



University of Dundee

On Technological Ground

Smith, Dominic

Published in:
Evental Aesthetics

Publication date:
2015

Document Version
Publisher's PDF, also known as Version of record

[Link to publication in Discovery Research Portal](#)

Citation for published version (APA):
Smith, D. (2015). On Technological Ground: The Art of Torsten Lauschmann. *Evental Aesthetics* , 4(2), 138-170.

General rights

Copyright and moral rights for the publications made accessible in Discovery Research Portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from Discovery Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain.
- You may freely distribute the URL identifying the publication in the public portal.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

On Technological
Ground:
The Art of Torsten
Lauschmann

Dominic Smith

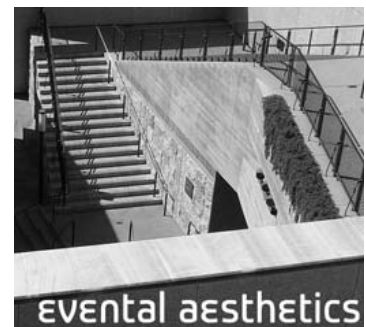
ABSTRACT

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'Œil 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

On Technological Ground

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

On Technological Ground

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.

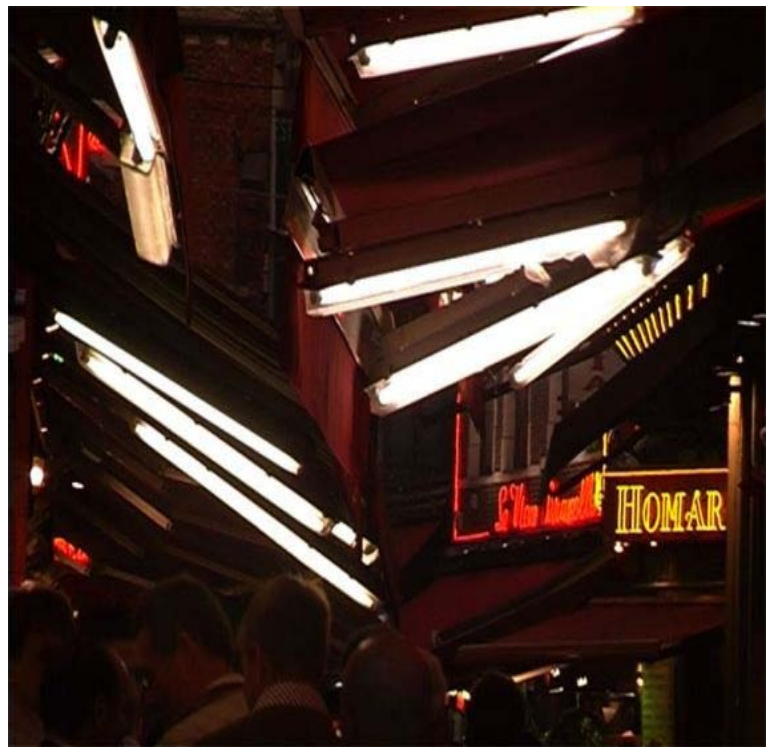


Figure 1. Misshapen Pearl (T. Lauschmann, 2003)



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

On Technological Ground

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

On Technological Ground

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)

On Technological Ground

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 “*poēisis*” 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_1939 130. 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 *poēisis* 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>.

On Technological Ground

- 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).

References

- Achterhuis, Hans, ed. *American Philosophy of Technology: The Empirical Turn*. Translated by R.P. Crease. Bloomington: Indiana University Press, 2001.
- Amerika, Mark. "Artist's Website." Accessed July 20, 2015. <http://markamerika.com/>.
- Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In *Illuminations*, translated by Harry Zohn, edited by Hannah Arendt, 211-245. London: Pimlico, 1999.
- . *The Arcades Project*. Translated by Howard Eiland & Kevin McLaughlin. London: The Belknap of Harvard University Press, 2002.
- Bogost, Ian. *Alien Phenomenology, or What It's Like to be a Thing*. Minneapolis: University of Minnesota Press, 2012.
- Bolognini Maurizio. "Artist's Website." Accessed July 20, 2015. <http://www.bolognini.org/>.
- Borgmann, Albert. *Technology and the Character of Everyday Life*. Chicago: University of Chicago Press, 1984.
- Cantini, Andrea. "Paradoxes and Contemporary Logic." Fall 2014. Accessed July 17, 2015. <http://plato.stanford.edu/entries/paradoxes-contemporary-logic/>.
- Chatonsky, Gregory. "Artist's Website." Accessed July 20, 2015. <http://chatonsky.net/>.
- Clark, Andy. *Supersizing the Mind: Embodiment, Action and Cognitive Extension*. Oxford: Oxford University Press, 2010.
- Cortright, Petra. "Artist's Website." Accessed July 20, 2015. <http://www.petracortright.com/hello.html>.
- Crary, Jonathan. *24/7: Late Capitalism and the Ends of Sleep*. London: Verso, 2013.
- Danto, Arthur C. "The Naked Truth." In *Photography and Philosophy: Essays on the Pencil of Nature*, edited by Scott Walden, 284-309. Oxford: Blackwell, 2010.

On Technological Ground

- Deleuze, Gilles. *Francis Bacon: The Logic of Sensation*. Translated by Daniel W. Smith. London: Continuum, 2005.
- Deleuze, Gilles and Claire Parnet. *Dialogues II*. Translated by Hugh Tomlinson and Barbara Habberjam. New York: Columbia University Press, 2007.
- Feenberg, Andrew. *Transforming Technology: A Critical Theory Revisited*. Oxford: Oxford University Press, 2002.
- Flusser, Vilém. *Towards a Philosophy of Photography*. Translated by Anthony Mathews. London: Reaktion Books, 2000.
- Gaddis, William. *Agapē Agape*. London: Atlantic Books, 2003.
- Gordon, Peter E. "Heidegger in the Black." Accessed July 20, 2015.
<http://www.nybooks.com/articles/archives/2014/oct/09/heidegger-in-black/>.
- Harman, Graham. *Tool-Being: Heidegger and the Metaphysics of Objects*. Peru, Illinois: Open Court, 2002.
- . *Guerilla Metaphysics: Phenomenology and the Carpentry of Things*. Peru, Illinois: Open Court, 2007.
- Hayles, N. Katherine. *How We Think: Digital Media and Contemporary Technogenesis*. London: University of Chicago Press, 2012.
- Heidegger, Martin. *Being and Time*. Trans. John Macquarrie and Edward Robinson. Oxford: Blackwell, 2005.
- . "The Question Concerning Technology." In *The Question Concerning Technology and Other Essays*. Translated by William Lovitt, 3-36. New York: Harper Row, 1977.
- . "Traditional Language and Technological Language." Translated by Wanda Torres Gregory. *Journal of Philosophical Research* Vol. XXIII (1998): 129-145.
- Hume, David. *An Enquiry Concerning Human Understanding*. Edited by Eric Steinberg. Indianapolis and Cambridge: Hackett, 1993.
- Husserl, Edmund. *Ideas: General Introduction to Pure Phenomenology*. Translated by W.R. Boyce Gibson. London: Routledge, 2012.
- Ihde, Don. *Technics and Praxis: A Philosophy of Technology*. Dordrecht: D. Reidel, 1979.

- . *Experimental Phenomenology: Multistabilities*. New York: SUNY Press, 2012.
- Jeffrey, Moira. “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.
- Latour, Bruno. *Reassembling the Social: An Introduction to Actor-Network-Theory*. Oxford: Oxford University Press, 2007.
- Lauschmann, Torsten. “Misshapen Pearl.” Single Screen Video, 8:33. 2003. Accessed July 20, 2015. <http://torstenlauschmann.com/#/misshapen-pearl-2003/4550473187>.
- . *Wunst*. Performance, Glasgow Transmission Gallery, 5:23. 2004. <http://torstenlauschmann.com/#/wunst-2004/4549785645>.
- . *Self-Portrait as a Pataphysical Object*. 2006. Accessed July 20, 2015. <http://www.torstenlauschmann.com/#/self-portrait-as-a-pataphysica/4551080050>.
- . *Piecework Orchestra*. 40 Computer Controlled Machines, Dimensions Variable, 4:56. 2007. Accessed July 20, 2015. <http://torstenlauschmann.com/#/piecework-orchestra-2007/4549785112>.
- . *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>.
- . “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>.
- . *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>.
- . *Dear Scientist, Please Paint Me*. Moving Head Light, Luminace Paint, Control Software, Speakers, 2:30. 2011. Accessed July 20, 2015.

On Technological Ground

- <http://torstenlauschmann.com/#/dear-scientist-please-paint-me/4558034730>.
- . *Startle Reaction, Saturday 22 October 2011 - Sunday 8 January 2012*. Accessed July 16, 2015. <http://dca.whitespacers.com/uploads/Torsten-Lauschmann-Gallery-Leaflet.pdf>.
- . and David Bellingham, eds. *Startle*. Dundee: Dundee Contemporary Arts & Film and Video Umbrella, 2012.
- . *World Jump Day*. Accessed July 16, 2015. https://en.wikipedia.org/wiki/World_Jump_Day.
- Löwith, Karl. *Martin Heidegger and European Nihilism*. Translated by Gary Steiner. New York: Columbia University Press, 1995.
- Malpas, Jeff. *Heidegger and the Thinking of Place: Explorations in the Topology of Being*. Cambridge, MA: MIT Press, 2012.
- McLuhan, Marshall. *Understanding Media*. London: Routledge, 1987.
- . and Eric McLuhan. *Laws of Media*. Toronto: University of Toronto Press, 1988.
- Merleau-Ponty, Maurice. *L'Œil et l'esprit*. Paris: Éditions Gallimard, 1999.
- Mulholland, Neil. "Reel 2 Real Cacophony: United Artists' Twenty-First Century Pictures." In *Scottish Cinema Now*, edited by Jonathan Murray, Fidelma Farley, and Rod Stoneman, 20-39. Newcastle: Cambridge Scholars Publishing, 2009.
- OED. "Paradox, *n.* and *adj.*" June 2015. Accessed July 16, 2015. <http://www.oed.com/view/Entry/137353?rskey=iwUKjn&result=1&isAdvanced=false#eid>.
- Petric, Maja. "Artist's Website." Accessed July 20, 2015. <http://www.majapetric.com/>.
- Poster, Mark. *Information Please: Culture and Politics in the Age of Digital Machines*. Durham, North Carolina: Duke University Press, 2006.
- Russell, Bertrand. *The History of Western Philosophy*. London: Routledge, 2004.
- Scharf, Aaron. *Art and Photography*. London: Penguin, 1969.
- Sicart, Miguel. *Play Matters*. Cambridge, MA: MIT Press, 2014.

- Stiegler, Bernard. *Technics and Time, 1: The Fault of Epimetheus*. Translated by Richard Beardsworth and George Collins. Stanford: Stanford University Press, 1998.
- Thomson, Jon and Alison Craighead. "Artists' Website." Accessed July 20, 2015. <http://thomson-craighead.net/>.
- Van den Eede, Yoni. *Amor Technologiae: Marshall McLuhan as Philosopher of Technology*. Brussels: VUB Press, 2013.
- Verbeek, Peter Paul. *Moralizing Technology: Understanding and Designing the Morality of Things*. Chicago: University of Chicago Press, 2011.
- Winner, Langdon. *The Whale and the Reactor: A Search for Limits in an Age of High Technology*. Chicago: Chicago University Press, 1986.
- Wong, Eva. *Lieh-Tzu: A Taoist Guide to Practical Living*. Boston: Shambhala Publications, 1995.