MONDAY

MATERIAL PERFORMANCE

EMILY ZIMMERMAN

Introduction

"All things are alter'd
nothing destroyed"
— Ovid, *The Metamorphosis*

What do we make today of Ovid's *carmen perpetuum*, his everlasting song, that speaks of the timelessness of transformation, itself subject to numerous mutations of meaning through the multitude of translations that it has been subject to since it was first published in 8 CE?[1] Or of a particular translator, John Dryden, whose own philosophy of translation allowed for ever greater degrees of divergence from the original text? Dryden only chose to translate select texts over the course of his career – Ovid, Virgil,

[1] Ovid - to 'spin out a continuous song from the first beginning of the world down to my own times."
[2] The series included lectures by Karen Barad, Luca Turin, Thomas Zummer, Riccardo Manzotti, Dieter Roelstraete, and Giuliana Bruno.

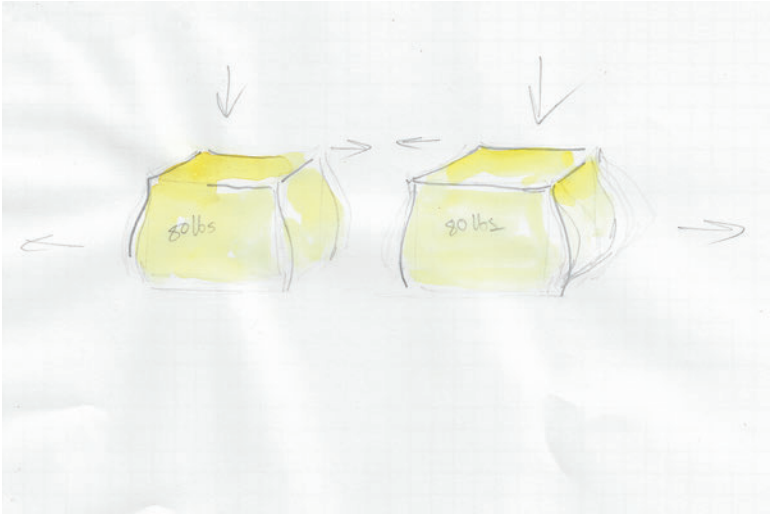
Homer, Horace, Juvenal, Lucretius, Persius, and Theocritus – those that helped him to refine his own thoughts through the process of translation, the one process interdependent on the other. In the opening lines of *Meeting the Universe Halfway,* Karen Barad succinctly encapsulates that interdependency by saying – "Existence is not an individual affair. Individuals do not preexist their interactions; rather, individuals emerge through and as part of their entangled intra-relating."

The focus of this first volume of *Monday* is "Material Performance" the title of a series of exhibitions that took place at the Jacob Lawrence Gallery in the fall of 2017. An extension of a lecture series that took place at the Experimental Media and Performing Art Center in 2014[2], *Material Performance* presented works that transformed continuously throughout the exhibition by processes of growth, decay, and what is known in physics as phase changes where matter in one state transforms into another (say from a solid to a liquid). Each artwork laid bare the interactions between the artwork, the environmental conditions of the gallery, and the peripatetic movement of the audience. *Material Performance* drew on sources as divergent as the "Golden Chain of Homer," an alchemical text written by Anton Josef Kirchweger in 1723; Bergson's reflections on time and materiality in *Creative Evolution* (the back cover of this volume bears Bergson's famous passage on lived duration); Deleuze's response in *Bergsonism*;[3] and the key texts of new materialism, a recent trend in philosophical thought manifested in the writings of Karen Barad, Rosi Braidotti, Elizabeth Grosz, Jane Bennett, and Manuel DeLanda. The exhibition's title playfully takes its name from that material science term that measures materials against a set of performance standards, put to the test in consumer product design.

[3] Deleuze says: "Take a lump of sugar… it has a duration, a rhythm of duration, a way of being in time that is at least partially revealed in the process of its dissolving, and that shows how this sugar differs in kind not only from other things, but first and foremost from itself. This alteration, which is one with the essence or the substance of a thing, is what we grasp when we conceive it in terms of Duration." Gilles Deleuze, *Bergsonism*, (Cambridge, MIT Press, 1988), 31.

These pages are suffused by innumerable conversations that lie just beneath the surface of the page. The journal you hold in your hands – *Monday* – makes visible some of these conversations surrounding the Jacob Lawrence Gallery, within the University of Washington's School of Art + Art History + Design. While the journal focuses on artists' writing, it is not exclusively devoted to it. And while each issue is thematically driven, it veers off topic as needed. Monday is the day that the gallery's doors are closed, a day for reading and reflecting. It is also the day that marks the beginning of a production cycle, and the start of the workweek in the context of the late capitalism. This journal itself evolved out of *The Jake Journal* – which was produced by students and for students from 2014 – 2016.

This journal is the result of the thought, time, and contributions of many. I would like to thank the writers and artists that contributed their work to this volume – Kemi Adeyemi, Karen Barad, Matt Browning, Nate Clark, Aaron Flint Jamison, Leena Joshi, Stuart Lingo, Francesca Lohmann, Fionn Meade, Robert Rhee, Emily Pothast, and Terre Thaemlitz. Greg Kucera Gallery generously supported the production of this inaugural issue of the journal, which would not have been possible without this crucial support. I am so grateful to Christian Alborz Oldham, Art Director for *Monday*, and to Eli Kahn, who thoughtfully and patiently designed these pages you now read. Merith Bennett, Sarah Faulk, and Colleen Louise Barry meticulously proofread each of the essays, and Aurora San Miguel made sure that the journal would be carried by key bookstores throughout the country. I would sincerely like to thank Tanja Baumann for her invaluable advisement on launching *Monday*, and to Peter Miller for hosting the launch party and carrying the journal. Risa Morgan Lewellyn wisely made sure that the institutional infrastructures for producing and sustaining this journal were in place. Finally, none of this would have been possible with out the gracious leadership of Jamie Walker, Director of the University of Washington's School of Art + Art History + Design.



Francesca Lohmann, Drawings for *Taffy VIII,* 2017.

Taffy VIII was installed in the Jacob Lawrence Gallery as part of *Material Performance: Part II* from November 8 - December 9, 2017. Three images of *Taffy VIII* at different stages punctuate this journal.

Book I: The Creation of the World

Of bodies chang'd to various forms, I sing:
Ye Gods, from whom these miracles did spring,
Inspire my numbers with coelestial heat;
'Till I my long laborious work compleat:
And add perpetual tenour to my rhimes,
Deduc'd from Nature's birth, to Caesar's times.
Before the seas, and this terrestrial ball,
And Heav'n's high canopy, that covers all,
One was the face of Nature; if a face:
Rather a rude and indigested mass:
A lifeless lump, unfashion'd, and unfram'd,
Of jarring seeds; and justly Chaos nam'd.
No sun was lighted up, the world to view;
No moon did yet her blunted horns renew:
Nor yet was Earth suspended in the sky,
Nor pois'd, did on her own foundations lye:
Nor seas about the shores their arms had thrown;
But earth, and air, and water, were in one.
Thus air was void of light, and earth unstable,

"Book I: The Creation of the World" from *Metamorphoses*, translated by Sir Samuel Garth, John Dryden, et al., 1913.

And water's dark abyss unnavigable.
No certain form on any was imprest;
All were confus'd, and each disturb'd the rest.
For hot and cold were in one body fixt;
And soft with hard, and light with heavy mixt.

But God, or Nature, while they thus contend,
To these intestine discords put an end:
Then earth from air, and seas from earth were driv'n,
And grosser air sunk from aetherial Heav'n.
Thus disembroil'd, they take their proper place;
The next of kin, contiguously embrace;
And foes are sunder'd, by a larger space.
The force of fire ascended first on high,
And took its dwelling in the vaulted sky:
Then air succeeds, in lightness next to fire;
Whose atoms from unactive earth retire.
Earth sinks beneath, and draws a num'rous throng
Of pondrous, thick, unwieldy seeds along.
About her coasts, unruly waters roar;
And rising, on a ridge, insult the shore.
Thus when the God, whatever God was he,
Had form'd the whole, and made the parts agree,
That no unequal portions might be found,
He moulded Earth into a spacious round:
Then with a breath, he gave the winds to blow;
And bad the congregated waters flow.
He adds the running springs, and standing lakes;
And bounding banks for winding rivers makes.
Some part, in Earth are swallow'd up, the most
In ample oceans, disembogu'd, are lost.
He shades the woods, the vallies he restrains
With rocky mountains, and extends the plains.

And as five zones th' aetherial regions bind,
Five, correspondent, are to Earth assign'd:
The sun with rays, directly darting down,
Fires all beneath, and fries the middle zone:
The two beneath the distant poles, complain
Of endless winter, and perpetual rain.
Betwixt th' extreams, two happier climates hold

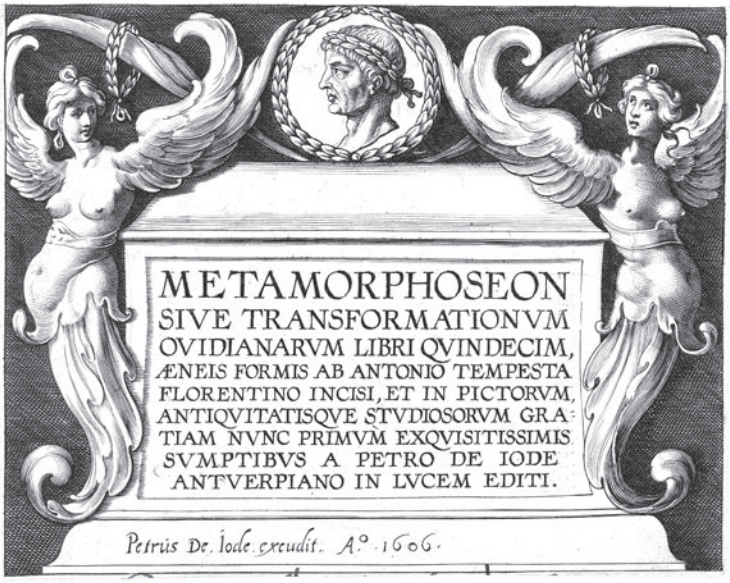
The temper that partakes of hot, and cold.
The fields of liquid air, inclosing all,
Surround the compass of this earthly ball:
The lighter parts lye next the fires above;
The grosser near the watry surface move:
Thick clouds are spread, and storms engender there,
And thunder's voice, which wretched mortals fear,
And winds that on their wings cold winter bear.
Nor were those blustring brethren left at large,
On seas, and shores, their fury to discharge:
Bound as they are, and circumscrib'd in place,
They rend the world, resistless, where they pass;
And mighty marks of mischief leave behind;
Such is the rage of their tempestuous kind.
First Eurus to the rising morn is sent
(The regions of the balmy continent);
And Eastern realms, where early Persians run,
To greet the blest appearance of the sun.
Westward, the wanton Zephyr wings his flight;
Pleas'd with the remnants of departing light:
Fierce Boreas, with his off-spring, issues forth
T' invade the frozen waggon of the North.
While frowning Auster seeks the Southern sphere;
And rots, with endless rain, th' unwholsom year.

High o'er the clouds, and empty realms of wind,
The God a clearer space for Heav'n design'd;
Where fields of light, and liquid aether flow;
Purg'd from the pondrous dregs of Earth below.

Scarce had the Pow'r distinguish'd these, when streight
The stars, no longer overlaid with weight,
Exert their heads, from underneath the mass;
And upward shoot, and kindle as they pass,
And with diffusive light adorn their heav'nly place.
Then, every void of Nature to supply,
With forms of Gods he fills the vacant sky:
New herds of beasts he sends, the plains to share:
New colonies of birds, to people air:
And to their oozy beds, the finny fish repair.
A creature of a more exalted kind

Was wanting yet, and then was Man design'd:
Conscious of thought, of more capacious breast,
For empire form'd, and fit to rule the rest:
Whether with particles of heav'nly fire
The God of Nature did his soul inspire,
Or Earth, but new divided from the sky,
And, pliant, still retain'd th' aetherial energy:
Which wise Prometheus temper'd into paste,
And, mixt with living streams, the godlike image cast.

Thus, while the mute creation downward bend
Their sight, and to their earthly mother tend,
Man looks aloft; and with erected eyes
Beholds his own hereditary skies.
From such rude principles our form began;
And earth was metamorphos'd into Man.



Antonio Tempesta, Titlepage to Ovid's 'Metamorphoses', 1606.
The Elisha Whittelsey Collection, The Elisha Whittelsey Fund, 1951.

KAREN BARAD

The Science and Ethics of Mattering

Matter and meaning are not separate elements. They are inextricably fused together, and no event, no matter how energetic, can tear them asunder. Even atoms, whose very name, ἄτομος (atomos), means ''indivisible'' or ''uncuttable,'' can be broken apart. But matter and meaning cannot be dissociated, not by chemical processing, or centrifuge, or nuclear blast.

Mattering is simultaneously a matter of substance and significance, most evidently perhaps when it is the nature of matter that is in question, when the smallest parts of matter are found to be capable of exploding deeply entrenched ideas and large cities. Perhaps this is why contemporary physics makes the inescapable entanglement of matters of being, knowing, and doing, of ontology, epistemology, and ethics, of fact and value, so tangible, so poignant.

Setting the Scene.

In September 1941, when Nazi empire building had reached its pinnacle, the German physicist Werner Heisenberg paid a visit to his mentor Niels Bohr in Nazi-occupied Denmark. Bohr, who was of Jewish ancestry, was head of the world-renowned physics institute in Copenhagen that bears his name. Heisenberg, Bohr's protégé and a leading physicist in his own right, was at that time head of the German effort to produce an atomic bomb. Filled with nationalist pride for his homeland, Heisenberg decided to stay in Germany despite offers from abroad, but by all accounts he was not a Nazi or a Nazi sympathizer. Bohr and Heisenberg were two of the great leaders of the quantum revolution in physics. Their respective interpretations of quantum physics—complementarity and uncertainty—constitute the nucleus of the so-called Copenhagen interpretation of quantum mechanics. The two Nobel laureates had a special bond between them—a relationship described as that between father (Bohr) and son (Heisenberg)—that was broken apart by the events of this inauspicious visit. Although the details of what transpired during their fateful exchange in the autumn of 1941 are still a matter of controversy, it is clear that matters of the gravest consequences, including the prospect of a German atomic bomb, were discussed.[1]

Why did Heisenberg come to Copenhagen? What was he hoping to talk with Bohr about? What were his intentions? Did Heisenberg hope to find out what Bohr knew about the Allied bomb project? Did he come to warn Bohr about the German project and reassure him that he was doing everything in his power to stall it? Did he want to see if he could convince Bohr to take advantage of their shared status as authorities on atomic

physics to convince both sides to abandon their respective projects to build atomic weapons? Did he hope to gain some important insight from his mentor about physics or ethics or the relationship between the two?

This question—why Heisenberg went to see Bohr in 1941—is the focal point of a recent Tony Award–winning play that considers the controversy surrounding this fateful meeting. The play doesn't resolve the controversy; on the contrary, the play itself has gotten caught up in its very orbit. In Michael Frayn's play *Copenhagen*, the ghosts of Bohr, Heisenberg, and Bohr's wife, Margrethe, meet at the old Bohr residence to try to reconcile the events of that fateful autumn day. As if working out the details of a problem in atomic physics, Bohr, Heisenberg, and Margrethe make three attempts to calculate Heisenberg's intentions, by enacting and at times stopping to reflect on three possible scenarios of what might have occurred. Each attempt to resolve the uncertainty is foiled. But that is precisely the point Frayn wishes to make: drawing an analogy with Heisenberg's uncertainty principle, Frayn suggests that the question of why Heisenberg came to Copenhagen in 1941 does not remain unresolved for any practical reason, such as some insufficiency in the historical record that can be straightened out with newfound evidence or some new clarifying insight, but rather is unresolvable in principle because uncertainty is an inherent feature of human thinking, and when all is said and done, no one, not even Heisenberg, understands why he came to Copenhagen.

Frayn's uncertainty principle—the one that says that ''we can [in theory] never know everything about human thinking''—is not an actual consequence of Heisenberg's uncertainty principle but an invention of the playwright, created purely on the basis of analogy. Frayn is not applying the Heisenberg uncertainty principle—which concerns the limits to our knowledge of the behavior of physical objects, like atoms or electrons—to the problem of what it is possible to know about human behavior; he is simply drawing a parallel. Using this analogy, Frayn moves rapidly from the realm of epistemology (questions about the nature of knowledge) to the domain of morality (questions about values), from the uncertainty of intentionality

to the undecidability of moral issues. On the basis of his own uncertainty principle, he reasons, or perhaps moralizes, that because we can never really know why anyone does what he or she does, moral judgments lose their foundation. We'll never know whether Heisenberg was actively trying to build an atom bomb for Germany or whether he purposely foiled these efforts to prevent Hitler from getting his hands on new weapons of mass destruction. We are placed face-to-face with a question of profound moral significance where nothing less than the fate of humanity was at stake, and uncertainty foils our efforts to assign responsibility—uncertainty saves Heisenberg's tormented soul from the judgments of history. The play thereby raises more specters than it puts to rest.

Copenhagen is an engaging, clever, and beautifully written play. It has all the allure of a romance with its bold display of explicit intimacy between science and politics, peppered with the right amount of controversy. It also has its share of critics. While many critics have taken issue with important historical inaccuracies that haunt the play, my focus is on Frayn's portrayal of quantum physics and its philosophical implications, a portrayal, I will argue, that is fraught with difficulties.

Frayn's play serves as a useful counterpoint to what I hope to accomplish in this book. On the surface, the subject matter may appear similar. Questions of science, politics, ethics, and epistemology are among the key concerns taken up in this book. Indeed, quantum physics and its philosophical implications and differences in the approaches of Bohr and Heisenberg figure centrally here as well. But this is where the similarity ends. We diverge in purpose, approach, methodology, genre, style, audience, backgrounds, interests, values, level of accountability to empirical facts, standards of rigor, forms of analysis, modes of argumentation, and conclusions. Crucially, we also sharply diverge in our philosophical starting points and the depth of our respective engagements with the physics and the philosophical issues.

In an important sense, Frayn's viewpoint is more familiar and fits more easily with common-sense notions about the nature of knowing and being than the view I will present here. Frayn presents his audience with a set of binaries—the social

and the natural, the macroscopic and the microscopic, the laws of man and the laws of nature, internal states of consciousness and external states of being, intentionality and history, ethics and epistemology, discourse and materiality—and his approach to relating the two sets is to draw analogies across the gap. He also presupposes a metaphysics of individualism for both the micro and macro scales: humans, like atoms, are assumed to be discrete individuals with inherent characteristics (such as intelligence, temperament, and intentional states of mind). And at times he freely mixes issues of being and knowing, ontology and epistemology, as if they were interchangeable isotopes in a chemical brew.

What, if anything, does quantum physics tell us about the nature of scientific practice and its relationship to ethics? Before this question can be approached, two prior issues must be addressed. First of all, there is an important sense in which the question is not well defined. The interpretative issues in quantum physics (i.e., questions related to what the theory means and how to understand its relationship to the world) are far from settled. When questions about the philosophical implications of quantum physics arise, no definitive answers can be given in the absence of the specification of a particular interpretation. Moreover, public fascination with the subject has been met with a plethora of popular accounts that have sacrificed rigor for the sake of accessibility, entertainment, and, if one is honest, the chance to garner the authority of science to underwrite one's favorite view.[2] As a result the public is primed to accept any old counterintuitive claim as speaking the truth about quantum theory. These factors, taken together, pose serious difficulties for anyone trying to make sense of, let alone answer, this potentially important question. Clearly any serious consideration of this question must begin by disambiguating legitimate issues from fancy and taking a clear stand with respect to the interpretative issues.

Public fascination with quantum physics is probably due in large part to several different factors, including the counterintuitive challenges it poses to the modernist worldview, the fame of the leading personalities who developed and contested the theory (Einstein not least among them), and the profound

and world-changing applications quantum physics has wrought (often symbolized in the public imagination, fairly or unfairly, by the development of the atomic bomb). But can it be this factor alone—this public hunger to know about quantum physics—that accounts for the plethora of incorrect, misleading, and otherwise inadequate accounts? What is it about the subject matter of quantum physics that it inspires all the right questions, brings the key issues to the fore, promotes open-mindedness and inquisitiveness, and yet when we gather round to learn its wisdom, the response that we get almost inevitably seems to miss the mark? One is almost tempted to hypothesize an uncertainty relation of sorts that represents a necessary trade-off between relevance and understanding. But this is precisely the kind of analogical thinking that has so often produced unsatisfactory understandings of the relevant issues.

We cannot hope to do justice to this important question—the implications of quantum physics for understanding the relationship between science and ethics—on the basis of mere analogies. That's one important lesson we should understand from the plethora of failed attempts. Frayn's *Copenhagen* is a case in point. In this sense the play can be used as an important teaching tool. In what follows, I examine the play in some detail to draw some important contrasts and to help set the stage for introducing some of the main themes of this book. This interlude provides a dramatic introduction to some of the relevant historical background, main characters, and key ideas and enables me to highlight some of the important ways in which my approach differs from the more common analogical approaches.

''Does one as a physicist have the moral right to work on the practical exploitation of atomic energy?''[3] Heisenberg's haunting question to Bohr hangs in the air throughout *Copenhagen*. But for its playwright, Michael Frayn, this moral question is a side issue. The one that really interests him is the meta-ethical question of how it is possible to make moral judgments at all. Frayn puts it this way: ''The moral issues always finally depend on the epistemological one, on the judgment of other people's motives, because if you can't have any knowledge of other people's motives, it's very difficult to come to any objective moral judgment

of their behavior.''[4] But how does this dilemma arise? Why can't we have any knowledge of other people's motives and intentions? According to Frayn, the root of the dilemma derives from the analogy he wants to draw with Heisenberg's uncertainty principle. The Heisenberg uncertainty principle says that there is a necessary limit to what we can simultaneously know about certain pairs of physical quantities, such as the position and momentum of a particle. (The momentum of a particle is related to its velocity; in particular, momentum is mass times velocity.) Frayn suggests that by way of analogy there is a necessary limit to what we can know about mental states (such as thoughts, intentions, and motivations), including our own. But if the goal is to set up an uncertainty principle for people in analogy with the famous one that Heisenberg proposes for particles, and one is committed to doing so with some care, then it does not follow that ''we can't have any knowledge of other people's motives.''

Let's look more closely at what Heisenberg's principle says. Heisenberg does not say that we can't have any knowledge about a particle's position and momentum; rather, he specifies a trade-off between how well we can know both quantities at once: the more we know about a particle's position, the less we know about its momentum, and vice versa.[5] So if, as Frayn suggests, he is interested in constructing an analogous principle for people that specifies a trade-off between a subject's actions and the subject's motivations behind those actions, it would have to say something more along the lines of: we can't have full knowledge of people's motives and know something about their actions that enact those motives; that is, we can't be fully certain about both a person's actions and what motivated those actions. (Which is not to say that I endorse such a principle. I am simply trying to tidy up the analogy Frayn wants to make.) But the fact that knowledge of motivations is not *prohibited*, but rather *limited*, has enormously important consequences for thinking about the question of moral judgment. Frayn argues that since there is no way in principle to get around the limits of our knowledge, and we are therefore forever blocked from having any knowledge about someone's motives, it is not possible to make any objective moral judgments. However, as we just saw, a more careful way of drawing

the analogy does not in fact undermine any and all considerations of moral issues based on knowledge of the motivations behind a subject's actions, as long as those considerations do not require full and complete knowledge but can instead be based on partial understandings.

Now, Frayn is the first to admit that the analogy that he draws is not an exact parallel, but his admission has nothing to do with the crucial fault in his analogical reasoning that we just discussed. Rather, Frayn's concession is of a different sort: he readily acknowledges that he is not making an *argument* for the limits of moral judgment on the basis of quantum physics. But he does see his play as a means of exploring a parallel epistemic limit for discerning the content of mental states (like thoughts, motives, and intentions). Hence his overstatement of the principled limitation poses a fundamental difficulty that goes to the core issue of the play. But rather than stop here, it is instructive to continue our considerations of Frayn's analogical methodology. Before we examine how Frayn exploits this parallel in the play, it's important to understand what is at stake in the way he frames the issues. (Another specter haunts the play: questions of the playwright's motivations.)

The stakes are these. The controversy about the matter of Heisenberg's intentions in visiting Bohr in Nazi-occupied Copenhagen in 1941 has never been settled. Indeed, the question about why Heisenberg went to visit Bohr during the war is a pivotal clue in a much larger puzzle that history yearns to (re) solve: What role did Heisenberg play as a leading German scientist and head of the Nazi bomb project during World War II? Did Heisenberg, as he claimed after the war, do his best to foil the German bomb project? Or was the actual stumbling block that undermined the German project the fact that Heisenberg had failed to get the physics right, a conclusion drawn by the majority of the physics community? Frayn is clearly sympathetic to Heisenberg's postwar rendering. And Frayn also doesn't hide the fact that his uncertainty principle for psychological states of mind is a means of attempting to get history to back off from issuing any harsh judgments against Heisenberg. ''I find it very difficult to judge people who lived in totalitarian societies,'' Frayn says.

''You can admire people who acted heroically, but you can't expect people to behave that way.''[6]

It's important to note that the play itself generated a considerable amount of controversy, especially following its opening in the United States. Its enthusiastic reception in London notwithstanding, American scientists and historians of science have criticized the play for its gross historical inaccuracies and its far-too-sympathetic portrayal of Heisenberg. Frayn acknowledges that Thomas Powers's Pulitzer Prize–winning book *Heisenberg's War: The Secret History of the German Bomb* (1993) was the inspiration for his play. Inspiration is one thing, but when a discredited account forms the primary basis for drawing the outlines and details of a dramatization of an important historical encounter, does the artist not have some obligation to history? What are the moral obligations and responsibilities of the artist? Questions of this nature have been asked of Frayn. But even with the emergence of new historical evidence that flies in the face of Frayn's reconstruction, he remains resolutely unrepentant. In his responses to his critics, he insists that he doesn't feel any obligation to hold himself responsible to the historical facts. Perhaps we shouldn't be surprised, since he claims to have offered a principled argument to absolve Heisenberg from any responsibility to history. (Perhaps Heisenberg does indeed deserve absolution, but Frayn's argument is that we have no ground to make such a determination.)

Significantly, the journalist Thomas Powers's rendition is based on the discredited thesis of the Swiss-German journalist Robert Jungk. Initially published in German, Jungk's reconstruction of the historical events, *Brighter than a Thousand Suns* (German edition, 1956; English edition, 1958), exculpates the German scientists for their involvement in the war effort, Heisenberg foremost among them, and argues that they were secretly engaged in resistance efforts against Hitler. In Powers's book we find this myth of heroic resistance expanded into a highly embellished ''shadow history'' of the German atomic bomb project. Significantly, Robert Jungk has publicly repudiated his own thesis. For his part, Jungk admits to having been far too impressed with the personalities involved. Jungk takes his

inspiration from a letter Heisenberg sent to him after the war detailing his recollection of the famous 1941 meeting with Bohr. Jungk includes a copy of the letter in his book. He notes that ''if one could interpret the content of [the] conversation [between Bohr and Heisenberg] in psychological terms, it would depend on very fine nuances indeed.''[7]

Frayn was clearly impressed by the possibility of considering the ''very fine nuances'' in psychological terms, but Bohr was not. Bohr was enraged by Heisenberg's recasting of the story. Upon encountering the letter in Jungk's book, Bohr drafted a letter to Heisenberg denouncing his misleading account. But Bohr never sent the letter. Following his death in 1962, the Bohr family discovered several drafts of the letter and deposited them with the Niels Bohr Archive in Copenhagen with instructions to have them sealed until 2012, fifty years after Bohr's death. Historians could only speculate about Bohr's version of the encounter. But then, in 2002, the Bohr family agreed to the early release of all documents pertaining to the 1941 visit, including different versions of Bohr's unsent letter to Heisenberg.[8] The early release was precipitated by public interest in the controversy generated by Frayn's *Copenhagen*.

What do the documents reveal? In his response to Heisenberg, Bohr makes it clear that he was shocked and dismayed by the news Heisenberg brought to Copenhagen in 1941 ''that Germany was participating vigorously in a race to be the first with atomic weapons.'' Bohr writes to Heisenberg:

> You . . . expressed your definite conviction that Germany would win and that it was therefore quite foolish for us to maintain the hope of a different outcome of the war and to be reticent as regards all German offers of cooperation. I also remember quite clearly our conversation in my room at the Institute, where in vague terms you spoke in a manner that could only give me the firm impression that, under your leadership, everything was being done in Germany to develop atomic weapons and that you said that there was no need to talk about details since you were completely familiar with them and had spent the past two years working more

> or less exclusively on such preparations. I listened to this without speaking since [a] great matter for mankind was at issue in which, despite our personal friendship, we had to be regarded as representatives of two sides engaged in mortal combat. (Niels Bohr Archive)

And in a draft written in 1962, the year of Bohr's death, Bohr tells Heisenberg it is ''quite incomprehensible to me that you should think that you hinted to me that the German physicists would do all they could to prevent such an application of atomic science,'' in direct contradiction of the story Heisenberg tells to Jungk, which is later embellished by Powers.

How does Frayn react to this revelation? He remains steadfast in the face of this crucial addition to the historical record. Frayn has indicated that the release of these important historical documents has had little effect on his thinking about the relevant issues and would not affect any future editions of the play. He admits only one inaccuracy: that he portrays Bohr as having forgiven Heisenberg too readily.[9] This dismissive stance toward history is completely consistent with Frayn's privileging of psychological (''internal'') states over historical (''external'') facts throughout the play, a point, as we will see, that reaches a crescendo in the play's final scene. For Frayn, no historical fact can trump psychological uncertainty; we are not accountable to history, *in principle*.

With this background, let's return to the play and see how Frayn handles the metaethical dilemma he poses. Miming Bohr's propensity for working through physics problems by writing multiple drafts of a paper, Frayn offers his audience three possible scenarios—three complementary ''drafts'' exploring different points of view—for what occurred during the conversation between Bohr and Heisenberg on the occasion of Heisenberg's visit to Bohr in 1941. The first draft is largely a presentation of Heisenberg's point of view, replete with embellishments compliments of Jungk and Powers. Bohr's wife, Margrethe, is a major figure in the second draft. She represents the informed majority public opinion, consonant with the majority view of the physics community, which rejects Heisenberg's claim to have been

consciously working to thwart the German bomb project, and largely sees the failure of the project to be the fortunate result of Heisenberg's failure to appreciate the relatively small amount of fissionable material needed to make a bomb. The third draft is where Frayn's philosophical interests in the play come to the fore.

There are two important elements to the third draft, which delivers the play's conclusions: one brings the analogy between the unknowability of physical states and psychological states to its climax, and the other explores the limits of the analogy. This final draft highlights Frayn's point that we are prohibited, in principle, from knowing our own thoughts, motives, and intentions. The only possibility we have of catching a glimpse of ourselves is through the eyes of another.

> ***Heisenberg:*** And yet how much more difficult still it is to catch the slightest glimpse of what's behind one's eyes. Here I am at the centre of the universe, and yet all I can see are two smiles that don't belong to me. . . .
> ***Bohr:*** I glance at Margrethe, and for a moment I see what she can see and I can't—myself, and the smile vanishing from my face as poor Heisenberg blunders on.
> ***Heisenberg:*** I look at the two of them looking at me, and for a moment I see the third person in the room as clearly as I see them. Their importunate guest, stumbling from one crass and unwelcome thoughtfulness to the next.
> ***Bohr:*** I look at him looking at me, anxiously, pleadingly, urging me back to the old days, and I see what he sees. And yes—now it comes, now it comes— there's someone missing from the room. He sees me. He sees Margrethe He doesn't see himself.
> ***Heisenberg:*** Two thousand million people in the world, and the one who has to decide their fate is the only one who's always hidden from me. (87)

Just as Margrethe has explained in an earlier scene, on his own, Heisenberg cannot really know why he came to Copenhagen because he doesn't know the contents of his own mind; his own mind is the one bit of the universe he can't see. On the heels of

this scene, Heisenberg and Bohr go outdoors for their walk, a chance to have their momentous conversation out of earshot of any bugs planted in Bohr's house by the Gestapo.

> ***Bohr:*** With careful casualness he begins to ask the question he's prepared.
> ***Heisenberg:*** Does one as a physicist have the moral right to work on the practical exploitation of atomic energy?
> ***Margrethe:*** The great collision.
> ***Bohr:*** I stop. He stops . . .
> ***Margrethe:*** This is how they work.
> ***Heisenberg:*** He gazes at me, horrified.
> ***Margrethe:*** Now at last he knows where he is and what he's doing.

There we have it, a moment of knowing: Heisenberg can glimpse his own intentions, but only through the horror Bohr's face reflects as he gazes back at Heisenberg. As soon as this knowing interaction has taken place, Bohr uses the momentum of his anger to fly off into the night. But he stops short. He has an idea for how to get at this issue once and for all. He suggests a thought experiment.

> ***Bohr:*** Let's suppose for a moment that I don't go flying off into the night. Let's see what happens if instead I remember the paternal role I'm supposed to play. If I stop, and control my anger, and turn to him. And ask him why.
> ***Heisenberg:*** Why?
> ***Bohr:*** Why are you confident that it's going to be so reassuringly difficult to build a bomb with [the isotope uranium] 235? Is it because you've done the calculation?
> ***Heisenberg:*** The calculation?
> ***Bohr:*** Of the diffusion in 235. No. It's because you haven't calculated it. You haven't considered calculating it. You hadn't consciously realized there was a calculation to be made.
> ***Heisenberg:*** And of course now I have realized. In fact it

wouldn't be that difficult. Let's see . . . Hold on . . .
Bohr: And suddenly a very different and very terrible new world begins to take shape . . .

And then (in the productions I've seen) the terrible sound of a shattering bomb blast fills the theater. As the blast subsides, once again a clarification of the issues comes from Margrethe.

Margrethe: That was the last and greatest demand that Heisenberg made on his friendship with you. To be understood when he couldn't understand himself. And that was the last and greatest act of friendship for Heisenberg that you performed in return. To leave him misunderstood.

Better for everyone that Heisenberg, like all of us, is shielded from shining a light on all the dark corners of the mind. For if Heisenberg's conscious mind had had access to all its subconscious thoughts, then Hitler might have been in possession of an atomic bomb, and after the dust settled, the world might have found itself in a vastly different geopolitical configuration. A good thing that we have this limitation—it's the uncertainty at the heart of things that saves our weary souls.

Bohr: Before we can lay our hands on anything, our life's over.
Heisenberg: Before we can glimpse who or what we are, we're gone and laid to dust.
Bohr: Settled among all the dust we raised.
Margrethe: And sooner or later there will come a time when all our children are laid to dust, and all our children's children.
Bohr: When no more decisions, great or small, are ever made again. When there's no more uncertainty, because there's no more knowledge.
Margrethe: And when all our eyes are closed, when even our ghosts are gone, what will be left of our beloved world? Our ruined and dishonoured and beloved world?

> ***Heisenberg:*** But in the meanwhile, in this most precious meanwhile, there it is. The trees in Faelled Park. Gammertingen and Biberach and Mindelheim. Our children and our children's children. Preserved, just possibly, by that one short moment in Copenhagen. By some event that will never quite be located or defined. By that final core of uncertainty at the heart of things.

In the end it's because of our humanity—because of our limitations, because we can't ever truly know ourselves—that we survive.

This is how the play ends. But where, you might wonder, does this conclusion leave us with respect to the question of moral judgment and accountability? Frayn makes another important move in the final draft that can perhaps shed further light on this key question. In the final draft, Frayn drives home the point that he sets out to make (at least he speaks about the play as if he knows something of his own intentions): because we can't fully know Heisenberg's intentions, we can't fairly judge him. Ironically, however, Frayn plants his own judgments about Bohr throughout the play. It is Bohr, not Heisenberg, Frayn tells his audience, who wound up working on an atom bomb project that resulted in the deaths of tens of thousands of innocent people (a reference to Bohr's contributions to the U.S. bomb project at Los Alamos following his close escape from the Nazis in 1943).[10] It is Bohr (along with his student John Wheeler) who helped to develop a theory of nuclear fission. Bohr is the one who shot another physicist . . . with a cap pistol. (Only well into the scene do we learn the true nature of the weapon and the fact that it was all part of a playful interchange among colleagues. The cap pistol reappears near the end of the play as Heisenberg suggests that Bohr could have killed him in 1941 if he really thought Heisenberg was busy devising a bomb for Hitler, without even having to directly pull the trigger, by a simple indiscretion that would have tipped off the Gestapo about some detail of their meeting and resulted in Heisenberg being murdered by the Gestapo for treason.) More than once Frayn has us watch Bohr relive an unspeakably horrible moment in his life: Bohr stands aboard a sailing vessel and watches his oldest son drown. What role does

this series of repetitions within repetitions play?

> ***Heisenberg:*** Again and again the tiller slams over. Again and again.
> ***Margrethe:*** Niels turns his head away . . .
> ***Bohr:*** Christian reaches for the lifebuoy . . .
> ***Heisenberg:*** But about some things even they never speak.
> ***Bohr:*** About some things even we only think.
> ***Margrethe:*** Because there's nothing to be said.

One shudders to think that an author would be willing to wield this deeply painful personal tragedy for the purpose of layering Bohr with every (un)-imaginable kind of life-and-death responsibility, but this unthinkable hypothesis fits all too neatly with the sleight of hand by which Frayn attempts to shift responsibility from Heisenberg to Bohr. Yes, we are told that Bohr was held back from jumping in and going after Christian, but as we watch Bohr's ghost being haunted by the memory over and over again, the terrible suggestion that some things shouldn't be said floats in the air. Can it be . . . isn't it the case that in the reiteration of the unspeakable, the unspeakable is spoken? And then there are the loving, yet all too facile, denials of Bohr's responsibility by Margrethe, which, of course, only serve to highlight his responsibility.

> ***Heisenberg:*** He [Oppenheimer] said you made a great contribution.
> ***Bohr:*** Spiritual, possibly. Not practical.
> ***Heisenberg:*** Fermi says it was you who worked out how to trigger the Nagasaki bomb.
> ***Bohr:*** I put forward an idea.
> ***Margrethe:*** You're not implying that there's anything that Niels needs to explain or defend?
> ***Heisenberg:*** No one has ever expected him to explain or defend anything. He's a profoundly good man.

All these subcritical pieces, these suggestions of Bohr's guilt planted throughout the play, come to an explosive climax

just near the end when Frayn unleashes the idea of a ''strange new quantum ethics,'' proposing its implications for the moral dilemma we are faced with:

> ***Heisenberg:*** Meanwhile you were going on from Sweden to Los Alamos.
> ***Bohr:*** To play my small but helpful part in the deaths of a hundred thousand people.
> ***Margrethe:*** Niels, you did nothing wrong!
> ***Bohr:*** Didn't I?
> ***Heisenberg:*** Of course not. You were a good man, from first to last, and no one could ever say otherwise. Whereas I . . .
> ***Bohr:*** Whereas you, my dear Heisenberg, never managed to contribute to the death of one single solitary person in all your life.

This powerful scene is one that remains imprinted in the minds of many audience members. And it's not surprising that it would: finally there is some resolution—a moral ground to stand on—something definite and concrete to hold onto amid the swirl of ghosts and uncertainties. And so is it any wonder that even though Frayn proceeds to disown this conclusion, audiences leave the play with the impression that if anyone should be held accountable for moral infractions, it is Bohr, not Heisenberg?

Surely Frayn is right to remind the audience that while the play focuses on German efforts to build the bomb, the United States had its own highly organized and well-funded wartime bomb project in the desert of Nevada, and the collective work at Los Alamos produced two different kinds of bombs—''fat man'' (a plutonium-based device) and ''thin man'' (a bomb based on the fissioning of uranium-235)—and one of each kind was dropped on two cities in Japan, killing tens of thousands of innocent people. (What of the possibility that, whatever the nature of Heisenberg's intentions, his visit to Bohr in 1941 helped accelerate the U.S. bomb project, resulting in the use of atomic weapons against the Japanese before the war's official end?[11] Are things really so cut and dry that the dropping of atomic bombs

on Japanese cities implicates Bohr while absolving Heisenberg?) But Frayn doesn't raise the issue to help us confront these relevant historical facts and the moral concerns they raise; rather, he uses it only to turn the tables so that we direct our moral outrage away from Heisenberg.

Frayn doesn't directly endorse this conclusion (at least not in the play).[12] In fact, he accuses audience members who leave with this impression of having made the embarrassing mistake of taking this ''faux'' conclusion seriously when he was obviously being ironic. Let's take a look at how Frayn (says he) accomplishes this ironic twist. Immediately following the foregoing exchange (where Bohr is held accountable for the deaths of one hundred thousand people, and Heisenberg is judged as innocent), Frayn has Heisenberg explain in an ironic passage that to judge people ''strictly in terms of observable quantities'' would constitute a strange new quantum ethics. Now, since the audience has been anticipating a new quantum-informed ethics all along and the passage itself involves a rather subtle point about quantum physics (what's this talk about restricting considerations to ''observable quantities'' all of a sudden?), it's perhaps not surprising that the irony has been lost on many a spectator, including some reviewers.

In other words, the move that Frayn makes to distance himself from the conclusion he throws out as bait to a hungry audience filled with anticipation (a conclusion that fingers Bohr instead of Heisenberg) is this: using irony, Frayn has Heisenberg question the application of a rather subtle aspect of his uncertainty principle (which is neither explained nor raised elsewhere in the play) to the situation of moral judgment. Here's the crucial exchange:

> ***Bohr:*** Heisenberg, I have to say—if people are to be measured strictly in terms of observable quantities . . .
> ***Heisenberg:*** Then we should need a strange new quantum ethics.

The physics point that Bohr begins to speak about is that Heisenberg, the historical figure, insisted (according to the positivist tenet) that one shouldn't presume anything about quantities that are not measurable, indeed that one should restrict

all considerations to observable quantities. The way Frayn wields this point is this: if we follow the uncertainty principle, we would conclude that we shouldn't presume *anything* about intentions (since we can't know anything about them) and therefore all we have to base our moral judgments on is our actions. This is what Frayn calls a ''strange new quantum ethics.'' And the cue we are given that this is not the conclusion we should walk away with is Heisenberg's lengthy homily on how if we made judgments only on the basis of actions, then the SS man who didn't shoot him when he had his chance near the war's end would go to heaven (presuming, of course, this was the only moral decision this particular devotee of Hitler faced during the long war). That's it. A bit too quick, perhaps? If Frayn had spelled out this key point more directly, he might have put it this way: we shouldn't rely on ''observables''—that is, mere actions stripped of all intentions—to make moral judgments. (Surely you didn't expect that Frayn would have us rely strictly on historical facts about what happened to sort things out?) So where are we now? We can't judge people on either their intentions or their actions. Is there anything we can hold on to as the play ends and we gather up our belongings to leave the theater?

Frayn ends the play by presuming to help us take solace in the fact that uncertainty is not our undoing but our savior: it is the very unknowability of intentions, that is, our principled *inability* to truly judge one another, that saves our weary souls. This final conclusion—the ''real conclusion''—harkens back to the earlier scene when Bohr turns around and helps Heisenberg to bring his unconscious intentions to light with the apocalyptic result that Heisenberg does the calculation and Hitler winds up with atomic weapons. Better that we don't know.

And so in the end, after a whirlwind of moral questions and uncertainties that surround, inhabit, and haunt the characters and the audience, we are left only with the slim and rather pat suggestion that the inherent uncertainty of the universe is our one salvation. All our moral searching is abruptly halted, frozen at a moment of time before Armageddon, and left as a mere shadow of itself cast on the wall that denies us access to our own souls. We are left wandering aimlessly through a barren

landscape with no markers, no compass, only an empty feeling that quantum theory is somehow at once a manifestation of the mystery that keeps us alive and a cruel joke that deprives us of life's meaning. Given the recent reinvigoration of nuclear weapons programs around the globe, the suggestion that the absence of a moral or ethical ground will inevitably, or could even possibly, forestall the apocalypse portended by the plays end falls flat, to say the least. But need we follow the reasoning we've been offered into the despair of a moral wasteland laid bare by the explosion of absolute certainty? Is it true that quantum physics envelops us in a cloud of relativist reverie that mushrooms upward toward the heavens and outward encompassing all the earth, leaving us with no remedy, no recourse, no signpost, no exit?

I would argue, on the contrary, that quantum theory leads us out of the morass that takes absolutism and relativism to be the only two possibilities. But understanding how this is so requires a much more nuanced and careful reading of the physics and its philosophical implications than Frayn presents. I first review some of the main difficulties and then proceed to map out an alternative.

As we have seen, by Frayn's own admission, the parallel that he draws between physical and psychological uncertainties is limited and poorly specified. As with many such attempts to discern the implications of quantum mechanics on the basis of mere analogies, the alleged implications that are drawn, such as the assertion that our knowledge of ourselves and of others is necessarily limited, ultimately do not depend in any deep way on understanding the lessons of quantum physics. Surely there is no reason to invoke the complexities of this theory to raise such a conjecture about the limits to human knowledge. (Freud, for one, does not rely on quantum physics for his theory of the unconscious.) It would have been one thing if, for example, we had been offered a more nuanced or revised understanding of the nature of intentionality or causality. But ultimately it seems that such methods (intentionally or otherwise) are only out to garner the authority of science for some theory or proposition that someone wanted to advance anyway and could have advanced without understanding anything at all about quantum physics. (Of

course, when the stakes are coming to Heisenberg's rescue, a clever use of the uncertainty principle is perhaps too much to resist.)

Another crucial point that I have yet to discuss is the fact that Frayn continually confuses the epistemological and ontological issues—issues concerning the nature of knowledge and the nature of being. And yet these are central elements in a heated debate between Bohr and Heisenberg concerning the correct interpretation of quantum physics, as I will explain. Before moving on to specify the nature of my own (nonanalogical) approach, I want to explore this issue further, since it entails a key point that is crucial for any project that seeks to understand the wider implications of quantum physics: the fact that there are multiple competing interpretations of quantum mechanics. One point that is particularly relevant for *Copenhagen* (and for my project) is the fact that there are significant differences between the interpretations of Bohr and Heisenberg. Frayn raises this point in the play but then proceeds to confuse the important differences between them.

Quite unexpectedly, Frayn brings to light the little-known and seldom-acknowledged but crucial historical fact that Heisenberg ultimately acquiesced to Bohr's point of view and made his concession clear in a postscript to the paper on his famous uncertainty principle. And yet, bizarrely, Frayn then proceeds to follow Heisenberg's (self-acknowledged) erroneous interpretation. It is not simply that this is yet one more source of tension between these two giants of the physics world; rather, the point is that there are significant, indeed far-reaching, differences between their interpretations and their respective philosophical implications. The question of what implications follow from complementarity (not uncertainty) is a specter that haunts this play. Frayn inexplicably buries the difference without putting it to rest.[13]

Let's take a brief look at some of the crucial issues.

In a key scene in the play, the audience learns about the intense disagreement between Bohr and Heisenberg concerning Heisenberg's uncertainty principle.[14] The nature of the difference between their views is not clearly laid out in the play, but it can be summarized as follows: For Bohr, what is at issue is *not* that we cannot *know* both the position and momentum of a particle

simultaneously (as Heisenberg initially argued), but rather that particles do not *have* determinate values of position and momentum simultaneously. While Heisenberg's point—that in measuring any of the characteristics of a particle, we necessarily disturb its premeasurement values, so that the more we know about a particle's position, the less we will know about its momentum (and vice versa)—seems at least believable, Bohr's point is utterly counterintuitive and unfamiliar. In essence, Bohr is making a point about the nature of reality, not merely our knowledge of it. What he is doing is calling into question an entire tradition in the history of Western metaphysics: the belief that the world is populated with individual things with their own independent sets of determinate properties. The lesson that Bohr takes from quantum physics is very deep and profound: there aren't little things wandering aimlessly in the void that possess the complete set of properties that Newtonian physics assumes (e.g., position and momentum); rather, there is something fundamental about the nature of measurement interactions such that, given a particular measuring apparatus, certain properties *become determinate*, while others are specifically excluded. Which properties become determinate is not governed by the desires or will of the experimenter but rather by the specificity of the experimental apparatus.[15] Thus there is still an important sense in which experiments can be said to be objective. Significantly, different quantities become determinate using different apparatuses, and it is not possible to have a situation in which all quantities will have definite values at once—some are always excluded. This makes for two ''complementary'' sets of variables: for any given apparatus, those that are determinate are said to be complementary to those that are indeterminate, and vice versa. Complementary variables require different— mutually exclusive—apparatuses (e.g., one with fixed parts and one with movable parts) for their definition, and therefore these variables are reciprocally determinable (when one is well defined, the other can't be). (I discuss these issues in detail in chapter 3.) Significantly, as Frayn points out, Heisenberg acquiesced to Bohr's interpretation: it is complementarity that is at issue, not uncertainty.

With this important difference in mind, it's hard to

resist the temptation to contemplate a new play, a rewriting of Frayn's *Copenhagen* using Bohr's complementarity principle rather than Heisenberg's uncertainty principle as a basis for analysis. I want to be clear that I am not suggesting that the difficulties with Frayn's play can be rectified by simply substituting one principle for the other and performing the same kind of analogical thought experiment to consider the moral and epistemological issues at hand. But I do want to briefly indulge in this exercise in a limited fashion, recognizing that there is no expectation of providing a rigorous analysis of the important issues at hand simply by making this shift. The point of the exercise is to get a sense of what a more careful consideration of quantum physics and its implications might bring to the surface. In this way we can at least get some feel for *what* philosophical issues are raised and *what* concepts might need to be rethought if we take quantum physics seriously, even though this method may not help us to understand *how* the issues can be resolved and the relevant concepts re-conceptualized.

Let's return to the question of Heisenberg's intentions in visiting Bohr in the autumn of 1941. Interestingly enough, there is already an important hint in *Copenhagen* that suggests how we might proceed if we want to take Bohr's complementarity principle as the basis for our analysis. We can zoom in on just the right passage by thinking of Margrethe not ''merely'' as Bohr's wife but as an integral part of Bohr (as Bohr says in reference to his partner, ''I was formed by nature to be a mathematically curious entity: not one but half of two'').[16]

> ***Margrethe:*** Complementarity again. Yes?
> ***Bohr:*** Yes, yes.
> ***Margrethe:*** I've typed it out often enough. If you're doing something you have to concentrate on you can't also be thinking about doing it, and if you're thinking about doing it then you can't actually be doing it. Yes?

Ironically, Frayn draws the conclusion from this statement of complementarity (by Margrethe) that doing something and thinking about what you're doing means that Heisenberg doesn't know why he came to Copenhagen in 1941. But, in fact, it (or

actually the relevant elaboration of the point) has quite different and much more far-reaching and profound implications. Frayn takes quite a leap here, and we would do well to go more slowly. Suppose that the activity that you're engaged in doing happens to be thinking. Then it follows (from Margrethe's statement of complementarity) that what you are prohibited from doing is both thinking about something and thinking about thinking about it. That is, you can't both think about something and also reflect on your own thinking about the matter. This is because you need to make a choice between two complementary situations: either you think about something, in which case that something is the object of your thoughts, or you examine your process of thinking about something, in which case your thoughts about what you are thinking (about something), and not the something itself, are the object of your thoughts.

Now let's assume that one of the things you're interested in discerning (by attempting to observe your thoughts) is your intentions concerning the thing you're thinking about. We can then deduce that there is a reciprocal or complementary relationship between thinking about something and knowing your intentions (concerning the matter). Now, the implication of this reciprocal relationship we've uncovered is not, as Frayn suggests, that we can't know them simultaneously but rather that we can't *have* definite thoughts about something and definite intentions concerning that thing simultaneously. That is, the point is that there is *no determinate fact of the matter* about both our thoughts and our intentions concerning the object of our thoughts. What we learn from this is that the very notion of intentionality needs to be reevaluated. We are used to thinking that there are determinate intentional states of mind that exist ''somewhere'' in people's brains and that if we are clever enough we can perform some kind of measurement (by using some kind of brain scan, for example) that would disclose the intentions (about some determinate something) that exist in a person's mind. But according to Bohr, we shouldn't rely on the metaphysical presuppositions of classical physics (which Bohr claims is the basis for our common-sense perception of reality); rather, what we need to do is attend to the actual experimental conditions that would enable us to

measure and make sense of the notion of intentional states of mind. In the absence of such conditions, not only is the notion of an ''intentional state of mind'' meaningless, but there is no corresponding determinate fact of the matter. To summarize, the crucial point is not merely that intentional states are inherently unknowable, *but that the very nature of intentionality needs to be rethought*.

Frayn's whole play is structured around the attempt to determine Heisenberg's intentions, as if there were determinate facts of the matter about them at all times. By contrast, Bohr's point is that the very notion of an intentional state of mind, like all other classical properties, cannot be taken for granted. To speak in a meaningful way about an intentional state of mind, we first need to say what material conditions exist that give it meaning and some definite sense of existence. But what would it mean to specify such conditions? What, for example, would constitute the appropriate set of material conditions for the complex political, psychological, social, scientific, technological, and economic situation that Heisenberg finds himself in, where matters of race, religion, nationality, ethnicity, sexuality, political beliefs, and mental and physical health are material to Nazi thinking? And this is surely an abbreviated list. And what does ''material'' mean?

Furthermore, with such a complex set of apparatuses at work, we are led to question whether it makes sense to talk about an intentional state of mind as if it were a property of an individual. Let's return to the play for a brief moment. While Heisenberg struggles to get his point across that he tried desperately to stay in control of the nuclear physics program in Germany and slow down the progress of the development of an atom bomb, Bohr points out that there was an important sense in which he was not in control of the program, but rather the program was controlling him: ''Nothing was under anyone's control by that time!'' But if the program is controlling Heisenberg rather than the reverse, what accounts for his intentional states? Whom do they belong to? Is individualism a prerequisite for figuring accountability? Are the notions of intentionality and accountability eviscerated? Despite these fundamental challenges to some of our core concepts, according to (the historical) Bohr, objectivity and accountability need not

be renounced. (See especially chapters 3 and 4 for an in-depth discussion of Bohr's views on objectivity and accountability.)

In summary, the shift from Heisenberg's interpretation to Bohr's undermines the very premise of the play. Frayn structures the play around the assumption that moral judgments are tied up with questions of an individual's intentions. But in Bohr's account intentionality cannot be taken for granted: intentions are not preexisting determinate mental states of individual human beings. A sophisticated argument needs to be given here, but this exercise provides an important hint of what a more rigorous analysis may reveal: that attending to the complex material conditions needed to specify ''intentions'' in a meaningful way prevents us from assuming that ''intentions'' are (1) preexisting states of mind, and (2) properly assigned to individuals. Perhaps intentionality might better be understood as attributable to a complex network of human and nonhuman agents, including historically specific sets of material conditions that exceed the traditional notion of the individual. Or perhaps it is less that there is an assemblage of agents than there is an entangled state of agencies. These issues, however, cannot be resolved by reasoning analogically; they require a different kind of analysis.

This thought experiment also suggests that moral judgment is not to be based *either* on actions or on intentions alone; rather, the very binary between ''interior'' and ''exterior'' states needs to be rethought, and both ''internal'' and ''external'' factors—intentionality and history—matter. But this exercise alone does not reveal *how* they matter and *how* they stand in relationship to one another. We learn *what* issues may arise in considering the implications of Bohr's interpretation, but we need a much more careful, detailed, and rigorous analysis to really get a handle on them. For example, questions of causality are surely significant in coming to terms with these important issues, but further exploration of Bohr's ideas reveals that the very notion of causality must be reconsidered, since the traditional conception—which presents only the binary options of free will and determinism—is flawed. But if causality is reworked, then power needs to be rethought. (Power relations cannot be understood as either determining or absent of constraints within

a corral that merely limits the free choices of individuals.) Agency needs to be rethought. Ethics needs to be rethought. Science needs to be rethought. Indeed, taking Bohr's interpretation seriously calls for a reworking of the very terms of the question about the relationship between science and ethics. Even beyond that, it undermines the metaphysics of individualism and calls for a rethinking of the very nature of knowledge and being. It may not be too much of an exaggeration to say that every aspect of how we understand the world, including ourselves, is changed.

In summary, this thought experiment only provides us with the briefest glimpse of the momentous changes in our world view that Bohr's interpretation of quantum physics entails. It gives us some indication of *what* needs to be rethought, but not a basis for understanding *how* to rethink the relevant issues. Also, reasoning by analogy can easily lead one astray. And furthermore, it posits separate categories of items, analyzes one set in terms of the other, and thereby necessarily excludes by its own procedures an exploration of the nature of the relationship between them. Indeed, even Bohr erred in trying to understand ''the lessons of quantum physics'' by drawing analogies between physics and biology or physics and anthropology. Ultimately Bohr was interested not in specifying one-to-one correspondences between these components but in focusing our attention on the conditions for the use of particular concepts so that we do not fall into complacency and take them for granted; but he often lost his way, and he was only able to hint at the implications he sensed were implicit in his work. What is needed to develop a rigorous and robust understanding of the implications of Bohr's interpretation of quantum physics is a much more careful, detailed, and thorough analysis of his overall philosophy.

In this book I offer a rigorous examination and elaboration of the implications of Bohr's philosophy-physics (physics and philosophy were one practice for him, not two). I avoid using an analogical methodology; instead, I carefully identify, examine, explicate, and explore the philosophical issues.[18] I am not interested in drawing analogies between particles and people, the micro and the macro, the scientific and the social, nature and culture; rather, I am interested in understanding

the epistemological and ontological issues that quantum physics forces us to confront, such as the conditions for the possibility of objectivity, the nature of measurement, the nature of nature and meaning making, and the relationship between discursive practices and the material world.

I also do not assume that a meaningful answer to the questions about the relationship between science and ethics can be derived from what physics alone tells about the world. Physics can't be bootstrapped into giving a full account of the social world. It would be wrong to simply assume that people are the analogues of atoms and that societies are mere epiphenomena that can be explained in terms of collective behavior of massive ensembles of individual entities (like little atoms each), or that sociology is reducible to biology, which is reducible to chemistry, which in turn is reducible to physics. Quantum physics undercuts reductionism as a world view or universal explanatory framework. Reductionism has a very limited run.

What is needed is a reassessment of physical and metaphysical notions that explicitly or implicitly rely on old ideas about the physical world—that is, we need a reassessment of these notions in terms of the best physical theories we currently have. And likewise we need to bring our best social and political theories to bear in reassessing how we understand social phenomena, including the material practices through which we divide the world into the categories of the ''social'' and the "natural."[19] What is needed is an analysis that enables us to theorize the social and the natural together, to read our best understandings of social and natural phenomena through one another in a way that clarifies the relationship between them. To write matter and meaning into separate categories, to analyze them relative to separate disciplinary technologies, and to divide complex phenomena into one balkanized enclave or the other is to elide certain crucial aspects by design. On the other hand, considering them together does not mean forcing them together, collapsing important differences between them, or treating them in the same way, rather it means allowing any integral aspects to emerge (by not writing them out before we get started).

[1] Outside of physics circles, one finds that it is often the case that Heisenberg's name is known but not Bohr's. Niels Bohr (1885-1962), a Danish physicist and contemporary of Einstein's, was one of the founders of quantum physics. He won the Nobel Prize in 1922 for his quantum model of the atom. Bohr played a primary role in founding the so-called Copenhagen interpretation of quantum physics. In 1921 he founded the institute in Copenhagen that bears his name. Many of the fundamental contributions to the new quantum theory were born at the institute. Werner Heisenberg (1901-76) won the 1932 Nobel Prize in Physics for "the creation of quantum mechanics," work he did at the Niels Bohr Institute.

[2] This is not to suggest that all popular accounts of quantum physics sacrifice rigor to other values and interests, but there is no shortage of such texts that do.

[3] This question, from an actual affidavit by Heisenberg, is also uttered by his character in the play. W. Heisenberg, affidavit on the Copenhagen visit, manuscript and typescript, c. 1948, Heisenberg Archive, Max Planck Institute for Physics, Munich (cited by David Cassidy in *Physics Today*, July 2002).

[4] This quote from Michael Frayn is from his talk for the Niels Bohr Historical Archive's History of Science Seminar, November 19, 1999 (available on the archive's website).

[5] Position and momentum are the quantities that Newton tells us are needed to predict the entire trajectory of a particle-into the future and the past.

[6] Frayn, quoted in Justin Davidson, "Was Something Rotten in Denmark?" review of *Copenhagen*, *Newsday*, April 7· 2000, p 6.

[7] Jungk admits to having been taken in by the "impressive personalities" involved: "That I have contributed to the spreading of the myth of passive resistance by the most important German physicists is due above all to my esteem for those impressive personalities which I since realized to be out of place" (quoted in "David Cassidy letter on Heisenberg," published in F.A.S. Public Interest Report, *Journal of the Federation of American Scientists* 47, no. 6 [November - December 1994]).

[8] The documents have been published on the Niels Bohr Archive website. There are some twelve extant drafts of Bohr's letter, written between 1957 and his death in 1962. This is typical of how Bohr wrote and approached physics problems as well. He would go over and over the same ground looking at things from different angles. The drafts are different attempts to get at the heart of what he wanted to say. They don't contradict one another; they offer complementary approaches to the truth. According to Leon Rosenfeld, a coworker, he and Bohr worked on one paper for over ten years and had over one hundred drafts fit.

[9] James Glanz, "Frayn Takes Stock of Bohr Revelations," *New York Times*, February 9, 2002. Frayn seems to consider this a small inaccuracy of little significance, but arguably, this error alone might justify a serious rethinking of Frayn's portrayal of Bohr, requiring substantial revision of the play.

[10] Frayn fails to mention the fact that even before the momentous engineering project at Los Alamos reached its goal, Bohr visited Churchill and Roosevelt to try to get them to think ahead about the changes brought about by a new atomic age, including steps that might be taken to avoid an arms race. Furthermore, after the war Bohr lobbied for the peaceful uses of atomic and nuclear energy. He was awarded the first Atoms for Peace award for his efforts.

[11] I thank Frédérique Apffel-Marglin for this point.

[12] After floating this conclusion, Frayn subtly distances himself from it. But reporting on an interview with Michael Frayn in the wake of the early release of Bohr's unsent letter to Heisenberg, James Glanz, in an article published by the *New York Times* ("Frayn Takes Stock of Bohr Revelations," February 8, 2002), reveals that Frayn may indeed subscribe to his "strange new quantum ethics": "What does seem to be true in the real world of the audience is that many theatergoers, especially those who have not s tudied the war and are too young to have lived through it, emerge from performances of the play with an impression that Heisenberg has bested Bohr in their otherworldly debate. With the proviso that he cannot be responsible for how others interpret his play, Mr. Frayn said, that impression *may simply stem from historical fact*. 'Heisenberg didn't, in fact, kill anyone with atomic weapons, or indeed any other

weapons,' Mr. Frayn said. 'And Bohr, rightly or wrongly, did actually contribute to the death of many people through the Allied atomic bomb program' " (emphasis added). Clearly, it would have been unwise for Frayn to directly endorse this conclusion in the play. After all, wouldn't it have been a bit too predictable for him to follow Jungk's ironic twist-which lays the moral burden at the feet of scientists who worked on the bomb project for the Allies while turning their German colleagues into heroes-too closely? And given the fact that Jungk recanted his own thesis-that "German nuclear physicists, living under a saber-rattling dictatorship, obeyed the voice of conscience and attempted to prevent the construction of atom bombs, while their professional colleagues in the democracies, who had no coercion to fear, with very few exceptions, concentrated their energies on the production of the new weapon" -wouldn't it have seemed a bit too extreme, to say nothing of historically inaccurate, to simply resurrect this thesis?

[13] With ever more irony, perhaps in his enthusiasm to safeguard Heisenberg's reputation using his uncertainty principle, Frayn fails to acknowledge the important fact that Bohr (not Heisenberg) spent decades struggling to come to terms with the larger implications of quantum theory. Moreover, Bohr even raises the very question that interests Frayn: what are the implications of quantum physics for understanding human thought processes? In particular, Bohr uses his notion of complementarity to contemplate the limitations of trying to be aware of one's process of thinking.

[14] See especially Frayn 2000, 6g. A video clip of this scene is available on the P ss website (listed under "key scene"): http://www.pbs.org/hollywoodpresents/copenhagen/scene/index.html. See also my discussions on the differences between the interpretations of Bohr and Heisenberg in chapters 3 and 7.

[15] As I will argue in chapter 3.

[16] Frayn 2000, 72.

[17] In fact, this is precisely the example that Bohr often used to exemplify complementarity (in a non physics context). It is a lesson discussed in a little book by Paul Martin Møller called *The Adventures of a Danish Student*. Bohr was so impressed with its exemplary example of complementarity that he would present a copy to all guests of the Niels Bohr Institute.

[18] See chapter 2 for a detailed discussion of my methodological approach.

[19] Inevitably some readers will balk at my use of "best" as a descriptor for either kind (indeed any kind) of theory. But it is a mistake to think that normative concerns entail a normative foundationalism or progressive conceptions of knowledge and history. For a more detailed discussion, see Rouse's (2002, 2004) account of normativity and naturalism. Furthermore, my account of scientific practices is not naturalistic in the sense of giving science unquestioned authority to speak for the world, on the contrary; Rouse argues that a suitably revised conception of naturalism takes seriously what our best scientific theories tell us while simultaneously holding science accountable for its practices, for its own sake as it were, in order to safeguard its stated naturalist commitments. Indeed, the unquestioned authority of science does not get a free pass here; on the contrary, the point is that a strong commitment to naturalism in Rouse's sense makes it possible to call its presumed authority into question on its own terms.

An image of Francesca Lohmann's *Taffy VIII* (2017), after 5 minutes.

NATE CLARK

An Interview with Matt Browning

On May 18, 2017, Nate Clark, graduate candidate in the Painting + Drawing program at the University of Washington School of Art + Art History + Design, interviewed Matt Browning who received his BFA in Fibers at the University of Washington in 2007.

Nate Clark: We've talked about you being from here, is there a reason you've stayed?

Matt Browning: I'm risk averse? Kidding. I stayed in Seattle after undergrad because at the time, there were enough people around, rents were affordable, and there were interesting things happening at informal spaces around town. The idea of moving somewhere like New York didn't appeal to me.

Nate: Having just moved here it's sad to hear how much culture Seattle has lost in the last few years due to rent increase pushing artists and galleries out. What's been the change here in the arts community? Is this still a place that inspires you, that you are excited to be making work in, are there still people here that you are excited about?

Matt: Exorbitant rent and patron hubris have definitely resulted in some upsetting recent closures. I think there are still some great spaces to see and show work. I am often excited by the programming at Veronica and The Alice. There are also still opportunities to participate in group study through events such as Red May and research collectives like Autonomous University.

Nate: Let's talk about your work. I appreciated how you had described your use of the grid as a form that is quickly legible, and there is something really, mundane is not the right word, but it's not pushing forward and pushing out very assertively, and that was one of the things that I was really drawn to about your work, because I do feel that a lot of people make work to self-aggrandize.

Matt: Part of the problem of viewing art is that we have this moderately educated public (myself included) who takes a look at something like the grid and very quickly sorts the sense-data based on that which we have seen before. So we are in an art museum, we see a grid, and we conjure a variety of associations, the more powerful taking primacy over the others. There is the grid as an index of a Modernist or a Conceptual/Minimalist impulse, but also the grid as the structure of cloth... The grid as the matrix of a print... The grid being related to the maternal, which Catherine de Zegher compellingly addressed in her exhibition *Inside the Visible*... The grid is shifty, and you can play with a viewer's engagement with a work based on a form that is perceived to be "known." It's not necessarily about testing the viewer, and certainly not about differentiating properly attentive from inattentive viewers, but rather about producing forms using certain techniques and materials which then hide beneath the apparent clarity of the form, only to undermine it later, should there be a later.

Nate: You've talked about having open-ended editions for your work and not quantifying things so they become more valuable.

You have also talked about being interested in the totality of production and less in exhibition, and I was curious in that sense, are you thinking like a potter?

Matt: The process of production entails a certain notion of practice, pretty much always. Depending on the person, a practice can cultivate or squash degrees of difference and variability. Variation can be precisely the thing that delights the practitioner about their practice. A potter, who is constantly making pots, expects and ostensibly enjoys a bit of variation. Someone like Fred Moten, whose work I'm very fond of, talks about improvisational jazz as a structure which provides great opportunity for variation. I'm seduced by this defense of repetition, but it doesn't really represent my methodology. My iterated works are nearly exactly the same, so there is something else going on. I think one of the reasons that I resist formal variation in the object itself is because formal variation, when concretized in an object, can be the type of thing that a collector or curator latches onto as they seek to find a notable work within a larger body of work. By keeping each work functionally identical, and keeping an edition open, the proposition is that this work might be made sporadically for the rest of my life. I like the idea that there is a countable number of works at a given time, but they could always proliferate, they could always show back up, and when they show back up they are not going to look fundamentally different. In his book *Art and Value*, Dave Beech writes about the numerous ways art is exceptional to theories of economic valuation. He writes about marginal utility in neoclassical economics, which basically boils down to the idea that a consumer's interest in a particular product wanes through satiation/saturation. Beech says that art has different effects. When you see great art it makes you want to see more great art instead of less great art. You don't hit a saturation point in the same way that you do with a consumable commodity. A particular artist's practice presents yet another complication in terms of marginal utility, where some people might think that each new On Kawara painting, for example, actually deepens and strengthens the practice, while others might be bored by his tedious commitment. By repeating my works, having them pop back up, I'm playing off both potentialities. The fact that boredom and rigor can be potentially encompassed by the exact same action is interesting, all the while casting doubt into someone like a collector who owns something and never knows how much of that thing will exist in the world. It's not radical, but it's a way of making sure that no one feels like they got something special, ever.

Nate: Along those lines, do you sell your work?

Matt: I don't think selling art is a bad thing, and I don't disapprove of artists who do it, or even do it with a certain level of tenacity. There is something very funny about making work that is highly sellable. There are arguments against aesthetic avant-gardism that claim that the disruptive and non-commodified action actually has a greater economic potency in the long term than already-commodified gestures. To paraphrase Robin James in her essay "Neoliberal Noise: Attali, Foucault, and the Biopolitics of Uncool", capitalism thrives on things like the punk movement, something that thinks it has escaped commodification. She notes the simultaneous release of several mainstream albums from post-punk bands like Spandau Ballet and Joy Division, arguing that this phenomena represented a correction to the genre's approach to anti-capitalism. One could say that releasing these ultra-commodified albums was testing something different, like an immanent-hospice approach to capitalism. We might test this tactic with art objects as well, and it might be a failure, who knows.

Nate: What is your current go-to book to recommend to people?

Matt: In general, I think Fred Moten and Stefano Harney's *The Undercommons* is a great book, really helpful in thinking through what a radical pedagogical approach might be moving forward. Denise Ferreira da Silva's *Toward a Global Idea of Race* is a very important book on the primacy of racialization to the process of globalization. Philip Mirowski's *Never Let a Serious Crisis Go to Waste* investigates the historical development of neoliberalism through the Mont Pelerin Society. It's a very helpful book in understanding how ideology can become naturalized. I also recommend Dave Beech's book, *Art and Value*, and I'm currently reading Gail Day's *Dialectical Passions*, which provides a very generous roundup of negation in art history.

Nate: I enjoyed hearing you talk about how much research goes into your projects. I've been taught to work backwards.

Matt: It's usually somewhere in between. T'ai Smith has written a short essay that leans on Deleuze's "Postscript on the Societies of Control", where cloth becomes this interesting structural metaphor for both discipline and control. Cloth's structural grid is indicative of statist located factories: the logic of the grid is the logic of infrastructure and the city. However, the fact that cloth

can be compressed, folded, whatever, simultaneously structurally aligns it with conditions of flexibility and precarity that have been termed Post-Fordist. So cloth becomes this thing that materially and procedurally embodies the blended nature of a Fordist/Post-Fordist economy. I thought I knew what my grid carvings were about until I encountered this essay. The carvings are flexible, they also pack down. They can pack down to a waiting mode that could be very much personified as an individual at a computer waiting to work or killing time. And then they expand into a grid, a sort of presentation mode that goes on the wall, the form of actually working, performing, whatever. Smith's influence came very late in the project, but helped chart a way out of it while also bringing me back to things I had previously read, like the Mirowski.

> **Nate:** Your description of the process of coming into the whittling project feels similar to where I'm at in my thinking with current projects. These are things that feel really open to me, like there is a lot of potential there, but that's as far as I have gotten with it. I'm trying to ride that wave, the not knowing or not defining it too much.

Matt: One of the nice things about portability is the economy of it, and that you can bring your work with you. It's fair to ourselves from a material standpoint: the necessity for studios, tools, and project budgets shrink or disappear entirely. But portability, wanting to be able to bring our work with us, being able to work under nearly any conditions, is dangerous as well.

> **Nate:** I appreciate the way you talk about work and your thinking about where you are coming from. It's a different model than UW, where we are very production orientated, still looking at the artist in the studio tooling away to make a landscape painting or whatever, and that is such an antiquated idea of what being an artist is.

Matt: There is value in thinking about production. I bristle more at individuation and isolation. Simply locating the genesis of the artwork within a collective, within discourse, within disagreement, but also commitment to one another, can have dramatic effects of what we value in production. *Art & Language*, or Dave Beech's collective *Free!* were/are committed first and foremost to sustained, productive disagreement. Collectives like these are essentially study

groups, reading together, making arguments, making journals, fighting, producing. Moten and Harney's *The Undercommons* manifested itself in this way, and locally, projects like Red May and The Alice function similarly.

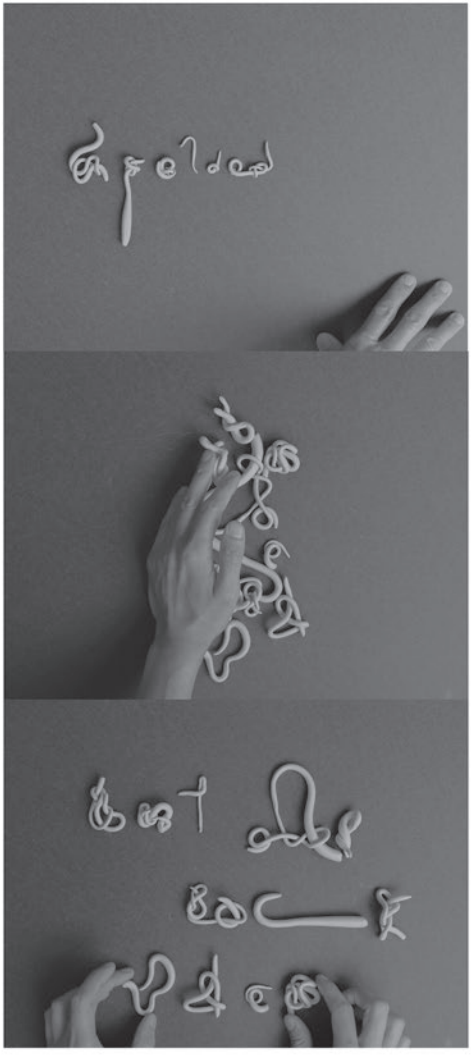
> **Nate:** Bauhaus was thinking about the object for others instead of for the self, or as the self, and I really appreciate that as a mode of thinking about production, or thinking about artwork in general.

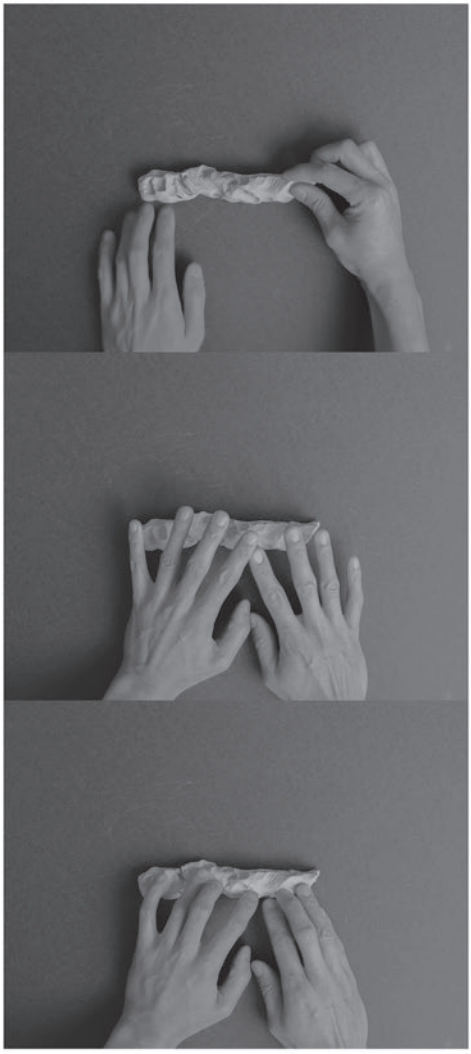
Matt: T'ai Smith writes about an interesting moment in which Bauhaus weavers realized that that weaving was not related to painting but to architecture. Again, it was about the artist thinking about the structure of the activity and not getting trapped into thinking that weaving can use this colorful yarn to produce painterly surfaces, but actually saying look, a loom does something different than a paint brush does. When you make the decision to make a net, when you make the decision to paint with your hands instead of a brush, all of those things are opened up by Duchamp's original decision to name a pre-existing urinal an artwork, forever implicating the process of decision-making into the creative process. The onus is on thinking through the technique and the structure and the implications beyond the delight of the novelty of the material. The search for novelty in a purely material sense without thinking through it more conceptually is a problem.

> **Nate:** Thank you again!

ROBERT RHEE

Knot Script: Figure Eight





Robert Rhee, *Knot Script: Figure Eight*, 2017.

CHARLES MUDEDE

The Political Economy of Basquiat

Partially hidden at the center of *The New Spirit of Capitalism*, a sprawling book by the French sociologists Eve Chiapello and Luc Boltanski, is a concept concerning the ontology of the post-Fordist worker. What made Fordist labor ontologically different from its post-Fordist form was a transition from capital's engagement with what Chiapello and Boltanski call "the social critique" of its mode and motives to an engagement with the "artistic critique." This transition began in the late-1960s, and was accelerated in 1971 by the collapse of the economic order that was established in 1944 at a conference, Bretton Woods, that had as its key figures the British economist James Maynard Keynes and the New Deal public servant Harry Dexter White.

Though Bretton Woods economic order was based on a plan designed and developed by White, and rejected many of the policies pushed by Keynes, such as the establishment of a universal currency, it became known as Keynesian because the age it initiated in 1947 (the conference occured in 1944) was defined by the core economic ideas Keynes articulated in 1937 in *The General Theory of Employment, Interest, and Money*. These ideas were realized as a post-war state commitment to full employment and a truce between labor and capital, between workers and the owners of the means of subsistence and production of wealth. This truce was not tacit

but explicit and in 1950 was even made official by the Treaty of Detroit. This contract protected capitalists (here represented by the Big Three American car makers--Chrysler, General Motors, Ford) from strikes in exchange for health certainty, sunset certainty (pensions), wages adjusted to inflation/cost of living, and, most importantly, job certainty.

From high wages and job security emerged America's massive middle class, which was mostly white and earned enough money to absorb capital's surpluses, thereby solving or overcoming the old contradiction of overproduction. The nature of this contradiction: Capitalists made lots of stuff but at the same time repressed wages, which meant that demand was chronically weak and so could not absorb or consume capital's surpluses. Keynes argued, during the Depression years, that capitalism would not survive if its repression of wages continued. Without massive government fiscal expenditures, on the one hand, and high wages, on the other, the crisis of overproduction would never be resolved and the system would submit to socialism. After World War II, all advanced capitalist societies adopted Keynes' economic program. Wages went up and up, jobs became secure, and health care costs were socialized. Keynesianism or social democracy or Fordism or the Treaty of Detroit addressed what Chiapello and Boltanski call the social critique of capitalism.

This social critique is still with us today, but in a much weakened state. And it has been replaced by the artistic critique, which has been around since the middle of the 19th century. You can find the social critique full-blown in the founding text of political economy, Adam Smith's 1776 *The Wealth of Nations*. But nothing about the artistic critique are in its 1000 or so pages. The artistic critique really gets its start in the Second Empire Paris (the 1850s). Its saint is the poet and flaneur Charles Baudelaire. He and his kind attacked the very morality that Smith celebrated in *The Wealth of Nations*—bourgeois conventions and standards. Smith, in turn, had attacked aristocratic values (which were seen as wasteful and unproductive) with the values of shopkeepers and manufactures (resourcefulness and industriousness). The aristocratic critique of commercial

society, which matured in the 17th century, had at its core a disdain for money-making. The artistic critique of the bourgeois morality that matured in the 19th century was basically a continuation of the aristocratic critique of the commercial society articulated in capitalism's founding document, *The Wealth of Nations*.

The artist rejects bourgeois paternalism and conventions. He/she demands freedom from market rationality, contracts of every kind, and struggles to break with the "cash nexus." He/she embraces uncertainty and denounces security as an illusion or even as a trap. Security means obedience. Security suffocates creativity. And so on. In this respect, the substance of the artistic critique is radically different from that of the social critique, which is all about security: job security, health security, sunset security. And it is here that Chiapello and Boltanski found their concept of the ontology of post-Fordist work. It is in essence the transition from certainty to uncertainty.

But how did this transition occur? By capital's nullification of the capital/labor truce in the 1970s (the social critique), and replacing it with an acceptance of the artistic critique in the 1980s. The artist became the ideal for the worker. Why? For one, the artist demanded autonomy or the freedom to express him/herself. This negation of bourgeois convention and conformity presented capital with a new ontology for the post-Fordist worker. In actuality, the artist rejected bourgeois certainty; but capital expediently tied this type of certainty with that of the post-war middle-class, which owed its existence to gains made by the social critique.

In walks Jean-Michel Basquiat, the last great Baudelairian of the 20th century. Though achieving success, and making in his short life more money than Baudelaire could have dreamed of, nothing but accidents marked his spectacular rise to fame. He was fiercely autonomous and singular and unmoored. He made money but he also disdained it like an aristocrat. Few lives represented more fully the artistic critique of capitalism than his. And yet by the 1980s, he represented not an opposition to capital but the ideal of its post-Detroit Treaty worker. The ontology of labor in its social critique form was security. In the form of the artistic critique, which

capital adopted after it reneged on the Detroit Treaty and social democracy, was uncertainty.

The absence of security (job insurance) is reevaluated by capital as a virtue. Corporate marketing identifies autonomy and creative genius and risk-taking with its products and modes of production. This messaging matures in the 1980s, Basquiat's decade. His art also arrives at the same time that the capital of capital completes its move from downtown Detroit to Manhattan. This move represents the financialization of economy that's often described as neoliberalism or globalization. It must not be confused with the financialization that took shape in the second-half of the 19th century. The latter facilitated large-scale productive enterprises like the railways or the transformation of whole cities, like Baudelaire's Paris. The former, Basquiat's Manhattan, breaks with production (Detroit) and successfully launches money from the base into earth's orbit.

The philosopher of Basquiat's moment, Jean Baudrillard wrote in the brief essay "Transeconomics" that money had become "the only genuine artificial satellite. A pure artifact, [that] enjoys a truly astral mobility... Money now found its proper place, a place far more wondrous than the stock exchange: the orbit in which it rises and sets like some artificial sun…" Basquiat's star rises and his life ends in the decade that Manhattan financialized the American and global economy. At the same time, his mode of existence, the artist life, became the model or new ontology of wage labor (precariousness) in the 21st century.

JASON GROVES

Observing the Anthropocene

During this summer of 2015, NASA made a startling announcement: Pluto has geology. Images from NASA's *New Horizons* spacecraft indicated the presence of active geological processes. To my ears this was a novel expression as well as a novel discovery: geology as something that a planet can or cannot have, like biology. Around the time of this announcement I stumbled across *A Walker's Guide to the Geology of San Francisco*, a slender booklet found in the San Francisco Exploratorium's Fisher Bay Observatory, and for a moment I misconstrued the preposition "of" to refer to the metropolis— its inhabitants, its developers, its agencies, its structures, and its infrastructures—as a geological process.

Can a metropolis have geology? According to a growing contingent of geologists, the human species can be regarded earth-magnitude geological agent. They contend that this species has mined, eroded, consumed, burned, and bombed its way out of the Holocene and into this new geological epoch, tentatively known as Anthropocene. The Anthropocene hypothesis has considerable implications for how we understand history and imagine cities. New ways of seeing and new ways of listening are needed as urgently as new terminologies.

A Step Back

My initial encounter with the Exploratorium began in 2013 on a multi-day walk that led from Pier 15 in San Francisco to the summit of Mt. Diablo and whose accompanying conversations traversed a shared interest in language, landscape, and the difficulty of negotiating, as Tim Robinson writes in *Stones of Aran: Pilgrimage*,

> our craggy, boggy, overgrown and overbuilt terrain, on which every step carries us across geologies, biologies, myths, histories, politics, etcetera [sic], and trips us with [...] personal associations. To forget these dimensions of the step is to forgo our honour as human beings, but an awareness of them equal to the involuted complexities under foot at any given moment would be a crushing backload to have to carry. [1]

Two years later, a residence as an Urban Fellow in the Observatory provided the opportunity to begin to chart the dimensions of what Robinson calls "the adequate step." The maps, atlases, and regional history books of the Observatory Library (curated by the Prelinger Library) are set against the backdrop of San Francisco's craggy and overbuilt terrain, and in particular an area that had been built on land reclaimed from the Bay with scuttled ships and debris from the quarried face of Telegraph Hill. Reflecting on this unsettled ground, I began to speculate on the question that occupied my residency: *How can the museum help to recalibrate your sense of time and space in the city?*

A Peripatetic Reference Library

While the ultimate material signature of this new epoch might be unseen—heavy metals in ice cores, radioactive nucleotides in sediment cores, elevated atmospheric carbon dioxide levels, worldwide networks of subterranean infrastructures—I began to speculate on how we might nevertheless imagine and perceive the

city as a geological actor. One aspect of the problem, as Rob Nixon succinctly writes, is that

> we're simply not accustomed—maybe even equipped—to conceive of human consequences across such a vastly expanded temporal stage. How can we begin to internalize our role as Anthropocene actors, to inhabit that role feelingly? [2]

To find at least a measure of the magnitude of this task would be a start. A first step, so to speak, might take the form of observing the asymmetry of a footstep's dimensions today, the growing lack of equivalence between a stride and the stratigraphy it traverses, the (un)conformity between the human and the geological, the utter derangement of scale that even an ordinary walk can initiate in an age of planetary anthroturbation. *In One Step, Travel From The Age Of Reptiles To The Age Of Mammals*: an interpretive panel that I stumbled across at the base of Mt. Diablo suggested to me that the perhaps impossible task of inhabiting the role of an Anthropocene actor might be undertaken on foot.

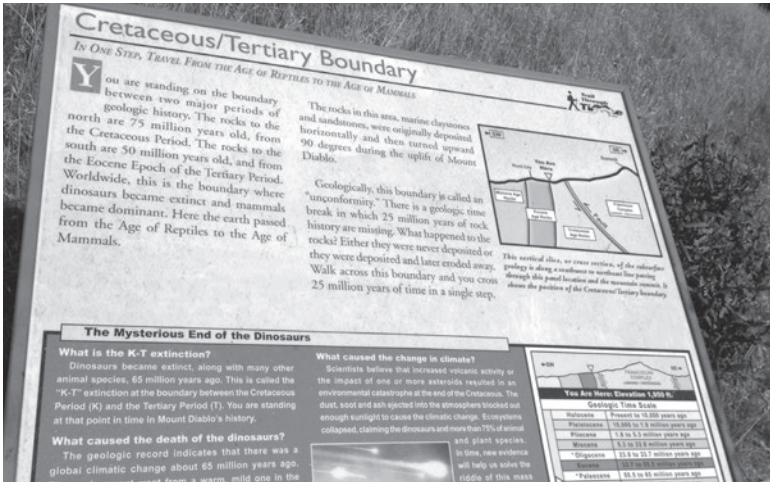


Figure 1. "Trail through Time", Mt. Diablo Interpretive Panel. Photograph by Jason Groves

The question, now, is how to negotiate an emergent boundary with wildly fluctuating feet. *In On Step, Travel From the Age of Mammals to the Age of Plantations*. Consider consumption footprints, carbon footprints, water footprints, and trash footprints: the human foot bears the mark of a planetary Oedipus, in that the average ecological footprint in the U.S. has swollen to an estimated 9.4 global hectares, or roughly a million square feet, according to the WWF. Per pair of feet.

While the proposed material markers of this novel geological epoch may be invisible to the naked eye, during my residency I began exploring materials for perceiving, notating, or otherwise imagining the Anthropocene from the vantage point of the pedestrian. These became the basis of a Peripatetic Reference Library, whose initial holding was Clyde Wahrhaftig's *Walker's Guide to the Geology of San Francisco* (A Special Supplement to the *Mineral Information Service*, Volume 19, Number 11, 1966) and its ten guided walks, especially "A Petrographic Nature Walk through the Financial District. The guide's "Petrographic Nature Walk through the Financial District" offered an urban geological tour, yet the most compelling evidence for considering San Francisco as a geologic force might be the absence of most buildings and features described in this 1966 walk. Smudge Studio's delightful *Geologic City: a Field Guide to the GeoArchitecture of New York* (2011), which playfully draws connections between urban phenomena and geologic forces and formations, bookended the collection. Presented as a field guide and showcasing 20 sites to "sense the geologic pulse of New York City," this book is the kind of speculative tool that speaks to the itinerant patrons of the Peripatetic Reference Library. This reference library's holdings informed a self-guided tour of the Anthropocene currently in development.

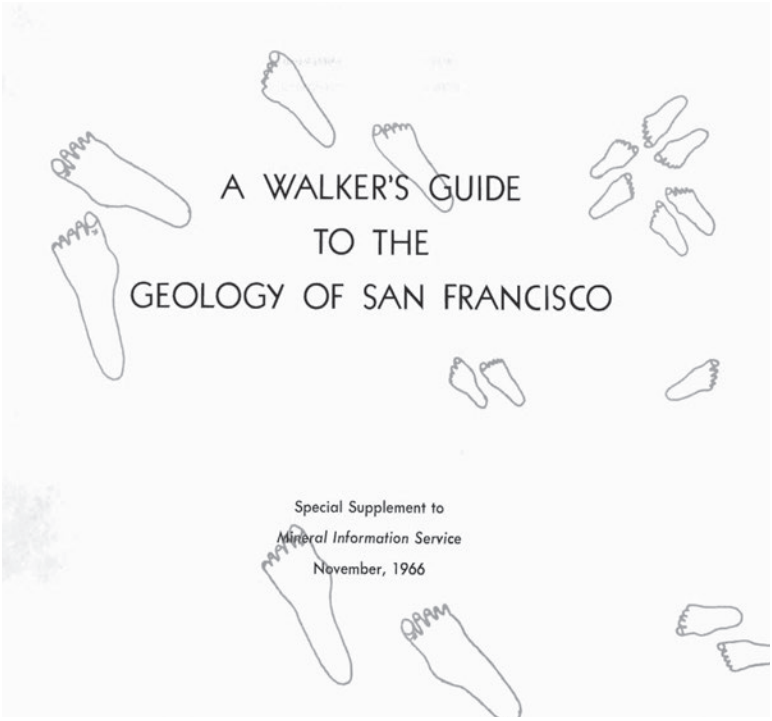


Figure 2. *A Walker's Guide to the Geology of San Francisco* (1966). Gordon Oakeshott and Clyde Wahrhaftig.

Steps Toward an Anthropocene Observatory

In what ways might the Observatory offer further insight into the shifting dimensions of the adequate step?[3] In what ways might it indicate the emergence of a novel geological stratum, and a new geological epoch in which the distinction between the built environment and its lithic substrate, between the local and planet, has become blurred? Just as 19th-century natural history museums helped reconstruct the history of the Earth, so too are contemporary museums emerging as key sites of inquiry into a volatile and vulnerable planet. Offering a privileged if precarious vantage point to observe the rising ocean levels that threaten its very foundations, the Observatory seems uniquely poised to lead

this inquiry.
While institutions ranging from the Smithsonian to Munich's Deutsches Museum have new exhibitions devoted to the Anthropocene, not enough attention is dedicated to the re-functionalization of museums' existing collections to contend with the socio-political forces shaping the earth system. I borrow the term *Umfunktionieren* ("functional transformation") from Bertolt Brecht, who coined it to describe the aesthetic strategy of alienating an object from its context in order to develop a critical perspective in the service of an emancipatory politics. Accordingly, I suggest a few exhibits that demonstrate how the Observatory might be reimagined as an Anthropocene Observatory that would facilitate geological literacy and numeracy in this new epoch.

Geotechture

Reading the brick warehouses of San Francisco's Northeast Waterfront Historic District as a form of "human-mediated sedimentary layering" amidst a "biogenic urban geology," Bryan Connell's Geotechture Observation Station contains a touch-screen survey instrument as well as a photomontage of these buildings and the shale quarry landscape where they originated across the Bay. This photomontage rehearses the space-time compression characteristic of Anthropocene geographies of resource extraction in which transoceanic and transcontinental shipping systems have stitched together a virtual supercontinent that geographer Alfred Crosby calls "our current reconstitution of Pangaea."[4]

Figure 3. Geotechture,
Photograph by Bryan Connell, 2013.

The Bay as Minescape

If the Geotechture Observation Station invites us to rethink urban architecture as geology, it also invites us to think of the quarries and mines that furnish the city's financial capital and building materials as part of its geotechtural legacy. The exhibit of two USGS mud core samples offers evidence of how sediment flows resulting from hydraulic gold mining have altered the topography of the Bay.

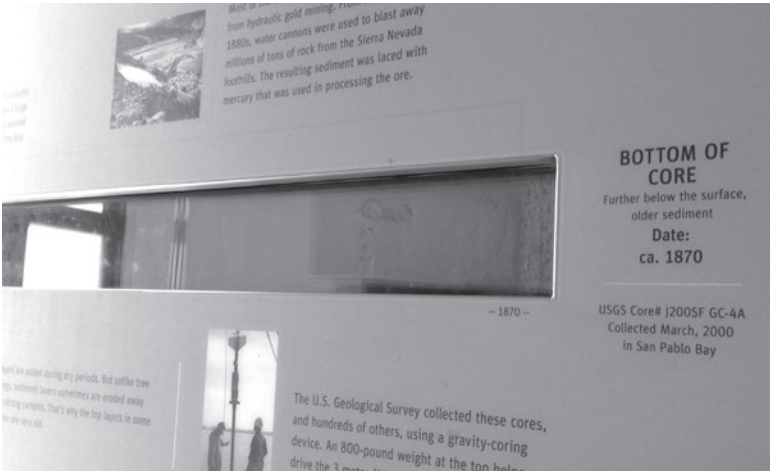


Figure 4. USGS Mud Core. Photograph by Jason Groves.

Seep City

Joel Pomerantz's *Seep City* project, found in the Observatory's map collection, charts water sources in San Francisco, but the contour lines at five foot intervals also register an infrastructural footprint in the topography itself. Streets, highways, reservoirs, and railroad grades interrupt the rolling contours with a deranged geometry of polygons and ziggurats. The shoreline prior to modern land reclamation projects has resumed its position, prefiguring the future shoreline in a climate-changed world.

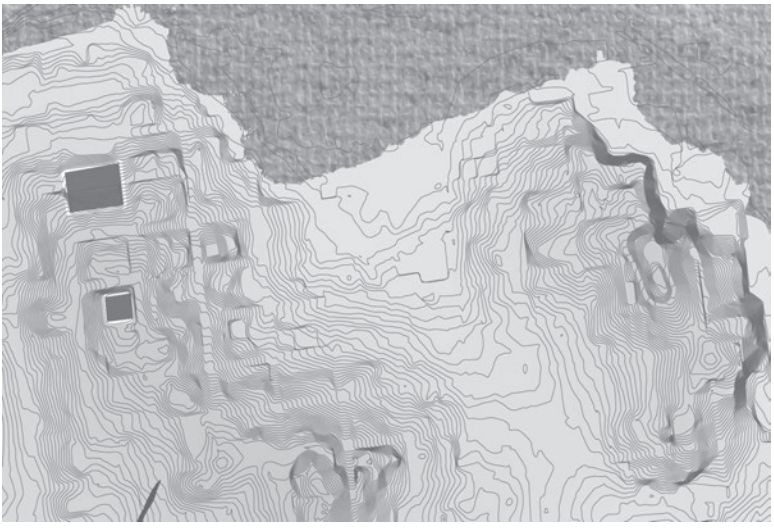


Figure 5. Seep City (detail), Second Edition. Photograph by Joel Pomerantz, 2016.

New Landmasses

If a metropolis can have geology, can I have geology? Yes, according to artist Ilana Halperin, who has developed *A Library of Earth Anatomy* for the Observatory. Ilana's work, which consists in exploring the often intimate relationship between human anatomy and earth anatomy, helps us understand our own minerality and our deep responsibility for an increasingly vulnerable planet. This too is the task of an Anthropocene Observatory.

[1] Tim Robinson, *The Stones of Aran: Pilgrimage*. New York: Viking, 1986, p.12.
[2] Rob Nixon: "The Anthropocene: The Promise and Pitfalls of an Epochal Idea." In: *The Edge Effects* (6 November 2014), available at http://edgeeffects.net/anthropocene-promise-and-pitfalls/.
[3] A film series by Armin Linke, Territorial Agency, and Anselm Franke also bears the name "Anthropocene Observatory."
[4] Alfred Crosby, *Ecological Imperialism*, Cambridge UP, 1986, p. 12.

my brain molded early in my real body
my tears fall large like my real body
my sister is half my real body
my mother made my real body
an orange peel holds a real body
and a real body
feeds a baby
there is so much on my real body
but no season fair to shed it
i feel my hip bones misalign
when i sit cross legged
i hold both bones after a day
of interfacing unprotected
i think against my will
and feel towards sleep
a lack of trust
a pillowed web of rot
lays indented from a touch

raga 1

in my dream i tinged whipping cream
grey with dust from black sesame
i was implored to make up
the sofa bed and uncrease the edges
something so soft when i smoothed
it like a haircut that gives you back
your power in the face of a bad world

raga 2

I accidentally typed
seattle instead
of *amazon* in a text
and fell apart screaming
like a screaming dot
at the end of a sentence

bye bye to this port only
memory from here on
the shoals at point lobos
cut me loose as did wonder
valley's emptiest
basketball court

now i'm unafraid of love
as i'm unafraid of dying
that is i'm very nervous
their inevitability a silk
fog around my organs

Definition of paper.

Paper is a material made of plant fibers which have been interlocked, processed and reformatted. The fibers are suspended in water, creating a slurry, and retrieved by sieve-like devices to form a sheet.

Hanna M. Szczepanowska, Conservation of Cultural Heritage: Key Principles and Approaches, p.127, 2013.

An image of Francesca Lohmann's *Taffy VIII* (2017), after 15 minutes.

TERRE THAEMLITZ

All's In Order:
"Out of Order" Fashion's Inability to Divest of Power

A NOTE ABOUT IMAGES: For the presentation, images were collected through Google image searches on the terms 'suicide,' 'anorexia,' 'bulemia,' 'anorexic male,' 'IV drug use,' 'crying,' and 'man crying.' They were projected in random order using the Mac OSX slideshow screen saver. This "corporate" (or "institutionalized") assembly and presentation of images (which included both real and faked scenes), and the way in which they could only function within the context of my presentation as a reified and touristic parade alienated from the events the photos documented, was a deliberate parallel to the way in which the themes discussed in my lecture were also subjected to alienation and commodification as a precondition of the symposium format.

Thaemlitz, Terre. "All's In Order: 'Out of Order' Fashion's Inability to Divest of Power" Comatose.com. January 27, 2010. Transcript of presentation at "Out of Order: A Matter of Principle," organized by Andrea Sick and Dorthea Mink at HFK Bremen (Bremen University of the Arts), Bremen, Germany, January 23-24, 2010. http://www.comatonse.com/writings/allsinorder.html.

As someone who spent the majority of my teens altering and reconstructing out-of-fashion secondhand clothing, I somehow always carried the notion that I liked fashion. In the same way that I thought I liked music despite absolutely hating the overwhelming majority of things I heard, so did I think I liked fashion despite my being absolutely horrified by the visual and social implications of most men's and women's clothing – the tyranny of which begins immediately with our first blue or pink baby jumpers. In the early '80s, the clothing options for males in a mid-Western U.S. town like Springfield, Missouri, were limited to those deadening cuts and dark, solid colors one would expect to come from the puritanical sensibilities of evangelical jackasses. Women had a bit more selection than men, as the U.S. was at the peak of its first obesity-pride movement, which encouraged plus size women to wear vivid prints and colors. But in my town, there were still many people who believed women's pants, along with polyester blend underwear, were the work of the Devil, so many women wore dark navy coulots – those long, baggy shorts that go below the knee and are cut to look like a skirt from a distance. Apparently Jesus loves the ladies in coulots.

My strategy at age 16, then, was to wear anything with vivid colors and obnoxious prints – the less fashionable the better. Given the lack of commercially available options at the discount department stores my parents frequented, I turned to clothes found in secondhand shops and boxes buried in my packrat father's basement. For shirts, I wore old flannel pajama tops from the '50s with gothic wallpaper patterns; for pants, I took in my father's old 152cm waist pants from the '60s with 20cm-deep pleats, and tapered the legs so tight around my ankles that I sometimes had to cut the seams open again to take them off; my belt was a frayed brown extension cord, which I considered an update to the old hobo classic of holding one's pants up with rope; on my feet I wore black leather dress shoes with large brass buckles that resembled those worn by Puritan Pilgrims, or else I copied my older brother's punk fashion of black engineer boots wrapped with two or three kilos of heavy duty towing chain; and of course, no outfit was complete without a massive assortment of rhinestone

costume jewelry – layer upon layer of necklaces, bracelets, and clip-on earrings. I occasionally wore old women's beige slips over my jeans, or one-piece dresses made from bed sheets I had hand-dyed and printed with pen inks and other non-standard dyes laying around the house. My self-cut hair style, which resembled a messy homage to the lead singer from A Flock of Seagulls, was appropriately described by my father as a "God damned rat's nest." I would occasionally color it with Marks-A-Lot permanent markers.

I did not particularly care for the majority of clothes I chose to wear. Liking them seemed irrelevant. They were simply the antithesis of what I considered at the time to be dominant culture's fascist fashion conspiracy against individuality in "America, the Land of the Free." I say they were clothes I "chose" to wear, but at the time my behavior seemed mandated by the idealist values indoctrinated in me as a naïve American child. They were my duty, without a doubt. But, as one can imagine, this fashion put me in physical harm's way. In fact, if I didn't have the experience of regularly getting my nerdy ass kicked throughout the previous nine years of schooling – during which time I tried my best to fit in with everyone else – I might have actually believed those around me who said I was bringing the violence upon myself. But I knew my deviant appearance was not an invitation for violence. I knew it was the result of a social split, a psychotic episode resulting from nearly a decade of fag-bashing that predated any individual awareness of sexual desire, and which extended to homophobic insults by school faculty. Despite my borrowing fashion ideas from New Wave album covers, in Springfield there was no communal component to my look; no big-city group of New Wave outsiders for me to hang out with. It was as anti-social a gesture as it appeared. In effect, if those around me insisted upon seeing me as a faggot-nuisance despite my attempts at assimilation, then by God I would show them what a faggot-nuisance I could be.

Although it's true that the theatrics of my appearance had an ability to transform otherwise invisible daily bashings into vivid scenes from American cinema, I was in no way director of the

events around me. I was simply providing the contrast that allowed one to see the absurdity of dominant culture. For example, there was the time when a pick-up truck of school athletes wielding baseball bats – a lynch mob – came to my parents' house and, with their wholesome All-American appearance, simply rang the doorbell and calmly asked my father if I was at home. Fortunately, I was out. However, my father was so taken in by their trustworthy appearance that he proceeded to tell them where they could find me; and until I had explained to him their true intentions, he had actually felt prideful relief in his freakish son finally socializing with normal types. Then there were the times I would be leaving work to the sound of voices screaming across a vast parking lot, "Thaemlitz is a dead little faggot!" – a phrase interwoven with the squeal of car tires heading my way such that the two sounds became cross-synthesized with one another, and another car chase was on. Those boys wore the clothes which, in their AIDS-phobia, I was warned not to bleed on as they shoved and threw me around – although the irony and black humor of mid-punch phrases like, "Bleed on me and I'll fucking kill you, AIDS bait!" was completely lost on them. In my mind, they were the true embodiments of "out-of-order" fashion, their appearances wrought with social chaos and destruction, all in a most literal sense. "Out of order" fashion could only hope to wield such vanguard leadership potential.

It wasn't always like this. Before my family was relocated to Missouri in 1981 we had lived in the outskirts of St. Paul, Minnesota, where there was an abundance of freshwater lakes, the public proudly identified as politically progressive, and the children dressed like spacemen. At least, that was my pre-teen goal, as I clothed those around me in capes, long boots, winter gloves, and motorcycle helmets decorated with colored duct tape. It was around this same time that I convinced my grandmother, a former seamstress, to make me an altar boy's gown in black rather than white, so I could become Death.

But these pre-teen exploits were also less about imagination or creativity than about contextual reactions – reactions to the bizarre, twice-outgrown hand-me-down fashions bestowed

upon me as a middle son who was smaller than both his older and younger brothers. I often joke that my interest in cross-dressing came from being forced to wear clothes worn so thin by my brothers that by the time I got them they were as sheer as negligees. As a result of the pacing of these hand-me-downs, I was aware of the industrial cycles of fashion from a very early age. When solids were in fashion, I was the geek in plaids and patterns. When patterns were cool, I was wearing solids.

Having to wear facially distorting Coke-bottle glasses since the age of two was another major fashion factor in my socialization as a youth. There was an animalistic reaction of the children around me to the distortions of my lenses that caused them to fearfully and vehemently ostracize me, similar to how they might reject other children with more severe handicaps or deformities. (Between scientific advances in thinner lenses, as well as cultural shifts, I am told some of these dynamics have waned. I can only hope so.) To make matters worse, my well-intending father (who did not wear glasses) suffered from the delusion that bigger lenses would allow me to "see more" – when in fact the curvature of the larger lenses was so deep that only the center was functional. Still, he would demand the optician construct custom glasses using the largest lens size available for a given frame, and combine that with the bows from a smaller frame in the same style – the frame size which was actually appropriate for my head. This continued until I left home at age 18. Yes, it was eyeglasses, and the experience of being a cyborg physically dependent upon body-correcting devices, which introduced those links between fashion, biology, and sociology that eventually developed into my use of transgenderism and cross-dressing as an active means of cultural- and self-criticism.

In all of this time, although I assumed my interest in manipulating appearance meant that I liked fashion, fashion was never my friend. Ultimately, it was a case of misplaced admiration, similar to my mistaking a like of sound for a like of music. Like so many things in life, processes of denaturalizing our associations with industry and tradition span decades, such that I did not fully

realize I despise fashion – that my approach toward dressing was not an effort at fashion reform, but that I actually live in diametric opposition to the motivations and objectives of the fashion industry – until my early 30's. The news came to me in the form of an argument with my partner at the time. It was my thirty-third birthday, and I guess my overly expressive face gave away the fact that I did not like her gift of a rather ugly, but expensive and slightly avant-garde brand name shirt… which also happened to be a size too small. My failed apologies led to her saying, "When I met you, you said you liked fashion, but you really don't. You can't stand when I watch fashion shows or fashion programs on television. You hate designers. You hate models. You hate fashion brands. You dress in drag but you hate women's clothes. You also hate men's clothes… You hate fashion!"

Although her take on what constituted "fashion" was rather enslaved to the mainstream industries, she was right. There was nothing about fashion that I wished to assist, transform or resurrect. Whatever movement around clothing I had in my life was not planned, but simply a compulsive reaction to my environment – like the flailing arms of someone helplessly drowning in a bottomless ocean. My movements were not about swimming in this cultural ocean, nor about directional mobility, but a panic reflex triggered by a fear of death – both a symbolic death of self-identity, and a material-based fear of violence and bashings from others. Realizing this was a liberating un-becoming. It erased the guilt I had carried for decades as a result of never having fun with clothing, but rather only using it to mediate my fear of appearing before others. Of course, the pressure to enjoy fashion increases tenfold within MTF communities, where transsexuality and transvestism collide in an ideological train wreck of theatrics, desires, seductions, fetishisms, and sensualities. Our oppressions are overshadowed by facades of self-control. Alienation is eclipsed by a mood of self-actualization. Insecurities become twisted into pantomimes of pride, such that any motives rooted in cultural resistance are depoliticized by the celebratory appearance of our Queenish actions. Taken to the extreme, we arrive at the ever-willing-

to-entertain Asian Ladyboy, whose paper-thin appearance of acceptance in her tyrannically homophobic homeland (such as Thailand, with its legal ban against homosexual government employees) betrays the reality of her simply doing what it takes to gain social acceptance as a male sodomite. Even more extreme is the state funded sexual reassignment surgery program in Iran, the sound of which has a progressive ring to Western ears, when it is actually an anti-progressive Islamic fatwah enacted shortly after the overthrow of Shah Pahlavi in 1979. This fatwah presents the Iranian male sodomite with a choice between life as an Islamic woman or life in constant fear of being murdered by the hands of strangers or one's own family. Meanwhile, here in the West, only one person has more pressure than a fag to be the life of a party: a fag in a dress. To be even more precise, a black fag in a dress. (On the other hand, gender-mixed crowds expect very little of FTM's and cross-dressing lesbians, who often find themselves ignored and avoided.)

Thus, whereas most people like to celebrate the illogical pleasures of "dressing up," I only anticipate the illogical rage and violence that is, ironically, equally capable of being triggered by our failed attempts to pass as "normal" or "real" women and men, as well as our attempts to lessen our feelings of failure by transforming ourselves into something "other than normal." While the fashion industry contemplates the possibilities of "non-law-abiding fashion" in relation to a woman's publicly exposed nipple (and not just any nipple, but the nipple of a very particular shape, color, age, and body type), I find myself preoccupied by a different series of "non-law-abiding" fashion issues. Issues of illegality that do not lie with the fashion industry's playful attempts at deviance and scandal, but with the violently illegal actions of people – overwhelmingly male – who claim their acts of rape and gay-bashing were inspired and justified by the fashions of their victims. Claims which, although they may not hold up in a court of law in most Western societies, do possess cultural credibility. Thus, here I stand in my 40's, still afraid of getting my ass kicked. It makes no difference whether I am dressed as a man or a woman, a norm or a freak. The entirety of fashion as

a celebratory medium has no resonance for me because I cannot identify with the cultural bases of power and domination it unfailingly celebrates – whether the location of that celebration is straight or queer, two-gendered or other-gendered, prudish or aesthetically scandalous. The urgency of social crises around these issues preempts my capacity for joy, and extends to my refusal to celebrate the symbolic spill of blood on the fashion runway through rebellious or impractical designs. I am trying to get away from bloodlust.

The world of fashion echoes with jingoistic claims of "shaping and changing what is perceived as 'mainstream,'" anticipating that "the deviant becomes the new rule," and a religious belief that "fashion leads the way." I am not simply talking about the spew of commercial rhetoric one sees on television or reads about in magazines. These are actual phrases used in the synopsis of this very symposium, "Out of order – a matter of principle." Seemingly ignoring a century of critique, the symposium's title itself is like an ode to the moral necessity of the avant-garde – a most classic and traditional avant-garde whose duty, on principle, is to generate those "chance events" which shall "become controllable and be analyzed as possible trends." As with other Modernist avant-garde's, these claims to cultural power - real or imagined, causal or symptomatic - constitute a problematic pseudo-politicization of their own marketplace in which "fashion suicide" (the act of designing against the fashion of the day out of a desire for cultural rupture) becomes a repeated cycle intended not to sever or destroy power relationships, but rather to endear the suicidal "out of order" fashion victim to dominant culture and secure its commercial embrace. "Out of order" fashion is, from the outset, a manipulative cry for help comparable to attempting suicide when one knows one only has half the pills necessary to complete the job. The gesture of severing cultural norms reflects a death wish, but the means themselves are seldom intended to complete the task at hand. This macro-psychology of fashion culture's death wish is paralleled on the micro-level through widespread individual problems such as Class A drug use, anorexia and bulimia – problems which actually facilitate

many peoples' successful participation within fashion industries. "Out of order" fashion, despite its celebratory grandeur, is the commodified image of misery. Its pleasures are a pacifying decoy, like LGBT Pride gatherings, in the midst of our domination.

As a fashion victim of another kind, who has no interest in commercial embrace or reconciliation, I have found "out of order" fashion's "anti-social yet commercially viable" concept of clothing to be even more oppressive and devious than evangelical prudery. The critique of dominant culture offered by impracticality and unwearability are no more than theatrics within an arena of mass spectacle, often reflecting a luxury of experimentation only granted by wealth and canonization. Unsellable fashion – the risqué face of a conservative industry – is more often than not the masturbatory privilege of corporate leaders whose lifestyle gluttony is funded by the bulk sale of their branded hand towels and sweat shirts to the less fortunate. It is the insulting cake offered up by Marie Antoinette. A cake we are all too eager to eat, as if without adverse implications.

Speaking of Marie, how many designers do you think would have refused participation in fashion films such as "Marie Antoinette" or "Elizabeth" on political grounds, refusing to associate with projects exalting feudalism at worst, or feigning ambivalence on the subject at best? I doubt you could find a single one. In this way, the suicide, or rupture, proposed by avant-garde fashion is rooted in a romantic identification with the prideful, arrogant death wishes of monarchs on the verge of dethronement; and not in the more realistic suicide of faceless, impoverished nobodies pushed to the brink by dominant social mores, principles, and trends. This is because fashion, as an industry, remains enamored of patrons and the patron system. The fashion industry's complicity with the brutalizing moralities implied in the systems of domination it mutually supports and is supported by, all the while claiming to speak from a position of social-minded "principle," is the disgrace of "out of order" fashion. It is the arrogance that would, for example, lead people in fashion to cite the social acceptance of women's slacks as a

case of the clothing industry transforming gender relations; a view which erases the material struggles of women who wore men's clothes in their attempts to gain male privileges such as suffrage, the right to own property, or even to join the military. Women who were sometimes beaten, raped, and murdered as a result of their wardrobes. (Again, we come back to the lack of entertainment value placed on FTM and cross-dressing lesbians at parties, precisely because they remind us our capacity for humor is at times outweighed by the traumas of life without a penis under patriarchy.) Industry and distribution do not remind us of these bold and brutalized women, but actually erase our memories of their actions by saying the acceptance of women in pants was simply a matter of exposing enough people to a certain cut of cloth over a long enough period of time. The fact that male dresses remain a cultural oddity after nearly a century of women's slacks shows how little fashion is doing to dismantle the images of patriarchy, or to divest men of their traditions. To the contrary, women's slacks – as a symbol of women's liberation with no corollary male transformation – simply reaffirm associations between power and traditional male fashion under patriarchy.

As someone who is not interested in empowerment, but interested in divestments of power, the cultural changes proposed by the fashion industry – no matter how outrageous they my look on the runway – mean nothing to a person such as myself. Instead, I feel molested. Raped. Violated. In my lifetime I have seen the effects and signs of poverty – of wear and tear, and second-hand fashion – become co-opted by the rich. I have come to see torn T-shirts and tattered jeans sold for more than the cost of a month's rent. (That's one month of my rent – how many months rent for the third-world employees working in garment factories?) I see young Japanese punkers (who don't listen to punk rock at all, but listen to J-pop) wearing €500 pants, and €800 hair weaves, with not a single self-made or self-altered item on their bodies. I have seen people proudly walking around in Richmond jeans with the word "RICH" emblazoned across their asses – to which I responded by patching the word "BROKE" across the back of a pair of my own used jeans. And I have seen people around the world and

of all classes swallow these trends, both in the form of the poor's fantasy-driven eagerness to see themselves in the rich, and as a means for the rich to camouflage themselves amidst those they exploit with ever increasing economic imbalances. I have seen every single signifier of my own experience twisted into blades wielded by the very industries and cultural systems I sought to resist. I stand empty-handed. Which is precisely where I began back in Reagan-era Springfield, Missouri: surrounded by peers robbed of class consciousness; wealth and industry ridiculing poverty; the possibilities of guerilla fashion and fashion terrorism commodified and regurgitated back upon us as a privilege of excess, at which point we gobble it up off the floor like dogs. I'm getting too old for this shit… and this time around I can't afford the new clothes or the used ones, which is why I still wear clothes found in my father's basement.

What has changed are my reactions to these circumstances – changes largely mandated by the economics of adulthood (ie., the necessity for employment). Although we like to portray our student years in high school and university as the time for struggling with our relationships to identity systems, it was only after graduation that my real struggles with issues of gender and sexual representation began. The impossibility for gender-fuck within standard work environments (let alone everyday actions such as grocery shopping), combined with intolerance in personal relationships, resulted in a strict gender divide within my wardrobe. Daily life took place in male clothes. Similarly, my cross-dressing became traditionally feminine and concerned with "passability." Both wardrobes revolved around concerns for personal safety, ranging from the ability to maintain employment to avoiding being singled out for bashing on the street. And although in recent years I have minimized my use of cosmetics and wigs when dressed in women's clothes, this rather clear gender divide continues to dominate my appearance.

While the closets underlying this divide – both sociological and industrial – are not at all surprising, there were also unexpected closets over the years. For example, during my DJ residency at the

midtown Manhattan transsexual sex worker club "Sally's II" in 1990 and '91, the fact that the majority of transgendered people there were engaging in hormone therapies and surgical alterations often led to the judgmental ostracization of non-medicating drag queens, such that I was ashamed to out myself as transgendered within the heart of a transgendered safe-space. Rather, I came to work in male drag, a habit which continues to influence my wardrobe when appearing as DJ Sprinkles.

When I do wear women's clothes – particularly within an employment context – my general approach is to downplay elements of camp, and dress in relatively standard apparel. Beyond safety concerns related to drawing excessive attention to oneself in potentially homophobic and transphobic environments, this is also a strategic rejection of the stereotype of the flaming queen, and the demand upon transgendered people to submit ourselves as fodder for entertainment and spectacle. This resistance to performance plays a large part in my electroacoustic audio performances, which seek to infiltrate media festivals and other events with deliberately boring and unsatisfying experiences for the audience, organizer, and performer. In fact, if I feel my invitation for employment is rooted in a fetishization of my status as a transgendered performer, and the promoter seems overly enthusiastic about my appearing in female drag, I will deliberately appear in men's clothing. Although this may be taken as personal betrayal (by not being "true to oneself"), contractual betrayal (by not fulfilling an employer's expectations), or even communal betrayal (by failing to show a particular kind of "transgendered pride" that conquers "the closet"), I feel it is imperative that people question their expectations around transgendered bodies – particularly since the primary condition of transgendered life around the globe is not celebratory self-actualization, but secrecy and the repressions of the closet. In the end, for transgendered people to only be granted public audience when playing the role of a campy snap diva who appears to her straight audiences as having transcended the troubles of life, in effect absolving dominant culture of its crimes by persisting despite domination, is the ultimate manifold betrayal enacted upon and enacted by ourselves.

At a personal loss for what to do, the tyrannical demand to "look fabulous" in drag (or conversely "over the top grotesque") has pushed me to try to publicly discuss the turmoil of being born with a penis, commonly dressed in men's clothing, yet still transgendered identified. Since men's clothing seems to offer a visual reconciliation with dominant cultural expectations around my body (which grants a degree of personal safety, yet betrays my political and cultural outlooks), and since this reconciliation is denied me when dressed in women's clothes (which also revolve around a patriarchal image of femininity that betrays my political and cultural outlooks), clothing ceases being about self-representation. It is reduced to a manifestation of the dissonances between identity and experience. This, for me, is a valid starting point for cultural investigation around clothing. But it is vital to remember within this formula fashion is not a facilitator of investigation, but an enabler of that which is under scrutiny. Fashion is the medium through which I find my body granted and robbed of privilege.

It was in the project Trans-Sister Radio, an electroacoustic radio drama commissioned by Hessischer Rundfunk in 2004, that I attempted to discuss the legal implications and risks of these privileges as they apply to transgendered mobility, internationalism, and migration. In particular, I questioned the various relationships between gender transitioning, spousal visas, and marriage as sex work; all of which were very scary issues for me to discuss openly at the time since my spousal visa in Japan was pending renewal, and I had not yet received permanent residence status (which grants a bit more legal independence and expressive flexibility). And, as if to demonstrate the very notions of privilege at issue, it was a year later when the follow-up broadcast *The Laurence Rassel Show* found itself cancelled for favoring the ever unfashionable term "feminism" over the trendiness of "transgenderism."

In my opinion, fashion – like the visual arts and music – seems to lack any potential for repoliticizing the terminology of anti-traditionalism and revolution that have been rendered

numb by over-saturated industrial ad copy. And, as with other media industries, the root of this impossibility seems to be its participants' ideological disconnection from the systems of violence through which the fashion industry constructs and perpetuates itself. Even when social issues do arise in the fashion world, they are so over-stylized and steeped in centuries-old Christian aesthetics of martyrdom – those same aesthetics which transform a bleeding Christ on the cross from an image of tradition-shattering horror to one of sublime and pacifying beauty – that we find ourselves hypnotized by the sensuality of our oppressions, even longing for their familiarity. I am not against sado-masochism (although I admit I find it personally boring, childish, and lacking the cultural potential proclaimed by Foucault and the rest); and within a Judeo-Christian heritage you would be in the minority if you were not to find grace in misery – it is the core of our social pacification and domination. But I do feel compelled to protest when the fashion industry – any industry – claims to stand at the vanguard of a culture (vanguardism being a ridiculously transcendental claim in itself), and with a peoples' best interests in mind, yet perpetuates the miseries of those people consistently and without fail. When our attempts at resistance are seamlessly and invisibly transformed into marketable trends, this is a mark of complicity, and not of success. In this way, "out of order" fashion is simply a very elaborate cultural sedative granting the illusion of mobility within a rigid socio-economic system.

I am speaking, of course, as someone who faces similar limitations working in the audio marketplace, where we all know "alternative music" is nothing more than a marketing ploy. And we all know from personal experience how fashion and music are interwoven as means of self-identification and socialization, functioning as signals to attract and repel those around us. So I am not speaking from a position of superiority, or higher understanding. I am speaking as a dupe; a sheep infected with the same diseases of desire as the rest of you. It is from this common base that I wish to say I do not believe we can transform industry into something liberating, any more than I believe transgenderism allows us to transform our bodies into something liberating. Culturally,

our liberation is not up for negotiation. Socio-economically speaking, capitalism relies upon our exploitation. And, of course, the fashion industry is notorious for its systematic reliance upon sub-standard work policies, ranging from unpaid internships to Third World slave labor. Even the heralded "sweat free" factories of Cambodia only pay workers €20 per month.

Rather than fantasizing about liberation through industry, industries need to be de-essentialized/denaturalized/dereified as vehicles of moralistic principle, and seen as material processes – not ideological processes – so that we may restructure our ideological relations to those material processes. This includes demystifying "out of order fashion" as "a matter of principle," so as to better understand its propagandistic functions within a larger dominant cultural context – because, like so many alternative culture industries, the principles being served are rarely those we wish them to be. In fact, they most often betray us. These ideological associations between industry and liberation, industry and leadership, industry and our social potential for realizing an inherently flawed concept of benevolent power, all need to be dismissed before we can even begin to think about the true topics we claim we wish to discuss. As a labor base enslaved to one industry or another in the service of domination (economic domination, national domination, global domination), what is first at issue is what kind of slaves we choose to be within those dominant systems.

Refuse to attach your dreams to the fashion industry's attacks on taste, even if you support them with your labor. Do not be ideologically seduced by the martyrdom of impractical clothing, as it is ultimately a sacrifice to the cultural Father. You may design it, you may manufacture it, you may sell it – but realize you do so as a slave, a dupe, a sheep, kissing the ass of H&M or whatever major company you or those around you pray will pick up on your patterns – hopefully after, and not before, you copyright them. Feel the weight of being forced to kiss this filthy, rotting ass. Breathe it in. Taste it. Vomit from it. Because it is only from the necessity to end the unacceptable that our principles take on

importance; and even so, only for a moment.

We all know principles are contextual – not rooted in "universal human truths," but in times and places – and in this sense they strike me as very poorly served by dreams of mobility or freedom. Those may be things we desire on a subjective level, but they are not at the root of our urgency nor a basis for social action. The institutionalization of principles, including "out of order fashion" as a matter of principle, is ultimately an extension of the domination we claim we wish to diminish. If, indeed, one's interest is in a type of cultural transformation which goes against domination, and which seeks to minimize the violence of current social praxis, then it seems imperative to actively and critically address issues of fear, violence, and culturally mandated hypocrisy. I am not talking about designing a season on the theme of domestic violence, or ribbon campaigns, or anti-fur advertising campaigns featuring nude fashion models, or other forms of political profiteering. There is always a cultural surplus of that sort of propaganda, which is about as socially engaged as choosing to pay with a high interest credit card because your credit company, which systematically bankrupts millions of people annually, will donate a fraction of a percentage to some mainstream charity hemorrhaging with administrative overhead. I am talking about recognizing one's own placement in a moment of crisis from which all directions are traps, and to then leave oneself vulnerable to crisis. As a member of the audio-activist collective Ultra-red recently wrote me, "once confronted with that crisis (the crisis of one's alienation), then one either enters into it to see what can be learned, or one retreats (aggressively) to the very modes of being that affirm and nurture the alienation."

One of the peculiar difficulties of working within academia and the arts is that the theme of principles is so omnipresent, yet simultaneously entrenched in those modes of being which foster our alienation. As systems, they are not unlike religion. In fact, the histories of higher education and the arts are entwined with the history of monasteries, convents, and cloisters. As a result, we find that the language that emerges from and sustains these

judgmental social systems is ass-backwards, and obsessed with the illusion of providing spaces devoid of judgment. A neurotic desire to believe our institutionalization is non-judgmental stops us from entering deeper into our alienations within these rigid systems, since giving our alienations visibility and conscious identification without claiming to know a means of resolution becomes tantamount to failure. Of course this is, in itself, judgmental and reflects the trauma of an educational system that demands we pass to advance, and punishes failure.

Based on my own experiences, I find that when these hypocrisies underlying our gatherings are directly called into question, members of the audience invariably arrive at two reflexive reactions: first, they ask what they are to do (or more specifically, what I want them to do); and second, they insist upon filtering what I am saying through familiar and naturalized concepts of hierarchy until it can only be heard as one form of authoritarianism wishing to replace another. The first reaction of wanting to be told what to do is clearly symptomatic of our immersion within systems of domination such that we can only conceptualize solutions to their oppressions as coming to us in the form of directions. The second issue of insisting that all discourse be reduced to, and judged in relation to, authoritarianism strikes me as a self-defensive impulse intended to preserve the ideological processes that enable one's "normal" social functionality within existing systems of alienation, rather than making oneself emotionally vulnerable to the alienation itself. In identifying these judgments as preconditions of my freelance employment, my chief difficulty is in complicating notions of being open to vulnerability without "openness" being reduced to "anything goes" apathy. How can I present the fact that I find no agency within this employment system – a competitive patronage system many of us here today are contractually dependent upon to one degree or another – as a means of connection and joint investigation with you, as opposed to my being dismissed as a defensive, antagonistic, and ungrateful bastard robbing an academic budget you feel should have been spent differently?

These are the traps before us at this moment. The traps of this professionally crafted response, by which I am simply doing what is expected of me as an employee. It is a performance – a drag show – contributing to an image of free speech and an open exchange of ideas within the framework of this symposium organized by the Fashion Department. In fact, the more vigorous my critique the more it affirms the graciousness of its object for facilitating said critique. Everything I do or say boils down to "out of order symposia - a matter of principle." Do you see the traps I am talking about? How our personal intentions, our principles, are irrelevant when everything can be reduced to a performance – a reduction that is inevitable when our actions and histories are catalogued and archived by the very systems at issue? These traps are shared by "out of order" fashion in its attempts to conflate runway attacks on taste with political resistance, as its metaphors of struggle become reified and mistaken for struggle itself. My self-sacrificial gestures here today – my apparent openness and vulnerability as a result of risking to say unpopular things in this setting – are not dissimilar to the martyrdom resulting from the development and production of "impractical" and "unwearable" fashion. This is our shared crisis that simultaneously unites and alienates us.

I believe it is vital that we shine light on these aspects of alienation, negativity, impossibility… because to only emphasize the authoritarian "leadership" potential of us and our industries results in a distorted sense of community which all the more excludes and conceals the oppressions binding us together. Such culturally self-serving discourse is the definition of propaganda. It clouds us with the idea that we are assembled here out of "free will" rather than out of class requirements, job requirements, or simply the pressure to keep up with trends. If we cannot confess to these most basic power dynamics underlying our assembly here today, how can we ever hope to produce more complex analyses of our relationships? Although my specialty is not fashion, the language in the English description for this symposium strikes me as symptomatic of the near fascistic enthusiasm and rivalry forced upon those employed in fashion industries:

As an element of a new and glamorous Celebrity Culture, fashion is one step ahead of other trades and the new-fangled concepts of Creative Industries. […] Fashion leads the way: Fashion designers, as well as fashion photographers and performers always have been on a quest for disruptions of perception and of production processes. The so called "bad taste" turns glamorous and leads the way for fashion, while the abolition of dress rules turns into a fashion label. Fleeting occurrences and breaches of the established order become the norm. The deviant becomes the new rule.

I know many of you hear these words as I do – a tragic ode to our cooptation, a love poem to capitalist systems of domination, ad copy sound bites defeating content. I feel you choking down your reactions to such positivist language like so many atheists silenced by a swarm of evangelists. I understand that social and economic factors make it so you cannot force up your reactions here and now, but can only bring them up later in private like so much bulimic waste. It is you to whom I am directly speaking when I say, as your sister, I am using my employment here today to bring you a message: You are wasting away. Digest or die.

Endnotes

I did not realize the English synopsis originally provided to me (quoted above) was revised in December 2009 on the Out of Order website (http://www.outoforder2010.com). Their final version incorporated a more critical perspective:

One thing seems to be an universally accepted fact in any case: Fashion is ahead of many other industries. In fashion, so called "bad taste" has always become glamorous and a driver of fashion. And the suspension of dress codes has turned into a fashion brand. This way, the transitory and the disruption of established order turn authoritative. Deviation becomes the norm. The imperceptible and capricious dictacte of fashion again and again constitutes itself as a serial cycle that slowly revises tensions and risks that have been created by dissonances. Are there instances

where this cycle has been broken, counteracted or revved up too high? The interdisciplinary project "Out of Order" is looking for answers.

Regarding the graphic slide show during my lecture: the images were collected through Google image searches on the terms 'suicide,' 'anorexia,' 'bulemia,' 'anorexic male,' 'IV drug use,' 'crying,' and 'man crying.' They were presented in random order using the Mac OSX slideshow screen saver. This "corporate" (or "institutionalized") assembly and presentation of images (which included both real and faked scenes), and the way in which they could only function within the context of my presentation as a reified and touristic parade alienated from the events the photos documented, was a deliberate parallel to the way in which the themes discussed in my lecture were also subjected to alienation and commodification as a precondition of the symposium format. Unfortunately, issues with English as a second language prohibited many people from being able to follow the speech. As a result, the slide show dominated the experience for many people (as well as became the focus of the Q&A).

The rest of the Q&A was dominated by one particularly optimistic participant (a student, I believe) who felt eating disorders and drug use were no longer problems at all, and that it was inappropriate for me to present such a "negative" presentation to people "trying to change things." In the absence of help from the moderator to move things forward and open the floor to other participants once her point was made, the Q&A session ended with loud, dead-end cross talk between the participant and I. Although this was one of the only truly "out of order" moments of the symposium, I feel it was unfortunate as I had hoped the post-discussion could have moved into richer territories. While I don't mean to force a "last word" to the disagreement now (particularly after it was suggested that I had abused the power of the stage through the tone of my responses), the point I wished to convey was that there is a difference between action motivated by optimistic desires for things to come ("trying to change things from this point forward"), and action motivated by an urgency

to end the unacceptable present ("trying to end things which have persisted until now"). I realize this is a difficult distinction to see, particularly as a young adult coming from an ideological perspective that has been trained to value the power of "dreams" and other optimistic devices, and to de-value a more immediate engagement with the traumas of the present as "negative." (It can take decades for a person to move beyond these dream-based educational philosophies, if at all - they truly coax us into believing a life without dreams can only result in paralysis.) However, I assure you there are other means of mobilization, and for me this difference of perspective was our point of disconnect. Additionally, the social problems mentioned in my talk remain alive, beyond any doubt. The ways in which they become/remain invisible to society at large, and within the fashion industry in particular, are at the core of the processes of alienation and non-disclosure referenced in my lecture.

An image of Francesca Lohmann's *Taffy VIII* (2017), after 35 minutes.

I'm not very comfortable with words. There are other types of language, and for me I think making art has become a way of interacting with the world that isn't so word based. A way to make thoughts subject to accident and time in the way that embodied things are.

I'm trying to understand the world through my body, a thing that is also subject to gravity and accident and time, with limits and a fixed perspective. I'm interested in the points of contact between what I can identify as me, and the outside. I don't think things are as separate as they feel.

Lately I've been doing work with sugar and candies, specifically saltwater taffy. I was initially attracted to the consistency— semi-solid— sticky, stretchy, slow. Like magma. I love the colors found in candies. And the relationship of color to flavor.

We eat for pleasure. There is nothing necessary about cakes shaped like faces or footballs or flowers. Or food coloring. Or Jell-O towers. It's all temporary, made to be cut up and shared and consumed— but so much effort goes into how it looks and I love that. I like that the making of food is something that has to be repeated— You have to make the coffee again every morning.

I love transformations— Like yeasted bread dough rising, or the stages of sugar. I'm interested in change, different rates of change, visual histories of change— ways of experiencing that condensed so you get it all at once, like a type of geologic evidence. Or stretched out so it's hard to observe because it's so gradual…

My initial attraction to the edible substances was just for the material behaviors, unfixed, malleable, jiggly. But I also like the edibility in itself— for me it changes the visual relationship, knowing what it feels like in the mouth— chewy, melting, soft— and how it tastes.

Food is an easy point of connection— we make it part of us when we eat it.

STUART LINGO

Critical Notes from the Past: Some Stakes of Renaissance Art Criticism

When we think of "Renaissance art criticism," what comes to mind may be Giorgio Vasari and his monumental *Lives of the Painters, Sculptors, and Architects*. And not without reason. Published in 1550, and in a vastly expanded second edition in 1568, the *Lives* encapsulate many of the achievements of period criticism and advance forceful theoretical propositions within the framework of some of the earliest sustained art history.

I'll come back to Vasari. But in considering the origins, achievements, and stakes of art theory and criticism in the 300-year period we have called the Italian Renaissance (roughly, 1300-1600), I want to start with a leap backwards. Cennino Cennini's *Book of Art* was written in Florence as well, but around 1400, 150 years before the first edition of Vasari. If you know something about Renaissance art writing Cennini may seem an idiosyncratic, even willful example, for he doesn't really cast his little book as "art criticism;" most of the text is more a "how-to" manual for painters, with instructions on everything from the mixing of colors to the painting of angel wings. But at the outset, Cennini makes clear that he sees theoretical stakes in the enterprise of painting, and advances a remarkable statement: "This is an art called painting, for which it is necessary to have imagination [Cennini calls it "fantasia"] and skill of hand, to find things not seen, hiding in the shadow of natural ones, and fix them with the hand, thus demonstrating that that which is not, is. Truly, then, [painting] deserves to be ... crowned with poetry."

Unpacking this passage could take a small book in itself, and frankly, it's hard to be entirely sure exactly what is being said. But this much is clear: for Cennini, painting is an art that conjoins profound imaginative thought with the work of the hand that brings

these mental insights into material form and visibility. He thus turns the tables on that standard prejudice of his day that associated the work of visual artists with manual labor rather than the cerebral enterprises of poets and philosophers. Indeed, it's critical that Cennini stresses in conclusion that painting should be "crowned with poetry" as a privileged creative product of the imagination. But the enigmatic statement at the heart of the passage stuns me every time I re-encounter it. It intimates that painting has a virtually divine power of revelation, disclosing unseen mysteries hiding beneath the surface appearances of the material world. Implicitly, this power makes painting a privileged vehicle both of spiritual insight and – as the Renaissance develops – of proto-scientific knowledge of the secrets of Nature. Painting becomes the central means through which the invisible can become embodied and visible.

Similarly evocative, enigmatic passages haunt Renaissance art writing. At their clearest, they find expression in statements like Leonardo da Vinci's assertion that painting can reveal soul and character even more powerfully than poetry, but must achieve this excavation of interiority through an infinitely precise and subtle representation of what can be seen: the body, the face, expression, and gesture. Such thinking clarifies one reason Renaissance art is so concerned with the portrayal of the human figure and the understanding of its mechanics, even to the point of pursuing the study of anatomy. Moreover, Leonardo's famed *sfumato*, that dissolving of edges and outlines characteristic of his mature art, forces the beholder to keep looking, to work to resolve what is visible yet not visible (where is the edge of that face as it disappears into dimness)? Making a mystery even of what can be seen only heightens our intuition that the unseen might be glimpsed here, "hiding in the shadow of natural" things.

More aphoristically than Leonardo – but in a manner that responds beautifully to the *sfumato* enveloping his paintings – Vasari concludes that a principal achievement of art in his day is a *non so che* – what we might call a *je ne sais quoi* – a hard-to-pin-down, "I don't know what" quality that identifies something in artistic representation which lies beyond anything explicable in words. Vasari advances a further mysterious statement that appears uncannily reminiscent of Cennini; great art, he writes, achieves in the bodies it represents a "grace that hovers midway between the seen and the unseen, as is the case with the flesh of living figures."

This epigrammatic assertion distills some of the fundamental commitments of late Renaissance art and criticism. At its finest, the

passage implies, representation inhabits that suggestive liminal zone between what is seen and what is invisible; this sounds almost like Cennini updated through looking at Leonardo. Critically, however, what seems to make such an evocative balancing act possible is that the greatest art is conditioned by grace. That means all we might assume concerning elegance and beauty, but also implies far more. "Grace" in the sixteenth century was a profoundly loaded term, bound up not only with courtly poise but ultimately with the profundities of God's love and the "grace" God offered human beings trapped in sin and suffering. The fashioning of great art is thus linked to the creativity, the love, and the gifts of God. The theorist and writer Francisco de Hollanda asserts explicitly that "good painting is nothing else but an imitation of the perfections of God." Inspired by God, modern artists are enabled to create something like "the flesh of living creatures." Artistic creation has become so powerful that it may appear to transmute inert matter into living organisms.

This urge toward animation is one of the ultimate Renaissance ambitions for art, and also one of the era's greatest concerns. For this was a culture as suspicious of images as it was fascinated by them: even a committed Florentine art writer like Anton Francesco Doni, a contemporary of Vasari, could write that "painting comes from shadows, and sculpture from idols" while penning some of the most sensitive responses to both painting and sculpture that the century produced. Cennini's contention that painting could "demonstrate that that which is not, is" could point not only to art's power but to the perceived deceptiveness of the illusions of which period mimesis was increasingly capable. Further, while leading period artists such as Michelangelo were increasingly hailed as "divine," this very celebration of art and the artist provoked profound suspicion of a hubris that could seem to verge on the blasphemous.

In the Renaissance, thinking about art might be bound up with what appears to us belief in a quasi-magical potency inherent in images and objects. Even well into the seventeenth century, physicians could recommend the decoration of marital bedchambers with paintings of beautiful figures; if a couple attempting to conceive a child gazed upon representations of lovely bodies, it was thought, their offspring would be more likely to become handsome and healthy.

On the other hand, however, there was a developing sense of irony concerning the power inherent in images and the artistic ambition to "make images live." Jacopo Pontormo was one of the most distinctive painters of the sixteenth century, producing haunting

works that continue to provoke artistic responses today. He also crafted a brief but telling letter regarding the nature of art, penned as a response to a debate in Florence as to whether painting or sculpture was the greater art. In his letter, Pontormo melds ironic humor with incisive insight. As a painter, it was predictable he would vote for painting. But his reasons are unexpected. Painting is superior, he writes, because it forces its practitioners to dare beyond any normal expectation and even beyond nature. For if the goal of creation is to generate life, Pontormo quips, then evidently even God had to admit that this was most easily accomplished by working in three dimensions. Only painters, concludes Pontormo, dare to attempt animation in two dimensions! They attempt, in effect, the impossible. The greatness of their art lies in the brilliance of its failure.

Ironic about animation and art's illusionistic powers, Pontormo's generation embraced as perhaps never before the equivocal understanding that art was a mask. Art could indeed employ the visible and material to speak to "things unseen," but it did so with a new depth of self-consciousness and a new awareness of the potency of the visible as a veil. Sixteenth-century portraits might even come with a protective painted cover that exhibited a mask and the motto "to each their own mask" – putting viewers on their mettle before the apparently "lifelike" representation of the sitter that the cover hinged open to reveal. And here, art got ahead of much art criticism. This brings us back to Vasari. One thing we haven't spoken of is the political environment in which he published. Florence had long been a republic, but only about twenty years before the first edition of the Lives, the Medici seized power and forced the city to accept totalitarian governance. Republican sympathies remained rife, but one's life could depend on not making them too obvious. Whatever his personal views, Vasari had to write from his position as a member of the Medici court, and his text may thus hesitate to speak of certain things. Artists, however, could take refuge in the masking and dissimulation that increasingly characterized artistic practice. In this environment, it begins to seem almost uncanny how enigmatic some of the major artistic monuments to the Medici prove to be when considered closely.

We know, for instance, that Michelangelo was resolutely opposed to the Medici's designs on Florence. Might this condition the fact that, in the Medici funeral chapel that he designed – and where he was forced to keep working for years even after the takeover – screaming masks provide critical components in the chapel's "ornaments," and the sculpted Christ turns away from the Medici

princes he is supposed to bless? We will never know; in this new art of dissimulation, it is – by definition – impossible to pin down the maker's intentions. Anything potentially suspicious could mean something else, something innocuous. But precisely this slippage of iconographic and visual clarity opens a new space for implication and insinuation.

Was there any way that art criticism might respond to the widening realm of ambiguity cultivated in period art? Some twenty years after Vasari, the Florentine writer Raffaello Borghini published *Il Riposo*, a long exploration of art theory, criticism, and history that is cast into a distinctive form: the dialogue. Borghini's four characters, all speaking from different backgrounds and points of view, argue for hundreds of pages about the making and meaning of art – but nothing is resolved. Thus, one character complains that Michelangelo withheld the proper iconographical attributes from a number of his figures in the Medici Chapel, making their identity and significance hard to fathom. This by itself might pique readers' curiosity. And later in the dialogue, an entirely positive assessment of Michelangelo's inventions is voiced. We are told no more, but are implicitly encouraged to return to the works and look more searchingly.

Borghini is particularly fascinating when he considers a major public fresco by a painter highly responsive to Michelangelo, Agnolo Bronzino. *The Martyrdom of San Lorenzo* was painted as a commission from the Medici for a highly public site in one of the city's most eminent churches. But Bronzino's work has confused and disturbed observers since its unveiling, in part because of the pointed ambivalence of its figures and its choice of artistic quotations. Why, for instance, is the evil ruler who condemns Saint Lawrence to death closely adapted from the figure of one of the Medici princes in Michelangelo's Chapel? Could Bronzino be up to something that has eluded us? He gives us a clue that he might be. In the background, just behind the ruler, stands a monumental statue of Hercules, a symbol strongly associated with the Medici. If we are sharp-eyed – it's easy to miss – we may spot a nearly-hidden vignette in which a woman is egged on by a group of male companions to stare at the diminutive genitalia of the giant, ill-concealed behind a scant garland of leaves.

A scene like this arises from a long Florentine tradition of viewing official political propaganda with ironic and even burlesque humor. Niccolò Machiavelli, author of the infamous treatise of realpolitik *The Prince*, imagines in a satire a burlesque

social organization that – unlike most in the period – is "coed," and is overtly dedicated to pleasure. Both male and female members are forbidden to wear too many constricting clothes to meetings, for reasons that become all too clear. The punishment for women who infringe this rule is to be taken to the main government Piazza to stare at the genitalia of Michelangelo's *David*! Bronzino – for reasons we may never know – has channeled this kind of tradition to destabilize any official reading of his monumental painting as a propaganda image of the Medici state.

That he could do so depended entirely on the recent achievements of period art – an art of masking and dissimulation was also an art with inbuilt deniability. What could not be clearly understood could always be explained away. Art criticism faced grave difficulties here. For art criticism is at one level an act of translation. It brings words to the visual, and may attempt to articulate things the visual left unspoken. But how to speak to a work like Bronzino's?

Borghini's solution of the dialogue is a stroke of brilliance. The author absents himself; his characters argue without resolution. They thereby evade censure, but open space for reflection. One of the characters initiates a discussion of Bronzino's fresco with a telling critique that – like the critique of Michelangelo's figures in the Medici Chapel – will only encourage readers to go have another look for themselves. The critic's focus is revealing in the period's uneasy political climate, for he observes that some of the muscle-bound Michelangelesque nudes are equipped with carefully selected accoutrements of courtiers, such as fancy period hats. He is disturbed that "Bronzino, considering himself a great master of the nude, made the ruler's courtiers wholly or partially nude in this painting: a very indecorous thing for men who serve great princes." But how would one recognize that an ideal nude was a courtier? The fancy hats, for one thing. Michelangelo's heroic nudes were increasingly abstracted from and elevated above the contingencies of fashion and the everyday. By contrast, Bronzino has taken ideal nudes and reintroduced exactly those contingencies. These "courtiers with no clothes" are effectively outworkings of the destabilizing reading of the fresco initiated from within, when the woman in the background "misreads" a colossal heroic figure by considering it as a sexed body when she should be admiring it as a symbol of the state.

Furthermore, as we might now predict, other characters in the dialogue tacitly defend Bronzino; he is a great master of the nude – which after all is the apogee of art – and has fashioned them here "with great diligence." The self-contained discourses of art are

thus implicitly set in opposition to the traditional social purposes that art at this moment was still intended to serve. We are left in the dark, both by Bronzino and by Borghini, as to their ultimate beliefs or intentions. But their visual and textual strategies share this: they open doors to questioning, and reflection. That alone, in this society, may speak volumes.

There is so much more to say about Renaissance art criticism; we have hardly scratched the surface of an exceptional discourse. I have chosen the perhaps idiosyncratic trajectory I've followed in part to raise some questions for the readers of *Monday*. As you think your way forward toward a new community and culture of art criticism for Seattle, you might consider: how might some of the issues, investments, and strategies we have seen in Renaissance criticism inflect the way you think about the stakes of criticism today? Or about the nature and status of art? Centuries after the Renaissance fought for visual art to be taken seriously, have we safely and fully arrived? And in attempting to address works of art with our prose, how can we best bring words to the visual? How can we translate without betraying? How can we employ criticism to highlight and articulate new possibilities of thought and perception in confrontation with works of art? The challenge is great. But so is the legacy of criticism, and of art, which can always resort to that *non so che* of the visual that exceeds, eludes, and speaks beyond the strictures of words and oppressive ideologies.

KEMI ADEYEMI

Repetition Without Accumulation: Radical Black Politics & Temporalities in Martine Syms's *Notes on Gesture*

The bright staging of Martine Sym's 2015 video *Notes on Gesture* converses with the economies of digital blackness in the contemporary age, when the complex materiality of living while black is repeatedly broken down, parceled out into component parts, and redistributed across diverse platforms. The piece features the artist Diamond Stingily against a purple background in the midst of gestures that are sometimes combined with verbal utterances such as "point black, period" and other times executed silently, but for by non-diegetic sound. These gestures are citations of what Syms has described as "films, photos, mimicking family members, and Vines,

among other sources" and elaborate upon intermittent title cards with phrases such as "when the weed hit."[1] In what could be described as GIFs that are sequenced one after another, yet do not necessarily converse with nor build upon one another, Syms creates loops of moments where Stingily shakes her head, wags her finger, dances, and more.

The work emerges out of Syms's larger interest in the construction of figures such as *The Black Woman*, a figment of the white psyche with devastating material consequences. The video—as well as her 2017 MoMA exhibition *Project 106: Martine Syms*, which features augmented reality—can in fact be seen as conversing with what Lauren Michele Jackson calls digital blackface, wherein memes and reaction GIFs that capture the emotional responses of black people are repurposed to convey the responses of the non-black people who are circulating them.[2] In these memes which capture moments, the gestural economies of black people are extracted, appropriated, and repeated to the point where the memes themselves become stand-ins for black people (and the affective capacities of blackness and black people) writ large. The memes, in other words, become a part of the constellation of images, ideas, and assumptions about "The Black Body": who and what black people are presumed to look, sound, and act like, and how they are presumed to feel.

In this short essay, I am interested in how artists such as Syms utilize repetition to seemingly deconstruct the elemental forms which have been repeated endlessly into the accumulated fiction, fantasy, and desire of and for singular conceptions of blackness and black people.[3] I am particularly interested, however, in the ways that Syms refuses to *(re)construct* what could be read as a more "accurate" or "representational" visage of blackness and black people in their bodily, social, and cultural complexity. *Notes on Gesture* does

[1] Martine Syms, interview by Rizvana Bradley, *Kaleidoscope 30* (Summer 2017), http://kaleidoscope.media/martine-syms-interview.

[2] Lauren Michele Jackson, "We Need to Talk About Digital Blackface in Reaction GIFs," *Teen Vogue*, August 2, 2017, https://www.teenvogue.com/story/digital-blackface-reaction-gifs.

[3] This accumulation of myths of black people is itself grounded in the vast systems of justification that the West used to frame the violently enforced repetitive labors of black persons, labors which were used to accumulate evermore people, lands, goods, and services under the Atlantic Slave Trade, and racial capitalism more broadly.

not break down "The Black Body" or "The Black Woman" to its supposedly component parts in order to build them back out in perhaps more ethical configurations. The video never directs the gestures to accumulate in ways that would reconstitute the body as a legible whole, nor to recuperate the whole black subject. Any idea of a whole, that these gestures comprise a definition, in fact says more about our own projections onto the piece than what is actually represented on screen. Syms instead sticks to and gets productively stuck in, the act of repetition itself. This stuckness, where we get single gestures repeated on end, forestalls the pleasure that inheres in witnessing an accumulation to a whole. Her attention to the moment of the singular gesture stretched out makes it so that we cannot intuit nor are we ever delivered an endpoint; for example, the accumulation of the gestures into a normatively sequenced choreography that could be catalogued as "black" or "black woman."

In the repetition of repetition itself, Syms hones in on an element of Giorgio Agamben's essay "Notes on Gesture," wherein he theorizes the time-space of the gesture in relation to, or as a site of, politics. "What characterizes gesture," he explains, "is that in it nothing is being produced or acted, but rather something is being endured and supported." For Agamben, "the gesture then breaks with the false alternative between ends and means," and occupies the space of becoming: "The gesture is the exhibition of a mediality: it is the process of making a means visible as such." Syms literalizes this exhibition of a mediality as her piece endlessly captures someone in the midst of something—in the middle of a longer conversation, longer dance movement, longer sequences of looking, longer sentences. By continually refusing the viewer a "full picture" of the larger repertoire from which each gesture is pulled, focusing our attention instead on the elaboration of the singular gesture repeated without an accumulated endpoint,

she offers the opportunity to think critically about politics and the political writ large.

In *Notes on Gesture*, Syms specifically activates black feminist theorizations of time itself as providing critical grammar for manifesting alternate and alterable futures. Syms's turn toward time that is stretched out contributes to richer understanding of the place of blackness and black people within politics and the political writ large. In much abbreviated terms, the political (the terrain of dispute) as well as politics (the forms and formats of making claims) have traditionally been organized around rupturing events which ideally provide opportunities to reshape the status quo, often through leveraging, bestowing, and refusing rights.[4] A productively pessimistic understanding of politics and the political understands both to be the privileged ground of Man, a Western, white subject who has constantly shaped and reshaped the terrains of all life toward his advantage.[5] A black politics, however, reveals the constitutive absence of race to the very conceptualization of the political, and an especially suspicious black politics might be wary of certain forms of organizing around events which leverage rights as effective endpoints (because, at the very least, the State's bestowal of rights has historically been in the service of continuing domination—but now with perhaps a modicum of relief).[6]

In honing in on the stretched-out time-space of the repeated gesture, a time-space which never accumulates into identifiable endpoint, an event, Syms visualizes the grammars proffered by black feminist scholars who are themselves

[4] For more on the definitions of politics, the political, and events, you could begin with the work of people like Chantal Mouffe, Jacques Rancière, and Alain Badiou.

[5] On the definition of Man, see Sylvia Wynter, "Unsettling the coloniality of being/power/truth/freedom: Towards the human, after man, its overrepresentation--An argument," CR: *The new centennial review* 3.3 (2003): 257-337.

[6] For an introduction to black politics as a critique of the Western political, begin with Barnor Hesse, "Marked unmarked: Black Politics and the Western Political," *South Atlantic Quarterly* 110.4 (2011): 974-984.

[7] Saidiya Hartman, Scenes of Subjection: *Terror, Slavery, and Self-Making in Nineteenth-Century America* (Oxford: Oxford University Press, 1997).

orienting away from the event as the accumulated whole that is the governing logic of politics and the political. Canonical to these grammars is surely Saidiya Hartman, whose descriptions of the "non-event" of emancipation puts pressure on concept-events such as "freedom" and "liberation," and attendant calls for reparations instead of redress, as but fantasies that unproductively organize our attachments to real, future, and hypothetical time.[7] Hartman later calls for a more accurate grammar, one which exploits the capacities of the subjunctive, "(a grammatical mood which expresses doubts, wishes, and possibilities)," in ways that not only hypothesize but potentially enact alternate ways of marking historical time in order to craft more workably humane futures.[8] Tina Campt perhaps answers Hartman's call for mobilizing conditional temporalities when she offers the "future real conditional" as a tense which hinges on the idea/phrase/sentiment of "*that which will have* had to *happen.*"[9]

Sym's looping *Notes on Gesture* stages the conditional temporalities offered by Hartman and Campt by sitting exclusively within the repetition itself, destabilizing the event of the subject's consolidation and preempting the viewer's ability to do so herself. Syms takes advantage of a digital framework that can stop and freeze as a way of pulling us into the suspension of Hartman's non-event and Campt's future real conditional precisely because she makes us watch the gesture(s) over and over again. This move leads us nowhere in particular, and therefore asks us to slow down the way we see and what we see. Syms re-paces our seeing by attending to the gesture and not the gesture's expected end, opening up our own expectations of temporality as a time-place where gestures do something besides progress toward narrative closure.

Syms's thinking through repetition without accumulation as a diverse economy of gestures may help

[8] Ibid. "Venus in two acts," *small axe* 12.2 (2008): 11. There is resonance between Hartman's call to exploit the capacities of the subjunctive and Lauren Berlant's elaboration of "the situation," "in which something that will perhaps matter is unfolding amid the usual activity of life. It is a state of animated and animating suspension" (5). Lauren Berlant, *Cruel Optimism* (Durham, N.C.: Duke University Press, 2011).

[9] Tina Campt, *Listening to Images* (Durham, N.C.: Duke University Press, 2017), 17. Emphases in original.

us orient toward more complex theories and practices of collectivizing that are attentive to, and reflective of, the stultifying present. The states of suspension that Syms mobilizes in stretching out time may push us to think more expansively about (black)(feminist) temporalities that cannot be divorced from futurity, but which are more far attuned to the now as a predictive or anticipatory site of revision—a time-space, in other words that is possibly alterable. More than this, and there is plenty more room for discussion on this end, this repetition without accumulation not only contributes to politics that is structured by black feminist philosophy and practice, but poses a unique critique to art markets which themselves depend upon the (myth of the) consolidated, whole, narratively progressive (i.e. rooted in a temporality that necessitates accumulation) black body. This deeply black thinking through time must necessarily shape how we ourselves consider what is in, but also what inheres in conversation around, art that is marked as black.

Dan Webb, *The Visitor*, 2017, carved fir, 80 x 23 in.

FIONN MEADE

Less Event, More Encounter

I

Far from the imperium of treatise and consulting room, we dabble in the contingent art of persuasion, the gathering together and trying out of a personal poetics. And soon, lovers, friends, and rivals become targets for our witting dismay. We usher out and away from the mirthless kingdom of theory and system to interest ourselves in what we remember having read, heard, and seen. Dan Webb has similarly walked out on any willful theorizing and taken to carving and modeling. His "wider arena" from which he works includes his most recent exhibition *The Visitor* held at Greg Kucera Gallery in Seattle, WA in the early fall of 2017.

In taking up such themes as mortality and the "why" of sculpture within the show, Webb extends his repertoire from a long-held commitment to wood-carving as his primary medium to include an uneasy yet haunting engagement with another elemental sculptural form: glass—both blown and stained. As with works like

Lit Table (2017), the *Ur-* nature of glass as a vessel for imbibing is echoed across a table set with goblet, jar, and stoppered decanter forms arranged casually.

Dan Webb, *Illuminated Table (Set)*, 2017, constructed wood table, with interior LED lights, blown glass vessels, with carved wooden stoppers 20 x 32 x 96 in.

Recalling the conviviality of a dinner party, the ghosted forms spread across the table, with *Ear Specimen Bell Jar* (2017), the tallest within the ensemble. Known for its ability to create a vacuum, *lacunae*, or space of deprivation within a laboratory environment, Webb's 'bell jar' includes the indentation of an ear. Summoning that which is not present, Webb also presented a performative artist talk numerous times during the run of the show, in gallery and elsewhere. Prompting the listener and onlooker into the questioning nature of his work, Webb recited from an accompanying script, "All the other shows I've done, all the other work I've seen, the bad ideas, the good ideas, the travels taken, the conversations had, the doubts and fears, the overcoming of doubts and fears. All that is

here too, crowding around the room with us."

For Webb, the objects within a 'crowding' room are not objects in and of themselves but reminders of the human act of representing and remembering. Fallible truths gather and circulate within such a room. "Start with the obvious: as wood dries, it cracks. Why, in the middle of this lifelong struggle, would anyone expend anything extra towards making sculpture, or art, given our limited time frame, all for such an intangible reward?," asks the artist.

And yet the ruminative mood of both the exhibition and its totem-like eponymous sculpture, *The Visitor* (2017)—a turned away perhaps Italianate cloaked figure carved out of a nearly seven-foot piece of old growth fir—lags and gives way to what is worth remembering and thereby celebrating in life. For the visitor must turn to face the world eventually, revealing them(selves).

To spin and alter Dan's words from another passage in his talk, *less event, more encounter* please.

II

In the second part of these considerations, I would like to detour to thinking about the British writer and psychoanalyst Adam Phillips in relation to Dan and to the "why" of sculpture more generally. Indeed, I've been thinking about Philipps for awhile. I wrote a review of

his book *Promises, Promises, Promises* for *Bomb Magazine* way back when (Summer 2001 upon the US publication of his book just prior in 2000). I include this passage:

> With such delicious titles as "Roaring Boy," "Doing Heads," and "On Eating, and Preferring Not To" Philipps whets the reader's appetite and set her merrily perusing until her hour is up, unaware of time having passed. Finding herself jotting down so many of Phillips's aphoristic insights that a notebook will have to be enlisted. This unassuming but incisive quality allows for Phillips to impinge upon the self in solitude, to approach what Jane Austen referred to as "my self-consequence," and to force the reader's hand. For, in true Emersonian style, Phillips is ultimately interested in the democratic idea of being true to oneself: "Our relationship to ourselves must be inextricable from our relationship with others; but in what sense does one have a relationship with oneself, or with a book, or with its author, or with a tradition?" What if, as in the case of Pessoa, our fidelity accepts and includes multiple devotions (selves)? What release and revelation might we find if we practiced Henry James or recited Freud aloud?

No stranger to the art world, Phillips has partaken in conversations with artists and curators from time to time, including, for example, his part in a published dialogue on the work of New York-based artist Paul Chan, in dialog with Hans Ulrich Obrist and Massimiliano Gioni. This was on the occasion of

Chan's one-person exhibition at the New Museum and Serpentine Galleries *The 7 Lights*. But Phillips' take on sculpture as perhaps the most questioning of art forms goes much deeper than an art world trend. As he wrote in his book *Side Effects* (originally published 2006 by Hamish Hamilton, London), sculpture demands the onlooker to walk away from a sculptural encounter as if an encounter.

> "In carving", he writes: the artist assumes that the block of stone contains within itself the form invented for it by nature; the artist's desire is merely to liberate that form, to disclose its hidden face… In modelling, on the other hand, the artist gives the stone his own truth, or what he insists is his own truth; the truth of the stone as a different truth is not acknowledged.
>
> … In one kind of creative experience the artist uses his art to elaborate, to expose, to fashion himself. In the other kind of experience the animating intention of the artist is to reveal something other, something separate, something aside or apart from the self; not to fuse with object, but to differentiate it. The sacramental poet, the carver, forgets himself; the erotic poet, the Promethean, the modeller, endorses himself. In one version the self is the instrument, in the other it is the obstacle… At one extreme of this strange dualistic vision there is the cult of personality, the artist as the emperor of egotism; and at the other extreme there is a cult of the object, of a world whose virtue and substance resides in the fact that it resists manipulation.

> Creative experience is either self-promotion or self-surrender. The moral and aesthetic question becomes: do I value something because I can make it mine, or because I can't?…

And so from Phillips to Webb to sculpture as '*less event, more encounter*', we find ourselves, visitors yet again. Looking, asking, stepping away, coming back awkwardly to look again. Isn't that germane, upon entering the gallery, the galley, the gorge, the go between. To ask why carve a form out of a tree?

But let's check back with Phillips for one more moment from his book *Side Effects*. What does Adam say this time:

> I read psychoanalysis as poetry, so I don't have to worry about whether it is true or even useful, but only whether it is haunting or moving or intriguing or amusing — whether it is something I can't help but be interested in.

And so I end with a reprint (in the spirit of both *F.R. David*, as well as Dan Webb's *The Visitor)* of a poem hidden within an exhibition at David Kordansky Gallery (Los Angeles) that I curated in the Winter of 2013. This seems like a world ago as I finish this essay on December 4th, 2017. Thinking back to when we all had much more skeptical optimism than perhaps we have now. And yet we stand again at the precipice of only satisfying #artworld ego and #fear if we do not listen better, including to the helpers, advocates, and visitors in all of us:

Dan Webb, *Break It Down (The Shack)*, 2015, wood, tarpaper, tin, glass 12 x 12 x 14 ft.

The Assistants

I

Slipping through the peak of an open door, I have come back to my city. Awake. The noise that hasn't any courage left to explode or call out by name, hovers in the air instead. It's early, before six o'clock, when a shape still gets mistaken for a sound, and the hard darkness of a room gradually lessens itself into green, blue, and cold prism.

It's helpful to move in these moments when you seek out the you within you, to lay one thing upon another, and begin to compare—to not get lost in curious contours and isolation. Clothes then gather up their rough assembly and recognition follows. An ear is suddenly free to stand outside like a gateway, breaking up the common shadows of rooftops, hired scaffolding, and awnings.

Approaching steps become just that, no limp like a clock falling behind, just the steps of a walker out in the brief interval, branding the street with omission. Not thinking back to accomplices.

II

But in this approach, the falling is from universe to universe. Shape gaps memory and is unevenly tied, mouthing outlines not names.

Within the outline old impressions are there but muted.

A shop owner rehearses the lines of a poet, a lawyer hands over documents bleached with sun, and the woman you thought was Peruvian from her accent no longer lives on the second floor. Repatriation is null here. Ring wheat like bells, raise a river like a flag, enough with night. At this hour we are held in the same custody.

III

Slipping through the nape of a door, I have come back to my city. Awake. Noise hasn't any courage left to explode or call out my name.

We must move in these moments to find the you within you, to lay one thing upon another, and begin to compare—to not get lost in contour and isolation. Clothes can then gather up rough assembly and follow recognition. An ear is free to stand outside like a gateway, breaking up the common shadows of rooftop, scaffolding and awning.

Not like a clock falling behind, just the steps of a walker out in the brief interval of morning, branding the street with happiness. Shape gaps memory and is unevenly tied, mouthing outlines not names. A shop owner rehearses the lines of a poet, a lawyer hands over documents bleached with sun, and the woman you guessed was Chilean has moved out. Daylight brings forth its accomplices. Daylight with its unrestrained sun, mouthing the words "mother," "gangsters," "Los Angeles," and "forever."

EMILY POTHAST

Learning from *documenta 14*

The Material Performance of Education, Ethno-nationalism, and Wealth at *documenta 14*

Like *love*, *question*, and *wonder*, *matter* is one of those versatile words that functions as both a noun and a verb. As a noun, matter is the physical substance of the universe. As a verb, it signifies signification itself: to matter is to mean something. We tend to hold these definitions distinct from one another, but both share an etymology in *materia*, and thus *mater*. Substance and meaning as source.

"Matter and meaning are not separate elements," writes Karen Barad in *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. "Mattering is simultaneously a matter of substance and significance."[1]

Barad, a theoretical physicist and culture theorist, has incorporated the lessons of quantum entanglement into a philosophical framework she calls *agential realism*. In Barad's theory, the universe is understood as a matrix of ontologically inseparable "intra-acting" beings animated in an "ongoing ebb and flow of agency."[2] Intentionality is not the result of atomic beings moving of their own volition, but rather the consequence of a whole host of human and non-human agents interacting with specific material conditions in ways that transcend not only the idea of the individual, but the traditional binary of "external" and "internal,"[3] as well as the boundaries between space, time, and matter.[4]

Fascinatingly, as scholar and educator Leroy Little Bear has pointed out, quantum entanglement has parallels in many indigenous theories of knowledge, which speak of concepts like "constant flux," and "energy waves," which are also identified with "spirits."[5] It therefore bears mentioning that through the innovative materialisms afforded by quantum ontologies, Western scientists are finally gaining competency in a domain where indigenous thinkers have long held fluency—the fundamental unity of spirit and matter.

[1] Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham: Duke University Press, 2007), 3.
[2] Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society* 28, 3 (Spring 2003): 810, 817.
[3] Barad, *Meeting the Universe Halfway*, 23.
[4] Karen Barad, "Quantum Entanglements and Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and JusticetoCome," *Derrida Today* 3.2 (2010): 266.
[5] Leroy Little Bear, *Naturalizing Indigenous Knowledge, Synthesis Paper* (Saskatoon: University of Saskatchewan, 2009), 9.

These new/old materialist paradigms present artists, curators, and art historians with exciting conceptual challenges. How can art be a relevant participant in a reality in which entire cultural histories are understood to be caught up in a contrapuntal dance of the mechanics of mattering? *Material performance* is a concept that has been recently gaining traction in the art world as a way to consider cultural production in terms of spacetime, materiality, and meaning.[6] *Performativity* in this context has roots in queer theory, an apt vantage point from which to assess the dynamics of a universe where meaning exists outside the human capacity to assign representation and "boundaries do not sit still."[7]

In the following essay, I will consider the international art event(s) *documenta 14*—held in staggered simultaneity in both Kassel, Germany and Athens, Greece from April to September 2017—through a lens of material performance inspired by Barad's "diffractive" methodological approach, in which the phenomena of overlapping domains are read through one another like screens, revealing patterns that echo through space and time.[8] In this case, I will be analyzing several of the artworks, as well as the history, locations, and curatorial structure of the program itself in terms of their relationship to the overlapping frameworks of education, ethno-nationalism, and wealth. Because this approach often necessitates a looking-through of many frames at once, the organization of these ideas will unfold

[6] Emily Zimmerman, "Material Performance," EMPAC, 2014, http://empac.rpi.edu/events/2014/fall/materialperformance.
[7] Barad, "Posthuman Performativity," 817.
[8] Barad, *Meeting the Universe Halfway*, 25.

as a guided tour through the exhibition might—tracing just a few of the countless possible threads that may be drawn through the variously entangled objects and locations discussed.

It seems synchronously fitting to begin this analysis, written for a new journal called *Monday*, with a discussion of a work of art that is also called *Monday*. The other *Monday* is a multimedia work by the South African collective iQhiya installed inside a former underground train station in Kassel during *documenta 14*. iQhiya, which takes its name from the isiXhosa word for a traditional cloth women use to carry water vessels on top of their heads, is an all-Black, all-female collective founded in order to counter the exclusionary influence of the white-male-owned galleries whose tastes dominate the South African art scene.[9] Taking aim at what the group calls the "hidden curriculum"—a system of subtle, yet pervasive assumptions that permeate educational systems under white supremacist, patriarchal capitalism—*Monday* offers an alternative curriculum for Black women artists, generated during an 8-hour performance held the opening week of *documenta 14*.[10]

The group's performance took place in a makeshift classroom situated against a backdrop of a looped clip from the 1992 film *Sarafina!* The scene depicts the Soweto uprising, a real-life student protest sparked over the announcement that Afrikaans would be replacing indigenous languages in

[9] manu.escrita, "IQhiya, the Black Female Collective from South Africa," *contramare.net*, 03/14/2016, http://www.contramare.net/site/en/iquiyatheblackfemalecollectivefromsouthafrica/.

South African classrooms. Wearing school uniforms selected to represent each member's educational background, the artists operated on textbooks with saws and markers, transforming the installation into a cathartic constellation of experiential wisdom. By the time the performance ended, dozens of sheets of paper covered the wall, giving assignments like "MATH SET: To calculate all the ways to fuck shit up and burn all colonial debris." Another corner of the classroom had been made over into a hair salon with the words "ALWAYS QUESTION WHAT YOU ARE TAUGHT. - Black people" scrawled across a small circular mirror in permanent marker.[11]

To understand *documenta 14*'s relationship to the various currents made visible by iQhiya's *Monday*, it is first necessary to understand a bit about the history and context of *documenta* itself. Founded by artist and curator Arnold Bode in 1955 as a forum to showcase modernist paintings that had been prohibited by the Third Reich, *documenta* has evolved over the past fourteen iterations into one of the world's most prestigious recurring institutional statements on contemporary art. Every five years, the modest city of Kassel is overtaken by installations, performances, and hundreds of thousands of art tourists, making it one of the most important cultural centers in Europe for the 100-day run of the event.[12]

In November 2013, Polish curator Adam Szymczyk — already dubbed a "superstar among curators" by the

[10] Thuli Gamedzi, "iQhiya," *documenta 14*, 2017, http://www.documenta14.de/en/artists/13582/iqhiya.
[11] iQhiya, *Monday*, installation and performance, 2017, documenta 14, Kassel, Germany.

New York Times for his work with Kunsthalle Basel[13] — was nominated Artistic Director of *documenta 14*. Continuing a conscious effort made by previous directors to question and expand *documenta*'s inherent Eurocentrism,[14] Szymczyk's vision was to site the festival in two different cities for the first time—Kassel and Athens—in order to both decentralize its vantage point and "open up a space of possibility" that complicates any temptation to use art as a prop in the bourgeois rituals of state or corporate power.[15]

Athens is, of course, the ancient birthplace of democracy, as well as classical standards of artistic beauty which resonate to this day in the Western imagination. It's also the locus of a contemporary economic crisis; a present-day debtor state with a precariously asymmetrical power relationship with the wealthier nations of the European Union, and Germany in particular.

Given this complex history, Athens is uniquely situated to provide a highly specific sort of counterpoint to Kassel's gaze. But the decision to present *documenta 14* as an "anti-identitarian," "divided self" was not without controversy.[16] In Kassel, a 2016 CDU election slogan reflected some residents' fear of losing their beloved exhibition to Greece.[17] Meanwhile, former Greek Finance Minister Yanis Varoufakis called the idea "crisis tourism" and "a gimmick by which to exploit the tragedy in Greece in order to massage the consciences of some people from

[12] documenta, official website, https://www.documenta.de/en/ (retrieved 12/14/2017).
[13] Ginanne Brownell, "Superstar Among Curators," *The New York Times*, 6/13/2011, http://www.nytimes.com/2011/06/14/arts/14ihtrartadam14.html.
[14] Adam Szymczyk, "Iterability and Otherness—Learning and Working from Athens," in *The documenta 14 Reader* (Munich: Prestel, 2017), 24.
[15] Ibid., 3234.

documenta," comparing it to "rich Americans taking a tour in a poor African country."[18]

The theme of *documenta 14* is "Learning From Athens," heightening the expectation of an educational experience. According to his curatorial essay as published in *The documenta 14 Reader*, Szymczyk intended for this learning to come from a process he terms "aneducation," that is, "an education that attempts to stay aware of and rid itself of traditional pedagogical habits."[19] Much of this aneducation was focused on examining the role that education plays in creating and reinforcing the structural and institutional realities that undergird systems of power and influence, as exemplified by iQhiya's *Monday*. The specific relevance of this theme to Kassel itself is highly visible in Marta Minujín's *The Parthenon of Books*, a replica of the Parthenon incorporating some 100,000 banned books built on a site where Nazis held book burnings in 1933.[20]

The Secret School, a 2009 video work by Athens-based artist Marina Gioti which was exhibited in Kassel's Neue Galerie during *documenta 14*, deftly illustrates the slipperiness that can come into play around educational narrative-building, particularly where ethno-nationalistic factions are concerned. The centerpiece of the video is an archival propaganda film produced by the Greek army during the series of far-right military juntas that lasted from 1967 to 1974. Lost shortly thereafter, it was rediscovered

[16] Ibid., 21.

[17] Ibid.

[18] Leon Kahane, "Doing documenta in Athens is Like Rich Americans Taking a Tour In a Poor African Country — An Interview with Yanis Varoufakis," *Spike Art Magazine*, 7/10/2015, https://www.spikeartmagazine.com/en/articles/doingdocumentaathensrichamericanstakingtourpoorafricancountry.

[19] Szymczyk, "Iterability and Otherness," 36.

[20] Michael Waters, "A Parthenon of Banned Books, Built at a Former Book Burning Site," *Atlas Obscura*, 7/19/2017, https://www.atlasobscura.com/articles/aparthenonofbannedbooksbuiltataformerbookburningsite.

by Gioti at a military junkyard some thirty years later. This film follows a proud Greek father as he points out items of cultural importance to his middle class nuclear family on a trip through the Emfietzoglou Gallery Museum in Athens. The highlight of their tour is a late 19th century oil painting by Nikolaos Gyzis depicting a so-called "secret school" (*krifó scholió*). These schools were, according to Gioti's commentary, alleged underground schools operated under the auspices of the Greek Orthodox Church during the Turkish Ottoman rule of Greece from 1453 to 1821. A popular nationalist narrative credits these secret schools with keeping Greek language and ethnic history alive under a regime that had outlawed the teaching of non-Muslim subjects, and with playing a critical role in Greece's successful war of independence against the Turks.[21] It's an attractive story, but probably not very historically accurate. Actual evidence that these schools even existed is scant, and there is no conclusive proof that the teaching of Christianity and the Greek language were forbidden under Ottoman rule. There is, however, ample evidence that the Greek Orthodox Church conspired with the Ottomans *against* the revolution.[22] In other words, the secret schools are quite likely a nationalist myth created to instill patriotic faith in the Orthodox Church during a time when a Christian-tinged Greek ethno--nationalism was being actively promoted by the military-controlled government.

[21] Marina Gioti, *The Secret School*, digital video, sound, 2009, documenta 14, Kassel, Germany.
[22] Ibid.

On the surface, both iQhiya's *Monday* and Gioti's *The Secret School* depict subversive cultural resiliency in action; the drive to preserve language and identity in the face of foreign occupation. But while the former re-inscribes a genuine uprising against oppressive, colonialist educational forces, the latter reveals a narrative strategically projected onto the past in order to manipulate cultural pride for patriarchal, militaristic ends. In an era where "fake news" has contributed to an international environment of "post-truth" politics,[23] the ease with which a tale of cultural resilience may become a tool of an ethno-nationalistic, patriarchal coalition is a mechanism worthy of close examination.

Like democracy, ethno-nationalism is a philosophical product of ancient Greece, traceable to Herodotus, who identified "the kinship of all Greeks in blood and speech, and the shrines of gods and the sacrifices that we have in common, and the likeness of our way of life" as foundational to Greek identity.[24] Historically speaking, ethno-nationalism has played a vitally important role in constructing and enforcing a sense of shared identity within the different nations of Europe, woven variously into specific national histories to instill pride and terror alike. German nationalism has philosophical roots in the 18th century writings of Friedrich Karl von Moser and Johann Gottlieb Fichte,[25] and was politically activated by Napoleon's invasion of the Holy Roman Empire—currents which were self-consciously

[23] In 2016, "*post-fact*" and "*postfaktisch*" were named Word of the Year by the Oxford English Dictionary and the Society for German Language, respectively.
[24] Herodotus, *The Histories*, ed. A.D. Godley (Cambridge: Harvard University Press, 1920), book 8, chapter 144, section 2. Retrieved at http://www.perseus.tufts.edu/ 12/14/2017.

exploited by Otto von Bismarck in his efforts to create a unified German state.[26] Following the rise and fall of the Third Reich, German nationalism was considered taboo for the remainder of the 20th century, only to be revived in the first decades of the 21st century by the far-right party Alternative für Deutschland (AfD).[27]

This vacillating dance of history in which interlocking narratives are created, lost, torn up, burned, and born anew is a recurring theme throughout *documenta 14*. As Philipp Oswalt has pointed out, the "civilizational catastrophe of National Socialism" acts as an omnipresent frame of reference for *documenta* as an internationally recognizable brand representing a "liberal, cosmopolitan, innovative, and modern Germany."[28] This frame occurs on embedded levels: in the founding mission of *documenta* itself, in the buildings of Kassel that bear witness to the tangible history of World War II, and in the curated works exhibited inside them, such as Maria Eichhorn's *Rose Valland Institute*, a multimedia project aimed at the documentation of art and artifacts looted from Europe's Jewish population by the Nazis.[29] Szymczyk also attempted, but failed to bring the infamous Gurlitt Collection—a cache of some 1,406 artworks owned by a Nazi-era art dealer discovered in a Munich apartment in 2012—to *documenta 14*. Though this collection is not physically present in Kassel, its spirit influenced many of Szymczyk's other curatorial decisions.[30]

[25] Haagen Schultze, *The Course of German Nationalism: From Frederick the Great to Bismarck 17631867* (Cambridge: Cambridge University Press, 1991), ix.
[26] Otto Pflanze, "Bismarck and German Nationalism," *The American Historical Review* 60, 3 (April 1955): 548566.
[27] Julian Göpffarth, "How Alternative für Deutschland is Trying to Resurrect German Nationalism," *The New Statesman*, 09/28/2017, https://www.newstatesman.com/world/europe/2017/09/howalternativefr-deutschlandtryingresurrectgermannati onalism.
[28] Philipp Oswalt, "Bauhaus / documenta: Orders of the Present," *On Curating*, 33 (2017): 20.

These material histories of National Socialism provide a provocative context for Israeli artist Roee Rosen, whose work is characterized by a trenchant analysis of the uses and abuses of the Holocaust as a justification for Israel's present-day actions. Rosen's *The Dust Channel* is a 23-minute digital video featuring an original Russian-language operetta about the industrial beauty of the Dyson 7 vacuum cleaner exhibited at the Palais Bellevue, an 18th century palace notable for being one of the few buildings in Kassel to survive World War II intact. What begins as a cheeky sendup of a bourgeois fixation on cleanliness and the pseudoerotic appeal of consumer products soon turns, by means of a channel surfing effect, into a commentary on xenophobia-fueled militarism; the dust that accumulates inside the transparent belly of the Dyson 7 becoming an analog for the Holot open--air detention center where foreign-born asylum seekers are held long term.[31] "Holot" means sand, and images of sand and dust are used interchangeably in the video, drawing strong associations between the act of cleaning house and ethnic cleansing.[32]

Meanwhile in Athens, Rosen's controversial mixed media installation *Live and Die as Eva Braun* markets a macabre entertainment experience that invites viewers to imagine themselves as Hitler's mistress during the final days of his life, his death, and a "short trip to hell."[33] By inviting his audience to indulge the unthinkable—vicarious

[29] Maria Eichhorn, "Rose Valland Institute," multimedia project in nine parts, 2017, *documenta 14*, Kassel, Germany. http://www.rosevallandinstitut.org/.
[30] Sarah Cascone, "How the Nazi-Tainted Gurlitt Hoard Is Shaping documenta 14," *ArtNet*, 4/4/2017, https://news.artnet.com/exhibitions/gurlitthoardinspiringdocumenta149143 87.
[31] Roee Rosen, *The Dust Channel*, digital video, sound, 2017, documenta 14, Kassel, Germany.
[32] Hila Peleg, "Roee Rosen," *documenta 14*, 2017, http://www.documenta14.de/en/artists/1355/roeerosen.

intimacy with Adolf Hitler—Rosen reveals the Führer as a monster who is, above all, human. It's uncomfortable to consider Hitler in this way, and this discomfort reveals the distance that viewers tend to place between ourselves and the worst actors in history—a defense mechanism which both denies our entanglement with one another and obscures the possibility of observing similar factors at work in our own psyches. Together, *The Dust Channel* and *Live and Die as Eva Braun* function as a sort of pivot point for *documenta 14*'s political consciousness, examining the psychological conditions through which some survivors of a historical episode so ghastly the term "genocide" was coined to describe it might be seduced by the beguiling allure of ethno-nationalism themselves.[34]

While education and ethno-nationalism can bring us face-to-face with some of the channels through which asymmetrical power structures are achieved and perpetuated, as well as some of their underlying motivations, it is ultimately their intersection with wealth that casts the deciding vote in which narratives will be told, and who will therefore be granted access to power. The multimedia installation *La farsa monea* by Pedro G. Romero, Israel Galván, and Niño de Elche lends a physicality to the flow of money by tracing the movement patterns of three different historical coins with a relationship to flamenco culture. At the University of Kassel's GottschalkHalle, piles of coins

[33] Roee Rosen, *Live and Die as Eva Braun*, mixed media on paper, 19951997, documenta 14, Athens, Greece.
[34] United States Holocaust Memorial Museum, "What is Genocide?" *Holocaust Encyclopedia*, https://www.ushmm.org/wlc/en/article.php?ModuleId=10007043. (retrieved 12/14/2017).

were stacked around the room along with printed banners poetically enumerating the clandestine ways they were traded among the so-called "subaltern" classes—how a coin that was exchanged for sex might later surface as a plectrum for the performance of a musical composition by prisoners, only to later be used in a coin toss to decide which prisoner is next to be interrogated by the SS.[35] While the subjects of *La farsa monea* are drawn from a specific milieu, the embodied stream of currency described here is a helpful visualization which can be projected outward: a tangible trail of monetary exchanges that we might otherwise be tempted to imagine purely in the abstract.

The coin is not just an implement of exchange, it is, according to artist Antonio Vega Macotela, "a symbol of geopolitical status."[36] Macotela's *The Mill of Blood*, installed at Kassel's Orangerie, is a reproduction of a machine that was used in Bolivia to transform human labor into silver coins during Spanish colonial rule. The original mines used slaves to turn the machinery, "literally transforming human lives into coins."[37] Macotela's model allows visitors to produce coins called TEIOs—a *portmanteau* of the Greek "theos" and "Tio," a deity of the Bolivian mines associated with both luck and misfortune.[38] These coins, produced throughout the duration of the exhibition, correspond to a value in crypto-currency, and are currently available for sale on-line to anyone who is not a citizen or permanent resident

[35] Pedro G. Romero, Israel Galván, and Niño de Elche, *La Farsa Monea*, mixedmedia installation and performance, 2017, documenta 14, Kassel, Germany.
[36] Antonio Vega Macotela, *Mill of Blood*, steel, wood, and glass, 2017, documenta 14, Kassel, Germany, https://millofblood.com/.
[37] Ibid.

of the U.S. By re-purposing the machinery of colonialism to generate a new, artist conceptualized currency, Macotela and his collaborators envision a post-colonial system of economic exchange divorced from the global "necro-politics" that transform "life into profit."[39]

As it turned out, the art wasn't the only thing at *documenta 14* to embody the ebb and flow of capital. In September 2017, as the German portion of the exhibition neared its close, the local newspaper *HNA* published a report accusing the exhibition of massively outspending its €37 million budget, prompting the city of Kassel and state of Hesse to step in with a combined loan of €7 million to keep the quinquennial afloat.[40] In the following weeks, audits indicated that the missing money reflected unforeseen expenses on the Athens side of the exhibition, suggesting that had it not been for Athens, *documenta 14* would have turned a profit.[41] This revelation spurred a lawsuit against *documenta* from the far-right AfD faction of Kassel's city council over alleged mismanagement of funds. Exhibition organizers charged back with a statement blaming local politicians for creating an unnecessary panic "by disseminating an image of imminent bankruptcy of *documenta*" while also casting themselves as "the 'saviors' of a crisis they themselves allowed to develop."[42] Meanwhile, over 200 artists signed a letter in defense of the exhibition's organizers, indicating that not only had the curators' efforts

[38] Ibid.

[39] Ibid.

[40] Florian Hagemann, Horst Seidenfaden, and Frank Thonicke, "Leiter setze Geld in den Sand: documenta-Pleite war schon in Sicht," *HNA*, 9/12/17, https://www.hna.de/kultur/documenta/documenta14inkasselwarpleitebuergschaftenrettenausstellung8675464. html.

[41] Henri Neuendorf, "What Brought documenta to the Brink of Bankruptcy? Auditors find a OneWord Culprit: Athens," *ArtNet*, 11/15/2017, https://news.artnet.com/artworld/documentasauditorrevealswhy-showwentbankrupt1150967.

to "decenter" Kassel been successful, but that the mission of *documenta*—founded, in part, as a way for Kassel to atone for its own political support of Hitler—is too important to measure in terms of ticket sales. "Shaming through debt is an ancient financial warfare technique," the statement reads." These terms of assessment have nothing to do with what the curators have made possible."[43]

The language of this statement alludes to the political dynamics of the Greek debt crisis in the wake of the global financial catastrophe of 2007-2008. In order to understand how Germany is implicated in Greece's tragedy, it is necessary to consider a bit of background on the contributing factors.

When the global financial crisis hit, Greece was already in a disadvantageous position due, in part, to a trade deficit incurred through the introduction of the Euro in 2001. In 2009, Greece revealed that it had been underreporting this deficit for years, resulting in a collapse of confidence that prevented the country from borrowing money on the international market. At the same time, being tied to the Euro prevented Greece from printing its own currency in order to help stabilize the economy internally and make its exports competitive to the global market.[44] Shut out from borrowing, Greece suffered a humanitarian crisis that prompted a series of bailouts from the European Central Bank, led by Germany. Some €7.5 billion later, Greece's economy still has not recovered, as these funds have largely gone toward debt interest payments instead of

[42] Henri Neuendorf, "Germany's FarRight Populist AfD Party Sues documenta over Financial Irregularities,"
ArtNet, 10/24/2017, https://news.artnet.com/artworld/afddocumentalawsuit1126277.
[43] Henri Neuendorf, "Over 200 Artists Pen a Letter in Defense of Adam Szymczyk and documenta's Organizers," *ArtNet*, 9/18/2017, https://news.artnet.com/artworld/morethan200artists-defenddocumentainopenletter1085852.

circulating domestically, leaving the country trapped between an enormous debt burden and a lingering depression.[45]

In financing these bailouts, Germany wasn't just acting generously. In July 2017, *Süddeutsche Zeitung* published a report estimating that the German government had netted some €1.34 billion in interest payments on loans and bond purchases aimed at assisting Greece, provoking an outcry from many who believed that, in fairness and solidarity, these profits should belong to Greece.[46] In an essay in *The documenta 14 Reader*, Denise Ferreira da Silva identifies the financial crisis with what she calls "un-payable debt," a dialectical image which has its roots in the expropriation of wealth and labor under slavery and colonialism and casts capital as "just the most recent configuration of the modern matrix of power."[47] The financial crisis itself was triggered, in large part, by banks offering sub-prime home loans with exorbitantly high interest rates to working-class, lower income people in the United States—many of them Black and Latinx—who were then scapegoated as though it was their poverty, not the predatory lending, that represented a moral and economic failure.[48] But the reason these loans were so profitable in the first place was due to their borrowers' inability to pay. (This is precisely why Greece's economic crisis has been so profitable for Germany.) For Ferreira da Silva, the only way out of un-payable debt is a "metaphysical move" which allows us to transcend the legal, ethical, and epistemological systems which give debt its power

[44] Timothy B. Lee, "The Greek financial crisis, explained in fewer than 500 words," *Vox*, 6/29/2015, https://www.vox.com/2015/6/29/8862583/greek-financial-crisis-explained.

[45] Liz Alderman, James Kanter, Jim Yardley, Jack Ewing, Niki Kitsantonis, Suzanne Daley, Karl Russell, Andrew Higgins and Peter Eavis, "Explaining Greece's Debt Crisis," *The New York Times*, 6/17/2016, https://www.nytimes.com/interactive/2016/business/international/greece-debt-crisis-euro.html.

[46] Daniel Brössler, "Deutschland macht mit Hilfen für Griechenland Milliardengewinn," *Süddeutsche Zeitung*, 7/11/2017. http://www.sueddeutsche.de/wirtschaft/griechenland-deutschland-macht-mit-hilfen-fuer-griechenland-milliardengew inn1.3582710.

[47] Denise Ferreira da Silva, "Unpayable Debt," in *The documenta 14 Reader* (Munich: Prestel, 2017), 86.

[48] Ibid., 89

as a means of control. The method by which this move may be achieved is "a task for the intuition and the imagination."[49] In his *documenta 14* essay, Yannis Hamilakis makes a related point, evoking the cultural and philosophical foundations that Western civilization inherited from ancient Greece as an unpayable debt in its own right. Hamilakis proposes a reversal of the debt/credit paradigm; considering a release of Greece from its current debt burden as a reasonable payment for its enduring contributions to culture.[50] Given its strong emphasis on "de-centering" Kassel and providing a platform for artists who creatively critique the system of global capital from many angles, it could be argued that *documenta 14* represents an attempt by the organizers to make some semblance of the "metaphysical move" that the process of decolonization demands. But the as-of-yet-unresolved quagmire over the exhibition's finances begs the question: in a world where funding for the arts must come either from the state or from wealthy individuals, is it even possible to create a large-scale artistic statement which does not ultimately re-inscribe the circumstances of capitalism, nationalism, or both? That *documenta 14* has ultimately been swept up in some of the same forces it set out to critique is nothing if not a testament to the ubiquity of those forces, given the framework in which all of the actors are ensnared.

All of the threads that been traced here— ethnonationalism, wealth, and education (which tends to employ

[49] Ibid., 110, 88.

[50] Yannis Hamilakis, "Some Debts Can Never Be Repaid: The Archao-politics of the Crisis," in *The documenta 14 Reader* (Munich: Prestel, 2017), 507.

narrative curation in the service of the other two)—reveal vast power differentials that appear insurmountable given the current received wisdom about the legal and philosophical frameworks in which contemporary nation states operate. These frameworks, characterized by their easy exploitation by those who would grab power at the expense of others, are being increasingly revealed as brittle and unyielding in a way that is incompatible with the agential flux in which the universe actually operates down to the quantum level.

Within agential realism, ethics are defined by an accountability to the real. "Entanglements are not intertwinings of separate entities, but rather irreducible relations of responsibility," writes Barad.[51] Because there is no fixed boundary between internal and external, all power differentials based on a hard division between 'self' and 'other' are fundamentally incompatible with the deep essence of materiality.

The healthy organism (or system, or society) is one that is able to perceive its own entanglements and proceed accordingly. Under the forest floor, mycorrhizal networks of plant and fungus communicate using chemical signals in order to distribute carbohydrates across vast distances according to need.[52] Human social logistics seem very parochial in contrast. The ethno-nationalist ideations of the AfD (with obvious parallels in the United States, the United Kingdom, Israel, and a whole host of other nations with populations

[51] Barad, "Quantum Entanglements and Hauntological Relations of Inheritance," 265.

that benefit from global inequality) aim to impose an illusory order to ensure the continued benefit of the few at the expense of the many. They are unhealthy in the sense that they are tethered to an image of a world that simply does not exist, and never did. Like a curmudgeon who refuses medical attention for a problem obvious to everyone but himself, this denial exacerbates a wound desperately in need of healing.

In the context of agential realism, this healing involves an accountability to the conditions of the past and present with an attention to a material reconfiguration of the future. While what has already happened can never be completely repaired—memories of wounds are "written into the flesh of the world"—an ethics of entanglement would recognize the need for "making connections and commitments" as embedded in the nature of materiality itself.[53]

The degree to which *documenta 14* makes such entanglements visible makes the exhibition a success from a diagnostic standpoint, at the very least, but the task of healing these wounds has yet to be undertaken on any meaningful scale. Given the ample parallels with history, it should be evident that the forces of inequality cannot push forward without regard for the real indefinitely. That today's systems are tomorrow's ruins is a given, but what tomorrow's systems may look like is another matter entirely.

[52] Nic Fleming, "Plants Have a Hidden Internet," *BBC Earth*, 11/11/2014, http://www.bbc.co.uk/earth/story/20141111plants-have-a-hidden-internet.

[53] Barad, "Quantum Entanglements and the Hauntological Relations of Inheritance," 266.

Bibliography

Alderman, Liz, and James Kanter, Jim Yardley, Jack Ewing, Niki Kitsantonis, Suzanne Daley, Karl Russell, Andrew Higgins and Peter Eavis, "Explaining Greece's Debt Crisis." *The New York Times*. 6/17/2016. https://www.nytimes.com/interactive/2016/business/international/greece-debt-crisis-euro.html.

Barad, Karen, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Durham: Duke University Press, 2007.

Barad, Karen, "Post-humanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs: Journal of Women in Culture and Society*, 28, no. 3 (Spring 2003): 801831.

Barad, Karen, "Quantum Entanglements and the Hauntological Relations of Inheritance: Dis/continuities, SpaceTime Enfoldings, and JusticetoCome," Derrida Today, 3, no 2 (October 2010): 240268.

Brössler, Daniel "Deutschland macht mit Hilfen für Griechenland Milliardengewinn." *Süddeutsche Zeitung*. 7/11/2017. http://www.sueddeutsche.de/wirtschaft/griechenlanddeutschlandmachtmithilfenfuer-griechenl andmilliardengewinn1.3582710.

Brownell, Ginanne, "Superstar Among Curators." *The New York Times*. 6/13/2011. http://www.nytimes.com/2011/06/14/arts/14ihtrartadam14.html.

Cascone, Sarah, "How the NaziTainted Gurlitt Hoard Is Shaping documenta 14." *ArtNet*. 4/4/2017. https://news.artnet.com/exhibitions/gurlitthoardinspiringdocumenta14914387. documenta, official website, https://www.documenta.de/en/.

Eichhorn, Maria, *Rose Valland Institute*, multimedia project in nine parts, 2017, documenta 14, Kassel, Germany. http://www.rosevallandinstitut.org/.

Ferreira da Silva, Denise, "Unpayable Debt." *The documenta 14 Reader*. Munich: Prestel, 2017.

Fleming, Nic, "Plants Have a Hidden Internet." *BBC Earth*. 11/11/2014. http://www.bbc.co.uk/earth/story/20141111plantshaveahiddeninternet.

Kahane, Leon, "Doing documenta in Athens is Like Rich Americans Taking a Tour In a Poor African Country — An Interview with Yanis Varoufakis." *Spike Art Magazine*. 7/10/2015. https://www.spikeartmagazine.com/en/articles/doingdocumentaathensrichamericanstakingto urpoor-africancountry.

Gamedzi, Thuli, “iQhiya.” *documenta 14*. 2017. http://www.documenta14.de/en/artists/13582/iqhiya.

Gioti, Marina, The Secret School, digital video, 2009, documenta 14, Kassel, Germany. Göpffarth, Julian, “How Alternative für Deutschland is Trying to Resurrect German Nationalism.” *The New Statesman*. 09/28/2017. https://www.newstatesman.com/world/europe/2017/09/howalternativefrdeutschlandtryingres urrect-germannationalism.

Hamilakis, Yannis, “Some Debts Can Never Be Repaid: The Archaopolitics of the Crisis.” In *The documenta 14 Reader*. Munich: Prestel, 2017.

Hagemann, Florian, Horst Seidenfaden, and Frank Thonicke, “Leiter setze Geld in den Sand: documentaPleite war schon in Sicht.” *HNA*. 9/12/17. https://www.hna.de/kultur/documenta/documenta14inkasselwar-pleitebuergschaftenrettenau sstellung8675464.html.

Herodotus, *The Histories*, edited by A.D. Godley. Cambridge: Harvard University Press, 1920.
iQhiya, Monday, installation and performance, 2017, documenta 14, Kassel, Germany.

Lee, Timothy B. “The Greek financial crisis, explained in fewer than 500 words.” *Vox*. 6/29/2015. https://www.vox.com/2015/6/29/8862583/greekfinancial-crisisexplained.

Little Bear, Leroy, *Naturalizing Indigenous Knowledge, Synthesis Paper*. Saskatoon: University of Saskatchewan Aboriginal Education Research Centre, 2009. www.aerc.usask.ca.

Macotela, Antonio Vega, *Mill of Blood*, steel, wood, and glass, 2017, *documenta 14*, Kassel, Germany, https://millofblood.com/.

manu.escrita, “IQhiya, the Black Female Collective from South Africa.” contramare.net. 03/14/2016. http://www.contramare.net/site/en/iquiyatheblack-femalecollectivefromsouthafrica/.

Neuendorf, Henri, “Germany’s FarRight Populist AfD Party Sues documenta over Financial Irregularities.” ArtNet. 10/24/2017. https://news.artnet.com/art-world/afddocumentalawsuit1126277.

Neuendorf, Henri, “Over 200 Artists Pen a Letter in Defense of Adam Szymczyk and documenta’s Organizers.” *ArtNet*. 9/18/2017. https://news.artnet.com/artworld/morethan200-artistsdefenddocumentainopenletter108585 2.

Neuendorf, Henri "What Brought documenta to the Brink of Bankruptcy? Auditors find a OneWord Culprit: Athens." *ArtNet*. 11/15/2017. https://news.artnet.com/artworld/documentasauditorreveals-whyshow wentbankrupt115096.

Oswalt, Phillip, "Bauhaus / documenta: Orders of the Present." *On Curating*, 33. (2017): 2024. Peleg, Hila, "Roee Rosen." *documenta 14*. 2017. http://www.documenta14.de/en/artists/1355/roee-rosen.

Pflanze, Otto, "Bismarck and German Nationalism," *The American Historical Review*, 60, no. 3. (April 1955): 548566.

Romero, Pedro G., Israel Galván, and Niño de Elche, *La Farsa Monea*, mixedmedia installation and performance, 2017, documenta 14, Kassel, Germany.

Rosen, Roee, *The Dust Channel*, digital video, sound, 2017, *documenta 14*, Kassel, Germany. Rosen, Roee, *Live and Die as Eva Braun*, mixed media on paper, 1995-1997, *documenta 14*, Athens, Greece.

Schultze, Hagen, *The Course of German Nationalism: From Frederick the Great to Bismarck 17631867*. Cambridge: Cambridge University Press, 1991.

Szymczyk, Adam, "Iterability and Otherness—Learning and Working from Athens," In *The documenta 14 Reader*. Munich: Prestel, 2017.

United States Holocaust Memorial Museum, "What is Genocide?" *Holocaust Encyclopedia*. https://www.ushmm.org/wlc/en/article.php?ModuleId=10007043.

Waters, Michael, "A Parthenon of Banned Books, Built at a Former Book Burning Site." *Atlas Obscura*. 7/19/2017. https://www.atlasobscura.com/articles/aparthenonofbannedbooksbuiltataformerbookburning-site.

Zimmerman, Emily, *Material Performance*. EMPAC. 2014. http://empac.rpi.edu/events/2014/fall/material-performance.

Jacob Lawrence Gallery Supporters

The Jacob Lawrence Gallery wishes to thank the following individuals for their support.

Anonymous
Mary Jane Fitch
Anne Focke
Carole Fuller
Greg Gates
Alex Kang
Greg Kucera
Risa Morgan Lewellyn
Margie Livingston
Beth Lowrey
Jamie Walker & Mary Childs
Franklin & Elena Zimmerman
Emily Zimmerman