected, “bastardized” technological couplings in line with Deleuze’s remarks on the reciprocal processes of “becoming” involved in the coupling of a wasp and an orchid?¹⁷ Further, might this work be an allegory of Hume’s problem of induction? That is, might it only be the “constant conjunction” of the starting of the snow machine and the pianola’s playing that leads us to posit a causal connection between the two?¹⁸



Figure 3. *The Coy Lover* (T. Lauschmann, 2011)

Questions like these should of course remain open and unresolved in favor of the work's interpretative richness. However, this brief consideration of Lauschmann's work suggests that the gesture of "figuring" plays a key role in his practice, wresting technological entities from the ground to which the inattentiveness of common sense (*"doxa"*) consigns them. His gesture of figuring is "para-doxical" in that it works against the inattentiveness which he calls the "accepted everyday." Contemporary common sense, perhaps driven by consumerism, dictates that the non-specialist should be attentive only to the light emitted by a streetlamp, the result of a signal transmitted by a cable, or the tune emitted by an instrument and forego critical attention to the technologies that render such "content" possible. In response, Lauschmann creates "anti-environments" that suspend, invert, and perturb commonsensical expectations. To further follow through on the implications of McLuhan's remarks on the "anti-environment," this may place Lauschmann as well other artists like him within a broader aesthetic process of "retraining and updating" contemporary sensibility.¹⁹

2. Before the revolution. Merleau-Ponty

In his 2011 work *Before the Revolution*, Lauschmann sets a blurred background image of Géricault's 1821 painting *The Derby at Epsom* against a foreground of circling dots. The dots form a symbol familiar to users of Netflix, YouTube, and other sites as the "busy icon" or "processing icon" that dominates the screen while images are loading.²⁰ As in *Self-Portrait as a Pataphysical Object*, it is possible to see a reversible relation of figuring at work between the painting and the icon.

Before the Revolution is a work that is true to its title in at least two senses, depending on whether one apprehends the painting or the icon as "figure." Suppose we take Géricault's painting to be the figure. This will put us "before the revolution" in a temporal sense: we will be presented with a painting from before the "revolution" in image-making brought about by photography. Alternatively, the icon emerges as figure. This will put us "before the revolution" in a spatial sense: face to face with an example of the profound

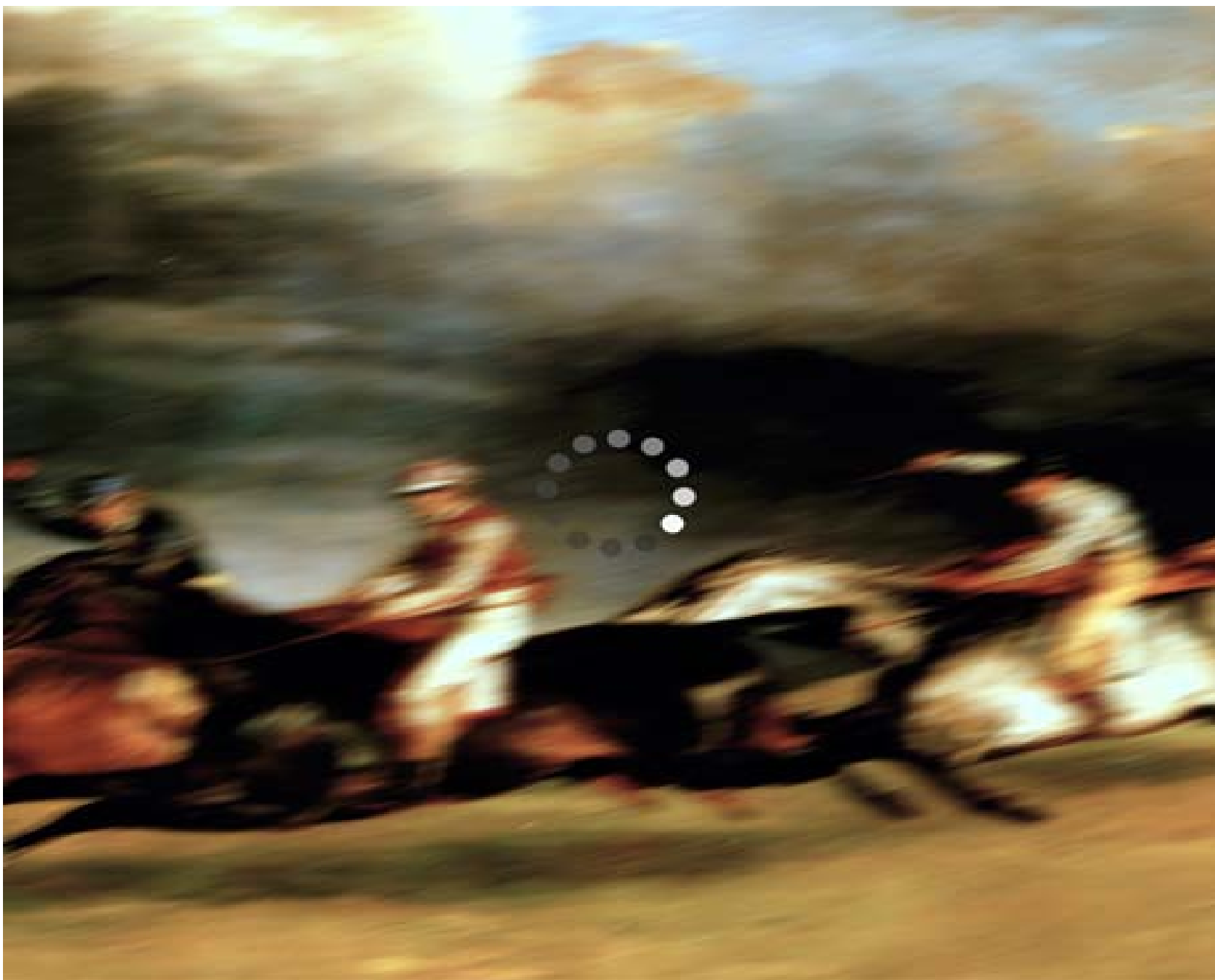


Figure 4. Before the Revolution (T. Lauschmann, 2011)

success of the photographic revolution — namely, Lauschmann’s artwork. The icon is a technologically produced image which our conventional narrative of technological development — advancing through the stages called “television,” “computing,” and “the Internet” — places in a direct lineage with what we have called the “photographic revolution.” Moreover, no matter how we encounter the work — online, in a magazine or journal, or on the LCD TV that Lauschmann uses in the gallery — we always encounter it through media that descend from the revolution in technologically mediated image-making brought about by photography, which therefore bear the traces of photography’s ways of seeing and reproducing images.²¹

Géricault’s painting is often cited in connection with Eadweard Muybridge’s 1878 photographic series *The Horse in Motion*, which demonstrated the painting to be anatomically absurd. As this well-known story goes, Géricault had, in accordance with the established artistic convention of his time, depicted horses in a “flying gallop” with front and hind legs splayed when all four leave the ground. Muybridge’s photographs demonstrated that no horse ever assumes this position; rather, galloping horses have all four legs compressed underneath the body when they leave the ground.²² Merleau-Ponty proposes a paradoxical reading of this story:

Why does [Muybridge’s] horse photographed at the instant where it does not touch the ground ... have the appearance of jumping on the spot? And why, in contrast, are Géricault’s horses running on the canvas, in a pose that no galloping horse has ever had? ... Rodin has a profound remark here: “It is the artist who is true and it is the photograph which lies, because, in reality, time does not stop.”²³

The problem facing all photography, as Merleau-Ponty implies, is that it can only capture movement by evacuating it from the scene. Thus instead of rendering the dynamism of a galloping horse, Muybridge’s photographs may appear to depict a horse jumping vertically on the spot. Although anatomically correct, these photographs may be *dynamically* absurd. In contrast, Géricault’s horses may not render anatomical exactitude, but they do render the forward dynamism of a horse in full gallop.

Merleau-Ponty’s remarks demonstrate painting’s capacity to envisage differently, critically, and creatively: by questioning the received narrative’s presupposition that photography’s powers of representation are inherently superior to those of the painter, Merleau-Ponty invites reconsideration not just of Géricault’s painting but of photography’s role in shaping our

contemporary common sense of what it is to see. In this sense Merleau-Ponty's remarks parallel Lauschmann's "anti-environments." With a work like "Misshapen Pearl," Lauschmann creates an anti-environment that invites reflection on how contemporary common sense relegates technologies to the "ground" of everyday existence. With his remarks on Géricault, Merleau-Ponty invites reflection on how the photographic revolution altered the common sense of what it was to see — an alteration that we commonly take for granted. Since the photographic revolution, Géricault's "flying gallop" appears paradoxical because it goes against this common sense; before the revolution, however, it was conventional, a *different* "common sense" of things.

3. "The environment announces itself afresh." Heidegger

As we have seen, Lauschmann seeks to sidestep "the tension that exists between optimistic and skeptical attitudes towards technology."²⁴ In contrast, Heidegger's account of the human relationship with technology is often perceived as deeply pessimistic and essentialist to the point of fatalism.²⁵ On closer inspection, however, it may be that Heidegger sought to articulate not a fateful relationship to technology but a "free" one in which art and technology "belong together."²⁶ Perhaps what makes Heidegger's approach appear fatalistic is its lack of "affective critique" — which Lauschmann's work, in contrast, achieves in abundance.

Let us revisit *Before the Revolution*. On a Heideggerian reading, it is not Géricault's painting or the icon that is the proper "figure" for this piece but rather *the relationship* between them. This is because this relationship, while always remaining to some degree "hidden" or "concealed," sets the conditions under which the elements of the piece are constrained to reveal themselves. It therefore provides a neat (perhaps "schematic") exemplification of what Heidegger calls "*alētheia*" — the conditions of truth under which beings are revealed.²⁷ In Heidegger's account, there are many different modes of *alētheia*.²⁸ The two most important in the context of his remarks on technology are *poēisis* and "enframing" (*Gestell*). By *poēisis*, Heidegger means art's way of revealing — a "bringing forth of the true into the beautiful."²⁹ If Géricault was aiming at the dynamism of a horse in motion in *The Derby at Epsom*, then the painting is an instance of *poēisis* in Heidegger's sense, for it

attempts to depict a truth about galloping horses using the conventions available to the painter.

By “enframing,” in contrast, Heidegger means modern technology’s way of revealing — a “challenging forth” which reveals entities to be available and controllable as “resources.”³⁰ Consider the conditions of revealing that give rise to a busy icon: filmic content must be available to watch quickly and repeatedly; users must appear to be regularly updated on the status of the content; and this content should be susceptible to control (e.g., fast-forwarded). To the extent that the busy icon symbolizes these conditions, it instantiates enframing.

For Heidegger, enframing is the dominant way of revealing at work in the modern, technology-dependent world. As the dominant way of revealing, enframing tends to conceal other ways, including *poēisis*. On a Heideggerian interpretation, this is the problem which *Before the Revolution* dramatically depicts: insofar as the busy icon is positioned over Géricault’s painting, it seems to demand that viewers evaluate the painting not as *poēisis* but as enframing.

Thus Lauschmann’s work speaks to the key claim of Heidegger’s reflections on technology: enframing is both dependent on *poēisis* and committed to concealing and forgetting it.³¹ Enframing depends upon *poēisis* as the creative source for the “resources” on which enframing seizes.³² However, enframing cannot tolerate the fundamentally unpredictable nature of *poēisis*.

The point is not to reduce Lauschmann’s work to the (vexed and politically contentious) terms of a Heideggerian interpretation but simply to point out that Heidegger’s philosophy of technology explores something which connects with Lauschmann’s work: the sense in which art and technology can be viewed as related forces. For Heidegger, this dynamic of “belonging together” rests on a tension: the fact that art (*poēisis*) and technology (enframing) are ways of revealing which are at once complementary (insofar as they are correlated ways of revealing) and opposed (insofar as they are ways of revealing guided by different values). The question then arises: how might Lauschmann’s work be said to “affectively critique” these Heideggerian relations? However onerous the demands of enframing, there is a fundamental sense in which *poēisis* remains irreducible to them. *Before the Revolution* makes this dramatically vivid by confronting the symbol of a downloading image with an image that never

loads: the painting *will not be moved by the symbol* in any sense. Thus the symbol emerges not as a manifestation of technological progress — in Heidegger's terms, of enframing's dominance over *poēsis* — but of technology *breaking down* and *malfunctioning*.

Lauschmann introduced us to the theme of technological malfunction in his opening remarks to “Misshapen Pearl,” cited above: “What is a streetlamp? I only pay her my attention if she bugs me, or if her light is too intense, or defective, or missing.” Consider Heidegger's famous description of what happens when a tool is paradoxically “found missing”:

[W]hen something ... is found missing, though its everyday presence has been so obvious that we have never taken any notice of it, this makes a break ... [We come] up against emptiness, and now [see] for the first time what the missing article was ready-to-hand with, and what it was ready-to-hand for. The environment announces itself afresh.³³

What Heidegger means by “ready-to-hand” (*Zuhanden*) is the sense in which a tool through use comes to be intuitively depended upon to fulfill its user's intentions: the sense in which a keyboard is depended upon for touch typing. When such a tool breaks or cannot be found, it is no longer “ready-to-hand,”³⁴ ceases to be dependable, and instead announces “independence” from the user.³⁵

An “independent” tool forces its environment to “announce itself afresh.” When a tool is “ready-to-hand,” it is part of the “ground” of the user's experience. When a tool becomes “un-ready-to-hand,” however, it emerges as a “figure” of attention. Furthermore, the lost or broken tool throws the user's attention back into the total environment from which the tool came; the user must think through how the tool's “un-readiness-to-hand” might be resolved and its “environmental” implications, such as what affordances the surrounding environment offers and whether some of these may be more sustainable than others.

Before the Revolution provokes its viewers to think through the implications of a busy icon becoming “un-ready-to-hand.” Many petty frustrations tend to follow such an experience: impatience with the clip that is taking so long to load, the desire to seek another link, or annoyance with the user who uploaded the content. The point, however, is that such frustrations may not be merely “petty.” Rather, they belong to a more general species of contemporary everyday experience: the sense of alienation that

slow, complex, and unresponsive technologies can engender in users. In this sense, superficial experiences with technologies turn out to be linked to more profound mutations in the environments we inhabit today, concerning alienation, reliance, and the perceived limits of control. This, I think, is a point that both Lauschmann and Heidegger could endorse; however, it is arguable that Lauschmann takes us further in exploring its implications.

Consider Lauschmann's 2009 work *He's Got the Whole World in His Hands*.³⁶ As an installation involving a notebook computer with a biro pen violently forced through the screen, this is so stark a dramatization of user frustration that the tendency of viewers may be to forget that it is an artwork at all. Instead of asking questions that go down established aesthetic paths (What does it mean? How is it constructed? What affect does it produce?), such viewers might be compelled to ask: What could have driven the user to it? This question raises important distinctions between the types of technologically mediated environments we inhabit today.

A biro pen — as a straightforward and relatively cheaply produced artefact — stands for the environment of low-tech tools. A notebook computer — as a relatively complex and expensive item — stands for the environment of high-tech consumer goods. *He's Got the Whole World in His Hands* provokes us to reflect on what separates and relates these environments in the contemporary world and on the contrasting implications that follow from low- and high-tech technologies breaking down.

If a pen runs out of ink, breaks, or cannot be found, the user's environment will, as Heidegger puts it, "announce itself afresh." This occurs because the user will have to seek out new affordances within the environment in order to complete the task in which the pen was implicated. If a computer becomes "un-ready-to-hand," however, this does not seem to cause an environment to "announce itself" in anything like Heidegger's sense. This is because rather than constituting an affordance within an environment, the computer may seem to more readily constitute an environment apart, offering affordances of its own. In this sense, the "un-readiness-to-hand" of the computer seems to announce a split between at least two environments.

By violently staging a collision that forces a pen and a computer to become simultaneously "un-ready-to-hand," *He's Got the Whole World in His Hands* functions as an "affective" critique of the tendency to conflate disparate



Figure 5. He's Got the Whole World in His Hands (T. Lauschmann, 2009)

technologies under the banner of “Technology” or “enframing” in Heidegger’s approach.³⁷ Lauschmann invites us to reflect that while it is relatively apparent to the average user of a pen how it might be repaired, replaced, or foregone, these issues become more complex in the case of a computer. One reason why a computer’s breakdown seems to announce a split between our mode of Being-in-the-world and that of technology is that the average user is

more likely to perceive the computer as a “black box” whose inner workings exceed their control. Reflecting further, we recognize that the split also has to do with the user’s perception of the environments to which the technologies are linked: a pen is, according to the contemporary common sense of things, a member of the world of “mere things”; a notebook computer, especially since the growth of the Internet, is a perceived portal into other worlds. The computer’s breakdown seems to take these worlds away.

He’s Got the Whole World in His Hands provokes critical reflection on this common sense of things. That the pen can damage the computer reminds us that even in a world where computers seem to act as portals into other worlds, there is at least one important sense in which they are still fragile members of the world of things. On the other hand, we may be highly familiar with the *cliché* that “the pen is mightier than the sword,” but here it is as though the pen were reminding us that there is at least one sense in which it is also mightier than the computer. Such a figurative reading is contrived, but the mere fact that it is possible demonstrates that there is at least one sense in which there may be more to a pen than our contemporary common sense of things will readily admit.

We may therefore speculate that what might “have driven the user to it” is a sense of widening gaps between the low-tech and the high-tech, “things” and the environments opened up by computing or the relative skillsets of the user and the computer. Throughout his work, Lauschmann displays an acute, critical, and playful awareness of such gaps, using affects to critique Heideggerian concepts.



Figure 6. *Wunst* (T. Lauschmann, 2004)

In the 2004 performance piece *Wunst*, for example, Lauschmann presented his audience with a series of musical instruments upon which they were invited to perform together without concern for the gaps between their abilities.³⁸ For the 2007 installation *Piecework Orchestra*, he programmed forty household devices — from electric drills and sanders to hedge trimmers and vacuum cleaners — to play his composition “Comfort Killed the Cat.” Here, gaps were opened and exploited between the technologies and the purposes for which the manufacturers intended them.³⁹ For one of the key works included in *Startle Reaction*, a piece entitled *Dear Scientist, Please Paint Me*, visitors were encouraged to use electric light sources to make luminous marks upon the wall of the gallery; in many cases, this involved turning smartphones into paintbrushes, thus exposing a gap between the complexity of the technology and the simplicity and playfulness of the activity.⁴⁰



Figure 7. Piecework Orchestra (T. Lauschmann, 2007)



Figure 8. Dear Scientist, Please Paint Me (T. Lauschmann, 2011)

Of all Lauschmann's works to date, however, it is perhaps "At the Heart of Everything a Row of Holes" that best explores the gaps opened up by technologies. A thirty-minute video performance, premiered at the Glasgow Film Theatre in February 2011, it begins by satirizing technophobia. First, Lauschmann's silhouette appears whereupon a mawkishly desperate voice booms the following words from William Gaddis' posthumously published novel *Agapē Agape*:

That's what it's all about — the collapse of everything. Of meaning. Of language. Of values. Of art. Disorder and dislocation wherever you look. Entropy drowning everything in sight. Entertainment and technology ... And every four year old with a computer ... Where technology came from in the first place you see ... Like, the pain ... Avoiding pain ... That's what this is all about, isn't it?⁴¹

What follows is a journey through the history, the pitfalls, and the potentials of the human relationship with technology. A roving video projector adorns the theatre walls, ceiling, and stage with images of mechanical toys, looms, and computer printouts. After six minutes, a computerized voice tells a tale from the sixteenth-century Taoist text *Lieh-Tzu* in which a jealous king disassembles an automaton.⁴² At eight minutes, clinical photographs depict a



Figure 9. At the Heart of Everything a Row of Holes (T. Lauschmann, 2010)

contorted human face over which key positions from FACS, the “Facial Actions Coding System,” are read out. At eleven minutes, images from Muybridge’s 1877 *Horse and Cart* series appear, accompanied by a voiceover from Alexandre Koyré’s 1950 text *The Significance of the Newtonian Synthesis*. Towards the end of the piece, images projected on a centrally positioned pianola and timed to coincide with the striking of its keys reach a crescendo before merging into a ball of UFO-like light upon the theatre’s ceiling.

“At the Heart of Everything” brings together all the key themes discussed in this essay: through manipulation of space, it tends towards the creation of an immersive “anti-environment,” where technologies are made to emerge as so many “figures” of attention; as with *Before the Revolution*, photography’s impact on our ways of seeing features as a key focus, and Muybridge’s horses make an important cameo; in the clash of mechanical voices and poetic sounds and imagery, connections with Heidegger’s notions of “enframing” and “*poiēsis*” can be made, and new reflections on the theme of technology breaking down are provoked, particularly by the *Lieh Tzu* story.


If there is something like a pivotal moment in “At the Heart of Everything,” however, it occurs roughly halfway through the piece as the viewer encounters home-video footage of a small boy circling on a trike: bemused, the child doesn’t pedal but simply holds the handlebars so as to perpetuate the circling. A voiceover states:

Entertainment. That’s where it all started, and that’s where it all ends up. Avoiding pain and seeking pleasure. Play the piano with your feet. Play the piano with your computer. Play cards. Press a button. What else can we do when there is [sic] only buttons left?⁴³

With these words, Lauschmann places two extremes of our contemporary relation to technology in a reversible relation of what we have called “figuring”: at the beginning of the work, Gaddis’ hysterical rant against technology established an anti-environment where technophobia emerged as the figure of attention; now, midway through, the relation is reversed, provoking reflection on the opportunities that technologies open up for childlike “play.”⁴⁴ The work seems to invite us to be both extremely aware and extremely open in our approach to the specificity of technologies and how they contribute to the environments of contemporary everyday experience. While the average computer user may not know a great deal about the machine’s internal workings, the same can be said of a child on a trike — yet

trepidation need not impede either the child's or the user's capacity to wonder at or innovate with the technology.

Conclusion

A guiding theme for this article has been “paradox” in the etymological sense of that which is “against common sense.” Lauschmann, I have argued, is an artist whose practice is paradoxical in this sense insofar as he works against our common sense of what technology is and how it influences behavior. By making disparate but highly specific technologies figures of his art, Lauschmann removes them from the “ground” of the accepted everyday and provokes reflection on the many ways in which they affect human existence. In this respect, his art relates to canonical philosophical reflections on technology from figures as diverse as McLuhan, Merleau-Ponty, and Heidegger. Like Lauschmann, these thinkers may be implicated in paradoxical practices of “figuring” our capacity to reflect critically and creatively on the technologies we use and the technologically mediated environments we inhabit. In McLuhan's case, this involves the “anti-environment,” a space where our common sense of things is suspended and recalibrated. In Merleau-Ponty's case, it involves highlighting the dynamic ontology of movement to call into question a common sense of things that was established by photography. In Heidegger's case, it involves the paradox of viewing art and technology as fundamentally opposed forces that nonetheless “belong together” and the paradox of finding something missing. A broader question to emerge from this essay then might be: to what extent is such a “passion for paradox” emblematic not merely of Lauschmann's work but of “new media art” in general? To what extent is such art a form of affective and enacted critique that takes up and goes beyond the concepts generated by philosophical reflections on technology in search of the paradoxical in a world of technologically mediated “common sense”? 

Notes

Thanks to Torsten Lauschmann and Dundee Contemporary Arts centre for granting permission to use the images featured in this article. All images courtesy of the artist Torsten Lauschmann and DCA (www.torstenlauschmann.com; www.dca.org.uk).

- 1 Torsten Lauschmann, *World Jump Day*, Accessed July 16, 2015, https://en.wikipedia.org/wiki/World_Jump_Day.
- 2 "Torsten Lauschmann - Biography," Accessed July 17, 2015, <http://www.torstenlauschmann.com/#/biography/4548508301>.
- 3 Sean Cubitt, "Noise, Luck," in *Startle*, eds. Torsten Lauschmann and David Bellingham. (Dundee: Dundee Contemporary Arts & Film and Video Umbrella, 2012), 38-40; Esther Leslie, "Luminescence," in *Startle*, eds. Torsten Lauschmann and David Bellingham. (Dundee: Dundee Contemporary Arts & Film and Video Umbrella, 2012), 51-52.
- 4 "Paradox, *n.* and *adj.*," Accessed July 16, 2015, <http://www.oed.com/view/Entry/137353?rskey=iwUKjn&result=1&isAdvanced=false#eid>. The OED provides the following etymology for "paradox": "mid 16th century (originally denoting a statement contrary to accepted opinion): via late Latin from Greek *paradoxon* 'contrary (opinion)', neuter adjective used as a noun, from *para-* 'distinct from' + *doxa* 'opinion.'" This essay will work with this *etymological* sense of paradox as opposed to more formal senses of paradox operative in contemporary formal logic (on this distinction, see "Paradoxes and Contemporary Logic," Accessed July 17, 2015, <http://plato.stanford.edu/entries/paradoxes-contemporary-logic/>).
- 5 "Philosophy of technology" is a growing but somewhat inchoate and diverse field of contemporary research. An inexhaustive list of approaches currently ranged under the heading in diverse ways would include: (1) Heideggerian and hermeneutical approaches (see, for example, Borgmann's *Technology and the Character of Everyday Life*, or Stiegler's *Technics and Time, 1: The Fault of Epimetheus*); (2) "post-phenomenology" (see Ihde's *Technics and Praxis: A Philosophy of Technology*); (3) "Object Oriented Ontology" (see Harman's *Guerrilla Metaphysics*); (4) contemporary McLuhanism (see Hayles' *How We Think*, or Van den Eede's *Amor Technologiae: Marshall McLuhan as Philosopher of Technology*); (5) social constructivism (see Winner's *The Whale and the Reactor*); (6) Foucauldianism (see, for example, Poster's *Information Please*); (7) "Critical Theory of Technology" (see Feenberg's *Transforming Technology*); (8) "Actor Network Theory" (see, for example, Latour's *Reassembling the Social*); (9) "Cyborg Theory" (see Haraway's "A Cyborg Manifesto"); (10) the Dutch "empirical" school (see Achterhuis' *American Philosophy of Technology* or Verbeek's *Moralizing Technology*); (11) "Extended Mind Thesis" (see, for example, Clark's *Supersizing the Mind*); and (12) "Philosophy of Information" (see Floridi's *The Philosophy of Information*). Without attempting to reduce any of the developing branches of contemporary philosophy of technology to any of the others, my aim is to examine three historical figures whose work relates to themes shared by several of the branches: McLuhan, for example, addressed themes of mediation and cognitive "extension"; Merleau-Ponty discussed embodiment and perception; Heidegger, interestingly, tends to surface across the branches of contemporary philosophy of technology as a figure who is emblematic of a problematic form of essentialist or "transcendental" philosophy of technology. Contemporary approaches are almost unanimously critical of Heidegger's approach in favor of more nuanced and case-specific "empirical" considerations of specific artefacts in action (see, for example, Verbeek's *Moralizing Technology*).

On Technological Ground

- 6 Torsten Lauschmann: *Startle Reaction*, Saturday 22 October 2011 – Sunday 8 January 2012, Accessed July 16, 2015, <http://dca.whitespacers.com/uploads/Torsten-Lauschmann-Gallery-Leaflet.pdf>.
- 7 Ibid.
- 8 Marshall McLuhan and Eric McLuhan, *Laws of Media* (Toronto: University of Toronto Press, 1988), 5. Emphasis added.
- 9 Compare, for example, McLuhan's remarks here with Ihde's remarks on the "variants" and "invariants" of perception (Don Ihde, *Experimental Phenomenology: Multistabilities* [New York: SUNY Press, 2012], 15-34), and with Husserl's remarks on "Intentionality as the Main Phenomenological Theme" (Edmund Husserl, *Ideas: General Introduction to Pure Phenomenology*, trans. W.R. Boyce Gibson [London and New York: Routledge, 2012], 170-174).
- 10 Marshall McLuhan, *Understanding Media* (London: Routledge, 1987), 7-21.
- 11 Torsten Lauschmann, "Misshapen Pearl," Single Screen Video, 8:33, 2003, Accessed July 20, 2015, <http://torstenlauschmann.com/#/misshapen-pearl-2003/4550473187>.
- 12 Torsten Lauschmann: *Startle Reaction*. See also Neil Mullholland, "Reel 2 Real Cacophony: United Artists' Twenty-First Century Pictures," in *Scottish Cinema Now*, ed. Jonathan Murray, Fidelma Farley, and Rod Stoneman (Newcastle: Cambridge Scholars Publishing, 2009), 20-39.
- 13 Torsten Lauschmann: *Startle Reaction*.
- 14 Torsten Lauschmann, *Self-Portrait as a Pataphysical Object*, Accessed July 20, 2015, <http://www.torstenlauschmann.com/#/self-portrait-as-a-pataphysica/4551080050>.
- 15 Moira Jeffrey, "Art Review: Torsten Lauschmann: Startle Reaction, Dundee Contemporary Arts," *The Scotsman*, Nov. 1, 2011, Accessed July 16, 2015, http://m.scotsman.com/lifestyle/visual-arts/art_review_torsten_lauschmann_startle_reaction_dundee_contemporary_arts_1_1939130. For a discussion of "pataphysics," as derived from the French absurdist Alfred Jarry, see Gilles Deleuze, "An Unrecognized Precursor to Heidegger: Alfred Jarry," in *Essays Critical and Clinical*, trans. Daniel W. Smith and Michael A. Greco (London: Verso, 1998), 91-98.
- 16 Torsten Lauschmann, *The Coy Lover*, Yamaha Disklavier, Snow Machine, Control Software, Spotlight, 1:13, 2011, Accessed July 20, 2015, <http://torstenlauschmann.com/#/the-coy-lover-2011/4558035156>.
- 17 See Gilles Deleuze and Claire Parnet, *Dialogues II*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Columbia University Press, 2007), 7.
- 18 See David Hume, *An Enquiry Concerning Human Understanding*, ed. Eric Steinberg (Indianapolis and Cambridge: Hackett, 1993), 50-55. Another of Lauschmann's works, "Dead Man's Switch" (2008) plays on the problem of induction in more obvious ways that recall the inventions of Descartes' followers on the so-called "Two Clocks" thesis of causal interaction (see Torsten Lauschmann, "Dead Man's Switch," Video projection, light switching, hard/software, 2008, Accessed July 20, 2015, <http://www.torstenlauschmann.com/#/dead-mans-switch-2008/4549566659>, and Bertrand Russell, *The History of Western Philosophy* [London: Routledge, 2004], 533.)
- 19 I have in mind here principally new media and net artists, from the established (see, for example, Mark Amerika, Accessed July 20, 2015, <http://markamerika.com/>; Maurizio Bolognini, Accessed July 20, 2015, <http://www.bolognini.org/>; and Thomson & Craighead, Accessed July 20, 2015, <http://thomson-craighead.net/>) through to the emergent (see, for

- example, the work of Gregory Chatonsky, Accessed July 20, 2015, <http://chatonsky.net/>;
Maja Petric, Accessed July 20, 2015, <http://www.majapetric.com/>; and Petra Cortright,
Accessed July 20, 2015, <http://www.petracortright.com/hello.html>).
- 20 Torsten Lauschmann, *Before the Revolution*, Monitor video (two minute loop), 0:34, Accessed
July 20, 2011, <http://torstenlauschmann.com/#/before-the-revolution-2011/4558035715>.
- 21 For the canonical contemporary discussion of (and challenge to) the simplifications of the
conventional “lineage” narrative involved here, see Vilém Flusser, *Towards a Philosophy of
Photography*, trans. Anthony Mathews (London: Reaktion Books, 2000).
- 22 For discussions of these received interpretations, see, for example, Arthur C. Danto, “The
Naked Truth,” in *Photography and Philosophy: Essays on the Pencil of Nature*, ed. Scott Walden.
(Oxford: Blackwell, 2010), 229, and Aaron Scharf, *Art and Photography* (London: The Penguin
Press, 1969), 170-175.
- 23 Maurice Merleau-Ponty, *L’Oeil et l’Esprit* (Paris: Éditions Gallimard, 1999), 80. My translation.
- 24 Torsten Lauschmann: *Startle Reaction*.
- 25 See, for example, Andrew Feenberg, *Transforming Technology: A Critical Theory Revisited*
(Oxford: Oxford University Press, 2002), 8.
- 26 Heidegger, “The Question Concerning Technology,” 3.
- 27 Ibid., 12.
- 28 See, for example, Jeff Malpas, *Heidegger and the Thinking of Place: Explorations in the Topology of
Being* (Cambridge, MA: MIT Press, 2012), 330-331.
- 29 Heidegger, “The Question Concerning Technology,” 34.
- 30 Ibid., 19-22.
- 31 Ibid., 27.
- 32 See Ibid., 34. Heidegger famously takes Enframing’s dependency on *poiēsis* to be signaled by
the fact that the ancient Greeks did not distinguish between “art” and “technology” but
instead referred to both as forms of *technē*. See also Martin Heidegger, “Traditional
Language and Technological Language,” trans. Wanda Torres Gregory, *Journal of
Philosophical Research* Vol. XXIII (1998): 129-145.
- 33 Martin Heidegger, *Being and Time*, trans. John Macquarie and Edward Robinson (Oxford:
Blackwell, 2005), 105.
- 34 See Heidegger, *Being and Time*, 102-107. Heidegger calls the modes of being in which a tool
exerts its independence “conspicuousness,” “obtrusiveness,” and “obstinacy.”
- 35 The traditional interpretation of this dynamic has been anthropocentric (or rather “*Dasein*”-
centric) insofar as it has emphasized the tendency of the broken tool to enjoy a kind of
negative liberty (“independence from” human intentions). In contrast, recent “realist”
developments in continental philosophy have, we might say, emphasized a form of
“positive liberty” for the object (that is, “independence to” be other than constituted by
human intentions). See Graham Harman, *Tool-Being: Heidegger and the Metaphysics of Objects*
(Peru, Illinois: Open Court, 2002), and Ian Bogost, *Alien Phenomenology, or What It’s Like to be a
Thing* (Minneapolis: University of Minnesota Press, 2012).
- 36 Torsten Lauschmann, *He’s Got the Whole World in His Hands*, Laptop, Biro Pen, Tuvan Throat
Singing Soundtrack, 1:01, 2009, Accessed July 20, 2015,
<http://torstenlauschmann.com/#/hes-got-the-whole-world-in/4549784259>.

- 37 By drawing attention to this split in a violent way, *He's Got the Whole World in His Hands* might also be read as implying a critique of the political "destinies" towards which such Heideggerian holism might stand to lead us. This is particularly important in the wake of the recent "Black Notebooks" controversy surrounding Heidegger (see Karl Löwith, *Martin Heidegger and European Nihilism*, trans. Gary Steiner (New York: Columbia University Press, 1995), and Peter E. Gordon, "Heidegger in the Black," Accessed July 20, 2015, <http://www.nybooks.com/articles/archives/2014/oct/09/heidegger-in-black/>).
- 38 Torsten Lauschmann, *Wunst*, Performance, Glasgow Transmission Gallery, 5:23, 2004, Accessed July 20, 2015, <http://torstenlauschmann.com/#/wunst-2004/4549785645>.
- 39 Torsten Lauschmann, *Piecework Orchestra*, 40 Computer Controlled Machines, Dimensions Variable, 4:56, 2007, Accessed July 20, 2015, <http://torstenlauschmann.com/#/piecework-orchestra-2007/4549785112>.
- 40 Torsten Lauschmann, *Dear Scientist, Please Paint Me*, Moving Head Light, Luminace Paint, Control Software, Speakers, 2:30, 2011, Accessed July 20, 2015, <http://torstenlauschmann.com/#/dear-scientist-please-paint-me/4558034730>.
- 41 Torsten Lauschmann, "At the Heart of Everything a Row of Holes," Moving Head Video Projection, Player Piano (midi), 26:32, 2011, Accessed July 20, 2015, <http://torstenlauschmann.com/#/at-the-heart-of-everything/4550244141>.
- 42 Eva Wong, *Lieh-Tzu: A Taoist Guide to Practical Living*, trans. Eva Wong (Boston: Shambhala Publications, 1995).
- 43 Ibid.
- 44 In connection with this, see Sicart's recent work on play and video games (Miguel Sicart, *Play Matters* (Cambridge MA: MIT Press, 2014), 93-101).

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