6

Unlearning: A Duologue

L.O. Aranye Fradenburg & Eileen A. Joy

To Diverge, Rather than to Undo[1]

Probably most of us would agree that, however expert we might become in this or that specialty, we are not richly educated until we have experience of a wide range of disciplines and methodologies — a range that includes critique *and* creativity, analysis *and* immersion, learning *and* unlearning. To our sorrow, this conception of education is rapidly losing favor with the citizenry. There are, of course, pushbacks. San Francisco took to the courts to defend the nature of its City College's (CCSF) course offerings from the so-called "student success" movement, which preaches efficiency and "progress to the degree." The Accrediting Commission for Community and Junior Colleges (a private concern) has tried to shut City College down, and the SF District Attorney has successfully sued to protect it (City Attorney of San Francisco, 2016). Prior to the attack by the ACCJC, CCSF

1 Our "duologue" alternates between us, first Aranye, then Eileen, and so on, with some co-composing here and there of an oblique and mysterious nature.

actually maintained graduation rates better than those of most community colleges in the country; the real target of the Accreditation Commission appears to have been the wide range of services CCSF provides for San Franciscans that do not target progress-to-the-degree as such, like the Queer Resource Center, the Women's Resource Center and Library, English classes for recent immigrants, parenting classes for new parents, technical and clerical training, music, painting, and sound engineering. Colleges like CCSF are points of crossover between the academy and the rest of the world. They treat culture shock, give the elderly new leases on life, and resist the ongoing enserfment of the citizenry and those who aspire to it. The "student success" movement means to impoverish sentience, not to enrich it; it's a Thatcherite attempt to discipline and punish, and capitalists love it. But why do so many other people fall for it?

Most students and parents hate teachers, at least some of the time, for subjecting said students to apparently impersonal standards. If we give a student the grade we think they *really* deserve, or if we make them sit for one exam after another, or if we don't even let them into college, then why should we escape external assessment and accountability? If academics play, experiment, muck about with things and other people's money (as opposed to the capitalists who spend many thousand dollars of other people's money on umbrella stands), then we are Žižekian thieves of enjoyment, who wreak havoc in what Lacan called "the dollar zone," ruled by the fantasy of equivalence between and among persons, objects, and symbols. Academic knowledge is edgy, hard to evaluate, and takes a long time to metabolize. Hence, while our new understandings of neuroplasticity and neuronal connectivity make the argument for the value of liberal arts learning, they remain "quiet" in educational policy debates. Arguably, however, the complexification and integration — not homogenization — of brain functions *is* the goal of education.

Educational theorist Wolf Singer strongly emphasizes the roles of connectivity and integration in adult learning: "the only major change that nervous systems have undergone during evolution is a dramatic increase in complexity" — that is to say,

not only a "massive" increase in the number of nerve cells but also a stunning increase in connections, including "numerous long-range connections" linking "nerve cells that are distributed across remote areas of the brain" (2008, 99). Damasio similarly believes that the experience of selfhood depends on connections between the "primitive" brainstem and the new orbitofrontal regions of the brain (2010, 192–193, 213, 243), and Edelman argues for the role of the basal ganglia in the creation of the redundancy loops that play such an important role in neuroplasticity (2004, 24). A lot that we think is new, or modern, or postmodern, derives from the oldest parts of the triune brain, which participate actively in the "developmental processes in which selection of cortical circuits depends on experience," such that, as Singer puts it, "frequently-occurring correlations in the outer world can be translated into the architecture of connections" (2008, 103). Our environments and histories, in other words, are actually built into the (always changing) functional architecture of our brains. Singer also notes that arousal and attention are required to induce "lasting changes in the circuitry" of the brain; "rewards," hence pleasure, or lack thereof, will be relevant here, as also "behavioral significance," especially since genetic scripts derive from past experience (2008, 105).

Educational researcher Tracy Tokuhama-Espinosa invokes a number of these modulatory and other epigenetic factors in her survey of "major brain functions as they relate to human survival and life skills" — skills that are needed to survive both in academic settings and "social situations." Her list of these major brain functions includes: 1. Affect, empathy, motivation; 2. Executive, decision-making functions; 3. Facial recognition and interpretation; 4. Memory; 5. Attention; 6. Social cognition; 7. Spatial management; 8. Temporal management (2011, 143). These are the same functions that Singer regards as crucial to epigenetic connectivity; they forge the ecological links between brain architecture and worldly experience at stake in both surviving and thriving. As I argue in *Staying Alive* (2013), it's the particular brief of the arts and humanities to enhance the skills on which thriving and surviving depend. We cannot sat-

isfy a "need," assuming we could identify one in the first place, without also experiencing affects and sensations (for example, pleasure, triumph, disgust, shame). So the interconnections of these functions are crucial — for example, the role of affect in decision-making, in focusing attention, and in the formation of memories. Unsurprisingly (as Tokuhama notes), nonverbal forms of communication, like facial expressions and tones of voice, are crucial to effective pedagogy and to the mastery of the abstract symbolism too often thought of as their opposite. These prosodic and *performative* elements are at work in the earliest modes of intersubjectivity, which take place in the context of the attachment process. Indeed, the profound relationality of learning is driven by the affective power of attachment. The psychoanalyst Wilfrid Bion (1959) emphasizes the intersubjectivity of the work of "linking" and "thinking," whereby the attachment figure helps the baby to process chaotic feelings and dread by naming them and connecting them to other experiences. "[T]he brain is a social organ that thrives on interaction with others," as Tokuhama-Espinosa puts it (2011, 166). Learning from other minds is impossible without theory of mind; learning depends on our capacity to understand that other minds are like our own, but also distinct from our own. But theory of mind in turn is acquired in the context of the sensory, affective and aesthetic dimensions of attachment. It is thus a kind of environmental theory, insofar as our awareness of different and non-mindedness depends also on our understanding of what our minds are like.

Tokuhama-Espinosa's suggestion of a link between emotional intelligence and metacognitive capacities (such as reflection) makes perfect sense in the context of attachment behavior in general and "active quiet" in particular. ("Active quiet" refers to the periods of play, e.g., peekaboo, engaged in by young babies and their caregivers, believed to be a chief means of intersubjective learning; these periods are punctuated by restful periods of withdrawal of attention.) Paul Howard Jones, in *Introducing Neuroeducational Research,* also stresses the counter-intuitive importance of metacognitive factors in training teachers of

drama. Analysis is not inimical to creativity, he argues; instead, they are mutually supportive brain functions (2010, 138–63). The focused attention and working memory needed for analysis are impossible without affect; associative creativity is rapid and relatively uncensored brain connectivity, as Nancy Andreasen (2006) has argued. Her research suggests that the *corpus callosum,* the thicket of connective fibers linking the right to the left hemisphere of the brain, is specially aroused during times of creativity. Jones's experiments with drama-teacher trainees also emphasize the interactions between right- and left-brain activity (2010, 160). Both hemispheres of the brain are needed for linguistic processing. The left side specializes in syntax and logic, while the right side specializes in the emotional and social significance of utterances. But if the right brain is damaged, the result is not speech that sounds affectless, but rather non-sense, so important are emotional and social contexts in the construction of syntax and logic. And hence the importance of the liberal arts. Scientific method relies on quantitative analysis and controlled conditions; humanistic methods address real-time performance, rhetoric, persuasion, social and emotional expressivity and intelligence, the capacity to improvise. But attention and memory, affect and the senses, are vital to both, and so is relationality. My answer to Malabou's well-known question "What Should We Do with Our Brain?" is therefore "enrich it." The fact is that many basic brain functions must work together to enable even the narrowest of specializations — scientific, mathematical, musical, or otherwise.

How does the concept of "unlearning" illuminate, or question, the neuronal complexity now axiomatic in the new science of the brain? Is there, for example, a "before" to "unlearning," or even an *un* to unlearning? To the extent that the term "unlearning" presupposes a learning that needs to be undone *before* new learning can take place, it conjures a linearity that is not altogether helpful. Here is an example from Descartes: "The chief cause of our errors," he wrote, "are the prejudices of our childhood. […] I must seriously address myself to the general upheaval of all my former opinions" ([1641] 1955, 23). Here

is another example, this time from the discourse of organizational psychology: "[L]earning often cannot occur until after there has been unlearning. Unlearning is a process that shows people they should no longer rely on their current beliefs and methods. Because current beliefs and methods shape perceptions, they blind people to some potential interpretations of evidence […] '[People] […] hold onto their theories until […] failures […] convince them to accept new paradigms'" (Kuhn 1962, cited in Petroski 1992, 180–81; see also Starbuck). Similar narrative elements are at work in the story told by many developmental and psychoanalytic theorists about how our relational expectations — including patterns of anticipation, preparedness, anxiety, hope, and desire — resist modification, producing "entrenchment," or, in the analytic situation, transference. Time lags because the past lives on in us; nothing is altogether superseded. But contemporary fields of knowledge-making are also creating more complex narratives. Not all of us who are psychoanalysts expect our patients to uproot their relational expectations altogether before new ones can begin to form. For that matter, Freud himself characterized all new relationships, including analytic ones, as "new editions," "facsimiles" of old ones. The discourse of unlearning seems on the other hand to polarize the old and the new, where the old simply resists the new, rather than providing opportunities for its creation.

Sameness is not a popular goal these days, and for very good reasons, when it supports the fantasy of eradicating difference. But as so much queer theory has noted, both difference and sameness are relative to larger networks of conceptualization and evaluation. Few things are completely the same or completely different from other things, partly because sameness and difference are in the end relativized abstractions we use to recognize and modify patterns. ("Sameness" is of course not the same thing as a "link" or "linking," but the latter draws on the former.) Abstractions are always cathected, or not, if they have cognitive significance. If the desire for sameness is or can be part of us, is there something in sameness *for* us? Freud precedes his account of the "simplest organism" in *Beyond the Pleasure*

Principle with the paradoxical claim that *staying the same* is the goal of all becoming; we change *because* of our wish for repose, and ultimately, for inanimacy. The "external disturbing and diverting influences" responsible for "the phenomena of organic development" elicit responses that bring about change in the organism, but said responses "are merely seeking to reach an ancient goal by paths alike old and new" (1955, 37–38).[2] By attributing the dynamism of organic development exclusively to the impingements of the external environment on the organism, Freud maintains a distinction between the creature's desire and its ecology that is no longer tenable. But he at least insists that the development of organisms can only be understood in the context of "the history of the earth we live in and of its relation to the sun" (1955, 38). He invites us, further, to suppose "that all the organic instincts are conservative, are acquired historically and tend towards the restoration of an earlier state of things" (1955, 49). It is a paradox worth considering that the drives have a history partly *because* they "tend towards the restoration of an earlier state of things." *Because* the organic instincts are acquired historically, through long ages of experience and reality-testing, and *because* they have been such a long time in becoming, the past is built into them, and they have an allegiance to it. This is a narrative that foregrounds intimacies between sameness and difference, conservation, and exploration. We need, at least, some such story "to reckon with the organism's puzzling determination (so hard to fit into any context) to maintain its own existence in the face of every obstacle": the organism insists on following "its own path to death," and warding off "any possible ways of returning to inorganic existence other than those which are immanent in the organism itself" (Freud 1955, 37).

Here Freud is not so very far from Francisco Varela's use of the term *autopoiesis* to refer to the creature's constant remak-

2 Regrettably, Freud assumes that the "the elementary living entity would from its very beginning have had no wish to change; if conditions remained the same, it would do no more than constantly repeat the same course of life" (1955, 38). Studies of animal innovation do not confirm this assumption about the wishes of living entities. In a way, neither does Freud himself.

ing of itself in accordance with its particular potentialities, affordances, and provisions. Varela conceives of *autopoiesis* as always highly interactive with the organism's environment; it is a systems term, not a term that indicates individual autonomy:

> An autopoietic machine [e.g., a cell], is […] organized […] as a network of processes of production […] of components […] [which], […] through their interactions and transformations[,] continuously regenerate […] the network of processes […] that produced them; and […] constitute [the machine] […] as a concrete unity in space […]. (Maturana and Varela 1972, 78)

Each cell participates in a lavish network of biochemical connections *in order to regenerate* itself as "a concrete unity in space." Autopoiesis resists, not aggregation nor multiplicity, but assimilation to other ways of being alive. What we now know of uterine life is that as soon as we have ears to hear, we hear all the world around us. But we are also born with already-acquired preferences — for the music, the stories, the tastes, and smells of our prenatal experience. Becoming, yes; but becoming is not beyond attachment.

So what is the point of proposing that a linear process must take place — "learning often *cannot* occur until *after*" (my emphasis) — rather than positing that experimentation and its failures are simply part of all "learning" activities (changing, transforming, plasticizing, playing)? For that matter, why would we not posit that experimentation is part of all *living process*? Certainly we can think about habits, ideology, expertise, and the like as "entrenched" materially by the forming of strongly linked neural pathways that then guide us non-consciously. But what does it avail us to think of the process of learning anew as the equivalent of blowing up an old building to make way for a new one? Might it not be possible, that is, to *diverge,* to *re-contextualize,* instead of to undo? To create new, alternative pathways that intersect with old neuronal patterns and thus make creative use

of them in the project of living? Is a more holistic thinking possible about the nature of sentient responsiveness?

Particularly if we keep in mind the role of affect in the formation of memories, the question of why we cling or adhere to "tradition" is a matter of affective investments, of cathexis and de-cathexis. It is not clear to me that we can "unlearn" without undergoing mourning. The "giving up" of the old, of "home," in order to make way for the new is one of our most ancient *and* contemporary calls to sacrifice. Freud changed course on this point, acknowledging in a 1929 letter to Ludwig Binswanger that the substitution of an old object for a new one was not an adequate conceptualization since mourning is never really over:

> [a]lthough we know that after […] a loss the acute state of mourning will subside, we also know we shall remain inconsolable and will never find a substitute. No matter what may fill the gap, even if it be filled completely, it nevertheless remains something else. And actually this is how it should be. It is the only way of perpetuating that love which we do not want to relinquish. (1961, 386)

Studies of creativity show us over and over again that new learning depends on old knowledge. Arguably, the "Renaissance" could not have happened without the critical mechanisms of medieval skepticism, dissent, and iconoclasm. Studies of social learning make similar claims: if the elders in a tribe are wiped out prematurely, the result is not the opportunity to innovate but rather irreparable damage to the tribe's capacity for making and responsiveness. In behavioral ethology, "neophobia" and "neophilia" are not necessarily opposites but more typically interactive elements in always-already ongoing and mutually constitutive vital processes of responsiveness. Even Deleuze and Guattari (1987) argue for the radical potential of "archaisms" in history, just as Jane Bennett (2001) has claimed that premodern materialist understandings of sympathetic bonds and antipathetic lines of flight might inspire "new" respect for the vitality of all things.

How, then, should we think about attachment in the age of complexity theory? "Emergence" seems to resolve so many problems and antinomies. A new open system does not so much reject as reboot on a level of greater complexity the elements of previous systems. Does that mean we can focus on contemporaneity without worrying about the past? It's still with us, so if we work on "us," we're also working on it? And maybe its artifacts, its DNA, can emerge again, chock-full of new significances and material effects that nonetheless could not be were it not for the old ones? We have certainly made arguments like this. "Scale" offers similar opportunities: now we can think about decades, epochs, historical periods, the entire Anthropocene and beyond, as equally legitimate ways of shaping time in the pursuit of certain questions; indeed we can see each "period" as a complex network of different time scales. Foucauldian discontinuism and Foucauldian genealogy perhaps turn out to be the same thing, or complementary (see Fradenburg 2009). The tempting quality of these formulations gives us all the more reason to raise the question of the value of what we learn relative to the value of what we feel (not that these are radically distinct). Do our new-ish ways of thinking ask us to *sacrifice* the experience of attachment, love, bonding, relationality, intersubjectivity, trans-subjectivity? Because all of these involve bonds that do not easily let go. The networks of material relationships always under construction that affect our circumstances (whether at unimaginable distances of time and space or not) are still relationships that have implications for all affective experience. If the sympathies and antipathies that build molecules are an instance of the tendencies to aggregation, symbiosis, *and* autopoiesis characteristic of living process (see, for example, Margulis 1998), on what basis do we assume that our reluctance to change shape is simply an effect of the limitations of subjectivity? What exactly does it avail us to turn irreversible change into higher levels of complexity? What do we lose when we lose lack? In current environmental theory, the soothing, apparently optimistic aspects of the holistic concept of "ecology" (those that tempt us to think everything will adjust somehow — *Radioactive*

Wolves style of consolation[3]) are cut across by the real tear in the fabric of the Real promised by the current explosion of methane gas from the melting permafrost of the Arctic circle. Not just the polar bears are headed for the slaughterhouse.

Chaos and complexity theory and their offshoots — networks, meshworks, connectivity — dissolve the irreversibility of particular events and actions when and if inspired by melancholy, when "[w]hat should be a thought […] becomes a bad object, indistinguishable from a thing-in-itself, fit only for evacuation" (Bion 1962, 306–307). It is not a good idea to void and avoid lack and discontinuity as intolerable thought-objects, any more than it is to void and avoid continuity and resurgence. The refusal to link and thus think is not the same thing as seeing that a link has been broken. The obsessional defense of *undoing,* like *Radioactive Wolves,* undoes the act(s) of destructivity — our own — which we imagine, not incorrectly, to be the reason for our expulsion from paradise. But if we are expelled together, and there is no "third," if the couple or coupling have already absorbed the "outside" ideas that disturbed the equilibrium of the imaginary, if the damage can be undone one way or another, will they, and we, be all right? Who knows? Obsessional doubt also keeps us *in* the mire of a refusal of attachment, of decision, since, as Sodre puts it of one of his analysands, "any decision represented a loss, and […] this loss was unbearable" (1994, 384). Does unlearning have anything in common with undoing? Or is it an antidote of sorts? Of one thing I am sure: changing people's minds requires empathetic exploration of their *attachments* to prior viewpoints. As Martin Jordan writes,

3 *Radiocative Wolves* is a PBS Nature documentary, released in 2011, that explores how, in the ensuing 25 years after the 1986 Chernobyl nuclear disaster, "forests, marshes, fields and rivers reclaimed the land, reversing the effects of hundreds of years of human development," and how this "dead zone" has become "a kind of post-nuclear Eden, populated by beaver and bison, horses and birds, fish and falcons — and ruled by wolves" (http://www.pbs.org/wnet/nature/radioactive-wolves-introduction/7108/).

> The radical nature of ecology means that everything is interconnected, and it is the job of ecopsychotherapy to help humans negotiate the complex and interdependent present, not by romanticizing the perfect ecological past nor predicting some future ecological catastrophe, but by bearing to stay with the temporal spaces of the complex present. (2012, 145)

I am in complete agreement with the commitment to negotiating "the complex and interdependent present," but not with "bearing to stay […] in the […] present." Becoming creates but does not "stay" in spatialized temporalities. To give up yearning, to give up prophecy: why should we give up love, why should we give up fear? The language of "some future ecological catastrophe" dismisses the Real that now screens itself in the form of gigantic methane-releasing sinkholes. Complexity and extremity are not mutually exclusive.

The University-to-Come

Sinkholes are a *drag,* literally. Because they pull the earth out from under your feet and reveal a fact of worldy existence we don't always like to confront: there is no such thing as solid ground, no place you can return to that hasn't changed, or decomposed, or even been eradicated. At the same time, one doesn't easily slip the bonds of history, no matter how changeable that history might be. If current neuroscientific research is right, there *is* such a thing as "transgenerational epigenetic inheritance" (Dias and Ressler 2014), and that means I am carrying around my grandfather's fears and anxieties, maybe even his dreams. In other words, things and situations in the environment that affected my relatives may still be affecting me — behaviorally, neuro-anatomically, and epigenetically. We'll agree, then, that there is no escaping tradition or the past, and likewise, hankering after "the new" (or the "never was") has its decidedly dark side — just think of the Taliban demolishing Buddhist statues in Afghanistan in 2001 as a way to reset the historical clock to Year Zero (Rashid 2001). You can't accomplish these follies

without a lot of violence and murder — psychic, bodily, structurally, and otherwise. As one of my favorite novelists Lucy Corin has said, "When apocalyptic thinking is internal, it's rich and beautiful." But "enact [apocalyptic thinking] in real time with real people, and it's just about as fucked up as you can get" — because "of history, because there is no *new* time" (quoted in Vogrin 2010, 67; my emphasis). Nevertheless, an unthinking embrace of tradition for tradition's sake is equally dangerous, and novelty is important, if only to help us unsettle some of our overly-habituated modes of thought and practice. We'll admit, then, that we can't escape history and that Epicurus's laminar void, through which atomic particles once "rained," and then, through various small "swerves" (Luctretius's *clinamen*) created our world, is no longer possible (at least, not from the standpoint of the universe being empty and unformed). At the same time, we need to somehow be able to cultivate a certain radical contingency in order to engender material encounters that can't be predicted in advance, and out of which alternative life and art practices become more possible. The very problem of politics, in my opinion, is precisely its entrenchment in mentalities and histories and procedures that can't be, or aren't allowed to be, unthought nor abandoned (on this point, see Althusser 2006). But we can't reboot democracy, either, by hitting the delete key and just "starting over."

I honestly worry less about the destructive entrenchment of bad "un-novel" and acquiescent politics and more about the ways in which transnational, hyper-runaway capital makes even political regimes ultimately inconsequential relative to "how things might turn out" (with respect to climate change, sectarian wars, the automation of human labor, the end of the public research university as we have known it, global poverty and the scarcity of vital resources such as clean water, environmental pollution and pandemics, etc.). And with Aranye, I neither want to avoid lack and discontinuity nor continuity and resurgence. Nor do I want to despair, although, as Robin Mackay and Armen Avanessian have written in their Introduction to the *#Accelerate#* reader,

> Despair seems to be the dominant sentiment of the contemporary Left, whose crisis perversely mimics its foe, consoling itself either with the minor pleasures of shrill denunciation, mediatised protest and ludic disruptions, or with the scarcely credible notion that maintaining a grim "critical" vigilance on the total subsumption of human life under capital, from the safehouse of theory, or from within contemporary art's self-congratulatory fog of "indeterminacy," constitutes resistance. (2014, 5)

I also do not believe, strictly speaking, that there is any longer (nor has there ever been) an Outside to depart to, some other ground on which entirely new structures could be built apart from toxic hyper-capitalist relations, although I think about betrayal a lot, and about the importance of irresponsibility, with regard to both tradition *and* innovation, and also with regard to plotting a certain course that supposedly knits both together into the form of a so-called ethical or "good" life. As Sara Ahmed has put it, "For a life to count as a good life […] it must return the debt of its life by taking on the direction promised as a social good, which means imagining one's futurity in terms of reaching certain points along a life course. A queer life might be one that fails to make such gestures of return" (2006, 21). We can't stop looking back, or forward, but we might refuse to take on certain inheritances, no matter from which direction they're arriving — the past, with its "traditions," and the future, with its supposedly inevitable neoliberal accelerationism and resulting technological singularities (see Williams and Srnicek 2013).

I'm interested, then, in gestures of refusal, of non-compliance, of (again) betrayal, and in thinking about the ways in which the present might be more of a creatively productive fugitive zone, where time forks and bends everywhere *but* the past and future, and where we might practice the arts of divergent, tapestried becomings. As Aranye writes in "(Dis)continuity: A History of Dreaming," "Somehow, the unpredictable depends on what it supersedes. We cannot bypass having a past," and yet, at the same time, "the work is to keep moving" (Fradenburg 2009, 93, 109).

So, yes, let us not necessarily undo, nor blow up, what we have learned thus far, but let us definitely diverge. Although, contra Aranye, I want to put in a good word for occasionally "bearing to *stay*" where we might happen to be at any given moment, even if it's the most fucked-up place imaginable — not as a refusal of movement or change or productively divergent becomings, but as a form of resistance to the idea that the only good movement is forward, or somewhere else other than here, wherever that may be. Maybe there are times when we should embrace being stuck in personal incapacities and what might be called inoperative communities[4] of the exhausted, of institutionalized (and even post-institutionalized) invalids, where we might allow ourselves to be "at an impasse," while also cultivating new arts of care and convalescence, rest and indolence, choosing *not to perform* versus learning how to perform at ever more high and supposedly calculable levels. I borrow these notions from Jan Verwoert, who also asks us to consider what it might mean to embrace an "existential exuberance," which would be

> a way to perform without any mandate or legitimation, in response to the desires and dreams of other people, but without the aim or pretense of merely fulfilling an existing demand. It is always a way of giving too much of what is not presently requested. It is a way of giving what you do not have to others who may not want it. It is a way of transcending your capacities by embracing your incapacities and therefore a way to interrupt the brute assertiveness of the *I Can* through the performance of an *I Can't* performed in the key of *I Can*. It's a way of insisting that, even if we can't get it now, we can get it, in some other way at some other point in time. (2007, 94)

4 I borrow the term "inoperative community" from Jean-Luc Nancy who writes that community is "given to us […] well in advance of all our projects, desires, and undertakings," and further, that, at bottom, community is resistance itself, especially resistance to immanence (1991, 35). The essence of a community we could really get behind (and that would not harden into fascism) is its own "incessant incompletion" and the way it ceaselessly "exposes community *at its limit*" (1991, 38; Nancy's emphasis).

That sounds like a good definition of teaching to me as well, although I myself have stopped teaching — have stopped being a "professor" — partly because the university, increasingly, feels less and less like an hospitable place in which to think, write, and share ideas. It doesn't feel like the right place any more to enact what Lauren Berlant has called the "becoming-impasse," or the "collaborative risk of a shared disorganization," where "it is possible to value floundering around with others whose attention-paying to what's happening is generous and makes liveness possible as a good, not a threat" (2011, 85–86). But I still care about the fate of the public university, and that goes back to not wanting to blow things up. I just don't know sometimes if the university is the place any more to work on the university.

Much of my own academic career (whatever that word "career" might mean) has been torn between: (a) wanting to reform the university from within (where the glacial pace of change and seemingly endemic cowardice and personally petty antipathies have mainly dispirited me), and (b) wanting to escape its techno-managerial-bureaucratic controls completely in order to found and enact something radically Other, something more faithful to Derrida's "university without condition," which Derrida believed would "remain an ultimate place of critical resistance — and more than critical — to all the powers of dogmatic and unjust appropriation," and which had special safekeeping by way of the humanities, entailing the "principal right to say everything, whether it be under the heading of fiction and the experimentation of knowledge, and the right to say it publicly, to publish it" (2001, 26). Of course this is a utopian view, but I believe the university, in a sense, has always been utopian and never really actualized. We may bemoan the hyperbolic corporatization of the University, where we hardly have time any more to simply read, think, write, and teach thanks to never-ending rounds of assessment protocols, and where the defunding of humanities programs continues apace with the adjunctification of teaching lines and an obscenely staggering level of national student loan debt, but the University has always been, in some sense, a bureaucratic institution — its very "institution-

ality" and various modes and protocols of professionalization of disciplinary knowledge necessarily created (and sustains) a situation where, as Foucault once argued,

> the production of discourse is at once controlled, selected, organized and redistributed according to a certain number of procedures, whose role is to avert its powers and its dangers, to cope with chance events, to evade its ponderous, awesome materiality. […] We all know perfectly well that we are not free to just say anything, that we cannot simply speak of anything, when we like or where we like; not just anyone, finally, may speak of just anything. (1972, 216)

So perhaps the University-to-come is one of those chance (and precarious) events with which we must now cope (and also cultivate). Could we perhaps embrace a deterritorialization of the University, some sort of exodus that is not an escape from obligation(s) because it is also intent on inventing a common world as "a space of horizontal negotiations without arbiter" (Bourriaud 2009, 188)? This might entail going "radicant" — Nicolas Bourriaud's term for "setting one's roots in motion, staging them in heterogeneous contexts and formats, denying them the power to completely define one's identity, translating ideas, transcoding images, transplanting behaviors, exchanging rather than imposing." One has roots (a past, certain inheritances, etc.), but they are always on the move, "effacing their origin(s) in favor of simultaneous or successive enrootings" (Bourriaud 2009, 22). This effacement could be painful, of course, even sad — yet nevertheless, roots remain, in place, while also being transitive. You can have your *place,* and move it, too. Same goes for the classroom, which could be anywhere, while still being rooted in what Bill Readings called the "university in ruins." In other words, there is still a University (with a capital "U") to which we are dedicated, but it isn't the transnational corporation most of us work in today; rather, it is a collective commitment to *spending time* in "*listening to Thought*" — one which resists commodification and which al-

ways keeps "meaning open as a locus of debate," and there will never be a "homogeneous standard of value that might unite all poles of the pedagogical scene so as to produce a single scale of evaluation" of *that* situation (Readings 1996, 165).

Of course, as Aranye rightly points out, there are important issues of attachment to work through when considering where we might want to place ourselves vis-à-vis learning and teaching, thinking and writing. But isn't there also a productive sort of mourning always attendant upon learning, where one has to lose, or let go of (and then re-find in other spectral and material forms) something practically every day? I used to always tell my students that they should want to know more, but they would also have to accept that knowing things entails being sad and embracing one's fucked-up-ness, precisely because of that complexity Aranye describes — yes, complex systems always build on pre-existing materials, but something new is always emerging, and the ground is always moving under your feet. You couldn't stand still, even if you wanted to. There are no certainties, no unchanging verities. Learning is already unlearning, a continual upending of everything you thought you knew, and therefore, difficult and melancholic, especially when it requires you to let go of something you thought you couldn't live without. And no one said we had to let go of everything. With Stephen White, I believe in the "sustaining" affirmations of weak ontologies — "strong beliefs, weakly held." Our "figurations of self, other, and beyond-human are never purely cognitive matters; rather they are always aesthetic–affective," yet a weak ontologist recognizes that "no one set of figurations can claim universal, self-evident truth" (White 2005, 17). Commitments matter, figurations matter, but we must carry these life-goods lightly.

I agree that we have to also consider that "tear in the fabric of the Real" (whether climate change catastrophe or even just the "ruin" of the university as "public trust") and whether or not, similar to that tribe for whom the Elders have been wiped out, there is "irreparable damage" to our "capacity for making and responsiveness," or there is still "opportunity to innovate"? Another way to put this might be, "what do we hope for now"

(as learners, as teachers)? As Jonathan Lear explicates beautifully in *Radical Hope: Ethics in the Face of Cultural Devastation,* "as finite erotic creatures it is an essential part of our nature that we take risks just by being the world" and the world itself is not "merely the environment in which we move about"; rather, "it is that over which we lack omnipotent control," and at any moment, it "may intrude upon us," outstripping "the concepts with which we seek to understand it" (2006, 120). So, in merely *thinking* the world, we always take the risk "that the very concepts with which we think may become unintelligible" (Lear 2006, 116). In such a scenario, learning might then be a form of radical hope — not hope as an affective (and ultimately insipid) orientation toward definitive (projected-in-advance) outcomes, but rather, hope as a longing, or desire, for things that we do not fully, and cannot ever fully, understand. There would thus always be dialogic struggle as well (which could also be a form of friendship) — learning as the sort of encounter modeled by Lauren Berlant and Lee Edelman in *Sex, or the Unbearable,* where dialogue "commits us to grappling with negativity, nonsovereignty, and social relation not only as abstract concepts but also as the substance and condition of our responses — and our responsibilities — to each other" (Berlant and Edelman 2013, ix), and I would add, to the world more largely. And the university-to-come would constitute a collective project for which there is no foreseeable future, but on behalf of which future, we can agree — while we continue to disagree about all sorts of things — that at least we *care*.

Infinitely Enmeshed

What if we spread out our ideas and knowledge and signifiers and everything else on a Deleuzo-Guattarian surface, such that nothing is either old or new, past or present? What would we want from such plenty? What would we lose by giving up temporality, irreversibility, yearning, the *affective* categories of past, present, and future? I think maybe we would lose some of the richness and variety of our affective states and transformations.

For more than a century, analysts have been devoted to the "frame": the combination of the office, regular appointments, and financial regulations that ideally create a "holding environment" for the patient. I respect what this structure can accomplish for many patients, partly because it's a structure that evokes the death drive. Further, most analysts today know that the world is "in" the office and the office is *in* the world, and that transmission and transference transform without appreciable limit. These are material facts and effects. Eco-psychoanalysis and psychotherapy are now beginning to think more deliberately about how awareness of our infinite enmeshment with all forms of matter should change clinical practice, and as I'm sure you know, are beginning to advocate for and practice psychotherapy "outside" the office, in the forests, atop mountains, and by the beautiful sea. I welcome this probing of boundaries, these topological enactments. I do not myself anticipate ever practicing by hiking; my view is that if we care about the nature-that-is-no-longer-Nature, it's best we stay out of it. But the single most important thing for any creature to learn, through education or psychoanalysis, or being cared for, or being taken care of, is that it is a mortal creature, ever-changing, yet in its organic form subject to the limit of death, constitutively vulnerable to affecting and being affected because of its aliveness. The joys of creatureliness — the sensory and other sensitivities that are also the source of our vulnerability — are equally important in re-situating ourselves in a post-Guattarian world. I am not opposed to going "outside"; there are many ways to go "outside" the clinic and the university, too. I just don't want to go Outward Bound. The issue I want to address is how we now conceive phenomenologically of the topology of the relationships among classrooms, clinics, inner and outer worlds — especially because my interlocutor Eileen has been such a visionary creator of deinstitutionalizing processes and practices.

The classroom is unquestionably an intersubjective, transpersonal space/event. What are its therapeutic possibilities, given that group therapy techniques are not appropriate in the nonetheless highly groupified scene of *academic* learning? One of my

former professors once said to me that asking students how they *felt* about a poem or whatever was an *ipso facto* admission of pedagogical incompetence. Given what we have learned about perceptions and affects in the intervening years, I am now sure he was wrong. In the humanities and fine arts, we can help our students *think* about what feelings are, how feelings work, what kinds of intelligence they represent, and why they are often so difficult either to communicate to, or hide from, other beings. At the same time, we help them "see," "hear," and "touch" — what do images evoke in us, what is the intonational *range* of a line of verse, and why, and where does a poem place us? Our topics and teaching methods can emphasize the integration of thinking and symbolizing with affect and sensation, and in this way, help us all learn about the learning process as we go. All facts and ideas have valence, both "positive" and "negative," as the psychologists so lyrically put it. Learning ought to include awareness of this principle. If Texan students need to "unlearn" the idealized version of US history they are now taught in high school when they get to college or university, I believe this process must include mourning, helping them to understand that knowledge and knowledge production have valence, that we all become *attached* to particular narratives, conceptualizations, and beliefs, and that we understand them better when we understand how and why we are attached to them. So we can ask students about the range of feelings inspired in them by specific concepts (and vice-versa), lived experience, and literary texts. We can help our students cultivate and enjoy the crucial *real-time activities* of interpretation and expression that make relationships — economic, political, personal — possible in the first place. We can help them value error, failure, and surprise. And we can help them work through the ideas and attitudes that severely limit the potentiality and richness of their life experience.

We can introduce our students to the mind's real-time efforts to know itself, the world, and the minds of others — to see that the mind's waywardness is part and parcel of its plasticity, that our species has learned to talk about feelings as a way of making enabling use of them, that the ambiguities of language are

precisely what give it its powers of connectivity, in the form of the "spreading activations" Norman Holland (2009) discusses in *Literature and the Brain,* earlier called by Freud "associational pathways." We can say things like "*think,*" while pulling on our hair, to illustrate embodiment. We can show them how free association can begin a new thinking process, and how imagining, loving, and hating are aspects of remembering. There's nothing like the real time of live classroom experience for learning more about the everyday mental and emotional activities on which surviving and thriving depend. The best way to teach students about their minds is to ask them to use them in situations that demand improvisation and colloquy — that is to say, in everyday life — regardless of whether one is lecturing or teaching a small seminar. Affects belong in the classroom — again, I am speaking of the importance of integrating affect and cognition — as does the time required to reflect on them. Interpreting the minds of others is a precious survival skill many millions of years in the making, and its practice is (therefore) a source of joy. Intersubjectivity is necessary to, if not sufficient for, learning, and that is what makes live classtime experience so precious and difficult to simulate. The classroom is an ecology, but like all ecologies, infinitely enmeshed in many many others.

The Affinity of Thought

How we might conceive of the topology of the relationship between the classroom and the clinic, especially with the possible joys to be derived from encountering other minds (and I would add, other forms of sentience — human *and* nonhuman, whether embodied in real time, in the realm of the aesthetic, etc.), feels important to me, too. Both the classroom and the clinic are (or could be) critical sites for cultivating the arts and *technē* of the care of the self, for working on ourselves to "invent," and not to "discover," as Foucault once remarked, "improbable manners of being" and new "affective intensities" that might "yield […] relations not resembling those that are institutionalized" (1996, 310). This has something to do as well with philosophy — in-

creasingly, one of our most marginalized disciplines within the humanities — yet could anything be more essential to learning, and to the university, since philosophy, or critical theory, names the practice of what Bill Readings called "thought beside itself" (1996, 192), or what Leo Bersani has described as a lifelong devotion to "intrinsically unending" discussions, or, "to put it not quite so dryly, to spiritually liquefying speech" (2008a, 87). This is "a special kind of talk unconstrained by consequences other than further talk," a type of "conversation suspended in virtuality" that, similar to the psychoanalytic relation, treats the unconscious "not as the determinant depth of being but, instead, as de-realized being, as never more than potential being" (Bersani 2008b, 28). This "talk" also entails what Aranye has called elsewhere, a "shared attention" that is a "consequence of attachment" and of "intersubjective play," and which is always about "becoming" and never about "finishing" (Fradenburg 2011, 62, 57). Both the classroom and the clinic, as well as the signifying arts, as Aranye has described them in various writings, invite an "affective companionship" in which "we never finish working things out," but that doesn't mean we don't accomplish anything (Fradenburg 2011, 50). Such sites also require what Aranye has called "friendly" yet impersonal minds: "extimate" figures who enact a sort of "disinterested pastoral care" (healers, narrators, therapists, teachers), and who, in premodern narratives, were "always liminally situated — in homes not their own, woods and clearings, anonymous *thropes,* away from the main business of the day" (Fradenburg 2011, 59).

Away from the main business of the day — what, today, might it mean to live and practice pedagogic relations as forms of care of the self and affective (non-possessive) companionship in the liminal spaces so necessary for engendering productive encounters with other "friendly" minds, and with error, failure, and surprise? The university, I believe, has become increasingly hostile toward such liminal spaces, such encounters, and such non-calculable events, and it is increasingly insisting that everything, in fact, be "worked out," and in a business-like fashion that feels very antithetical to the idea that knowledge should

remain perpetually unsettled (that "learning," in fact, is always "unlearning"). I believe that the university, and its classrooms, will continue to be important sites for keeping open the question of thought and for fostering various important modes of affectively-wired cognitive experiments, but I also think it is time for a subterfugitive, vagabond, rogue para-academy, especially when so many of us are hanging on to the university by the skin of our teeth (and minds). We might even distinguish between the University (as a certain institution of knowledge communication) and Academia (as knowledge communication itself), between which there is no necessary connection. As Paul Boshears has put it, "Both the University and Academia are imagined communities, to borrow Benedict Anderson's phrase. However, the University is an institution that accredits, controls, and stamps the passport of those who would enter its territory. It is a striated space as opposed to Academia's [more] fluid space" (quoted in Allen et al. 2012, 139). I don't know if I myself completely buy into this distinction (I've always been of the camp that everything is so intermeshed that trying to draw lines is just futile), but I would like to see scholars absconding with the University (with, in other words, its academic "contraband"), in order to practice a polyglot, cosmopolitan pedagogy that would enunciate a "shaggy heart" and have "no fixed abode" (Kristeva 1994, 140).

"Frames," matter, of course, and as Aranye points out, the classroom (as well as the therapist's office) serve as important "holding environments," but if the mind's "waywardness is part and parcel of its plasticity," then can we not also engage a wandering pedagogy — not necessarily in the style of Outward Bound (I don't like hauling canoes, or hiking, myself, either), but in terms of having the courage to either depart the existing institution in order to form new desiring-assemblages and new environments for our embodied pedagogies (however we might envision them) or to hunker down within the institution itself while also refusing to comply with the baroquely deadening "effectiveness" protocols and "cost-to-benefits" analyses dreamed up by the ever-increasing ranks of the university's managerial

technocrats? Perhaps teaching within the institution has always been, in some sense, adversarial and subversive with respect to the university's administrators, if even quietly so (because under the radar, behind a closed door, largely undocumented, and in many respects, unremarked upon). And there is something importantly private and intimate (while also impersonal) about the pedagogic scene, no matter how publicly situated. I am reminded of something Lyotard wrote in 1978 about his experience teaching philosophy at Vincennes in a beautiful, yet somewhat despairing essay, "Endurance and the Profession." At the time that Lyotard wrote this essay, the philosophy faculty had lost the right to grant degrees, and yet students were still showing up to study philosophy there. Christopher Fynsk has referred to Lyotard's anguished reflections on his teaching at that time as a "pedagogy on the verge of disaster" (2013). Here is Lyotard:

> The concessions to what you feel is expected become rarer. You'd like to neglect even what your own mind desires, make it accessible to thoughts it doesn't expect. […] You are unfaithful in your alliances like the barbarians of Clastres, but for a different reason, opposite at least. You're at war with institutions of your own mind and your own identity. And you know that with all this, you're probably only perpetuating Western philosophy, its laborious libertinage, and its obliging equanimity. At least you also know that the only chance (or mischance) to do so lies in setting philosophy beside itself. (1993, 75–76)

When I myself read these words, I experienced something of a shock as I recognized in the words "setting philosophy beside itself" an echo with Bill Readings's description of the University-to-come as the place where we simply place Thought beside itself — thoughts alongside other thoughts — without ever asserting the need for consensus (or even for departments that would ultimately sediment, and strangulate, Thought over time). Then I also noticed that Readings was the editor of Lyotard's

collected political writings, in which "Endurance and the Profession" is included, and thus the "impress" of Lyotard's writing upon Readings's own writing also impressed itself upon my own consciousness with a certain tender vibration.

And I trace this line of affinity of thought to also say, or claim, that the University-to-come must also be a place of the affinity of Thought, where Thought continually suspends itself in its encounters with Other Thought, by it which it is always limned and bordered. This affinity would, of necessity, be a difficult affinity, but it would still be affinity, a closeness and intimacy that is important, because chosen freely, between ourselves, whether inside of the classroom or outside of it. This would be a pedagogy of rogue desires (or thoughts) meeting, in the forest, with other rogue desires (or thoughts). Everything would be in suspension, and in contact, simultaneously. Unworking thought, while also "working it," would be our aim. It would always be dusk. The conversation would never end.

Going Outdoors

Yes, topological intricacy matters in the thinking of un/learning. Going "outdoors" to an outdoors that isn't necessary concrete, but can be. Going "outdoors" not to learn that we can survive in Nature unassisted, but so that we can cultivate sentience, i.e., sense, feel, and enjoy our creatureliness. In the virtual extimacy of the mindscape, anything can happen, just as the extimacy of the outdoors is a realm of *possibility*. What is in me is also in whatever surrounds me, and *vice-versa*. Learning is what we *do*; therapeutic opportunities are everywhere. How might we best design, enrich, enable changes of embodied, environed minds? We have here, for example, a platform for newly creative thinking about how we might deliver "alternative" skills to graduate students who can't or don't choose to become professors, so that we might open the university to the kinds of learning and "working through" enabled by movement and making, enacting as well as acting. "Skills" or "arts and crafts" only sound boring because we have scorned for so long the materiality associated

with them, preferring the more putatively spiritual pursuits of theory. But action and movement, according to the philosophers and neuroscientists, is looking less and less cognitively-deprived and more and more like the very ground of cognition itself. If we can use theory to cultivate and maintain awareness of what is entailed in action and enactment, we will be able to frame psychoanalysis quite differently, and perhaps open up for ourselves the enjoyments entailed in *all* the kinds of work we do.

REFERENCES

Ahmed, S. (2006). *Queer Phenomenology: Orientations, Objects, Others.* Durham: Duke University Press.

Allen, J. et al. (2012). "Discussions Before an Encounter." *continent.,* vol. 2, no. 2, pp. 136–47.

Althusser, L. (2006). "The Underground Current of the Materialism of the Encounter." In *Philosophy of the Encounter: Later Writings, 1978–87,* eds. F. Matheron and O. Corpet, trans. G.M. Goshgarian. London: Verso, pp. 163–207.

Andreasen, N. (2006). *The Creative Brain: The Science of Genius.* New York: Plume.

Bennett, J. (2001). *The Enchantment of Modern Life: Attachments, Crossing and Ethics.* Princeton: Princeton University Press.

Berlant, L. (2011). "Starved." In *After Sex? Writing Since Queer Theory,* eds. J. Halley and A. Parker. Durham: Duke University Press, pp. 79–90.

——— and L. Edelman. (2014). *Sex, or the Unbearable.* Durham: Duke University Press.

Bersani, L. (2008a). "The Power of Evil and the Power of Love." In L. Bersani and A. Phillips, *Intimacies.* Chicago: University of Chicago Press, pp. 57–87.

———. (2008b). "The It in the I." In Bersani and Phillips, *Intimacies,* pp. 1–30.

Bion, W.R. (1959). "Attacks on Linking." *International Journal of Psycho-Analysis,* vol. 40, pp. 308–15.

———. (1962). "A Theory of Thinking." *International Journal of Psycho-Analysis,* vol. 43, pp. 306–10.

Bourriaud, N. (2009). *The Radicant.* New York: Lukas & Sternberg.

City Attorney of San Francisco. (2016). "City College." http://www.sfcityattorney.org/category/news/city-college/.

Damasio, A. (2010). *Self Comes to Mind: Constructing the Conscious Brain.* New York: Pantheon.

Deleuze, G. and F. Guattari. (1987). *A Thousand Plateaus: Capitalism and Schizophrenia,* trans. B. Massumi. Minneapolis: University of Minnesota Press.

Derrida, J. (2001). "The Future of the Profession or the University without Condition (thanks to the 'Humanities,' what could take place tomorrow)." In *Jacques Derrida and the Humanities: A Critical Reader,* ed. T. Cohen. Cambridge: Cambridge University Press, 24–57.

Descartes, R. ([1641] 1955). *Meditations on First Philosophy.* In *The Philosophical Works of Descartes,* Vol. 1, eds. and trans. E. Haldane and G. Ross. New York: Dover Publications.

Dias, B.G. and K.J. Ressler (2013). "Parental Olfactory Experience Influences Behavior and Neural Structure in Subsequent Generations." *Nature Neuroscience,* vol. 17, pp. 89–96; doi:10.1038/nn.3594.

Edelman, G.M. (2004). *Wider than the Sky: The Phenomenal Gift of Consciousness.* New Haven: Yale University Press.

Foucault, M. (1972). *The Archaeology of Knowledge and The Discourse on Language,* trans. A.M.S. Smith. New York: Pantheon Books.

———. (1996). "Friendship As a Way of Life." In *Foucault Live (Interviews, 1961–1984),* ed. S. Lotringer. New York: Semiotext(e), pp. 308–12.

Fradenburg, A. (2009). "(Dis)continuity: A History of Dreaming." In *The Post-Historical Middle Ages,* eds. E. Scala and S. Frederico. New York: Palgrave Macmillan, pp. 87–115.

Fradenburg, L.O.A. (2011). "Living Chaucer." *Studies in the Age of Chaucer,* vol. 33, pp. 41–64.

———. (2013). *Staying Alive: A Survival Manual for the Liberal Arts,* ed. E.A. Joy. Brooklyn: punctum books.

Freud, S. (1961). "Letter from Sigmund Freud to Ludwig Binswanger, April 11, 1929." In *Letters of Sigmund Freud,* 1873–1939, ed. E.L. Freud, trans. T. Stern and J. Stern. London: Hogarth Press, p. 386.

———. (1955). "Beyond the Pleasure Principle." In *The Standard Edition of the Complete Psychological Works of Sigmund Freud,* Vol. 18: *Beyond the Pleasure Principle, Group Psychology and Other Works (1920–1922),* ed. and trans. J. Strachey. London: Hogarth Press, pp. 1–64.

Fynsk, Christopher (2013). "A Pedagogy on the Verge of Disaster." In *Pedagogies of Disaster,* ed. Vincent W.J. van Gerven Oei, Adam Staley Groves, and Nico Jenkins. Brooklyn, punctum books, pp. 37–48.

Holland, N. (2009). *Literature and the Brain.* Gainesville: The PsyArt Foundation.

Jones, P.H. (2010). *Introducing Neuroeducational Research: Neuroscience, Education and the Brain from Contexts to Practice.* New York: Routledge.

Jordan, M. (2012). "Did Lacan Go Camping? Psychotherapy in Search of an Ecological Self." In *Vital Signs: Psychological Responses to the Ecological Crisis,* eds. M.J. Rust and N. Totton. London: Karnac, pp. 33–45.

Kristeva, J. (1994). *Strangers to Ourselves,* trans. L. Roudiez. New York: Columbia University Press.

Kuhn, T. (1962). *The Structure of Scientific Revolutions.* Chicago: University of Chicago Press.

Lear, J. (2006). *Radical Hope: Ethics in the Face of Cultural Devastation.* Cambridge, MA: Harvard University Press.

Lyotard, J.-F. (1993). "Endurance and the Profession." In *Political Writings,* trans. B. Readings and K.P. Geiman. Minneapolis: University of Minnesota Press, pp. 70–76.

Mackay, R. and A. Avanessian. (2014). "Introduction." In *#Accelerate#,* eds. R. Mackay and A. Avanessian. Falmouth: Urbanomic, 2014, pp. 1–46.

Margulis, L. (1998). *Symbiotic Planet: A New Look at Evolution.* New York: Basic Books.

Maturana, H.R. and F.J. Varela. ([1972] 1980). *Autopoeisis and Cognition: The Realization of the Living.* Dordrecht, Holland: Reidel Publishing.

Nancy, J.-L. (1991). *The Inoperative Community,* ed. P. Connor, trans. P. Connor, L. Garbus, M. Holland, and S. Sawhney. Minneapolis: University of Minnesota Press.

Petroski, H. (1992). *To Engineer is Human: The Role of Failure in Successful Design.* New York: Vintage.

Rashid, A. (2001, 12 March). "After 1,700 Years, Buddhas Fall to Taliban Dynamite." *The Telegraph.* http://www.telegraph.co.uk/news/worldnews/asia/afghanistan/1326063/After-1700-years-Buddhas-fall-to-Taliban-dynamite.html.

Readings, B. (1996). *The University in Ruins.* Cambridge, MA: Harvard University Press.

Singer, W. (2008). "Epigenesis and Brain Plasticity in Education." In *The Educated Brain: Essays in Neuroeducation,* eds. A.M. Battro, K.W. Fischer, and P.J. Lena. Cambridge: Cambridge University Press, pp. 97–109.

Sodré, I. (1994). "Obsessional Certainty Versus Obsessional Doubt: From Two to Three." *Psychoanalytic Inquiry,* vol. 14, pp. 379–92.

Srnicek, N. and A. Williams. (2013, May). "#ACCELERATE: Manifesto for an Accelerationist Politics." http://accelerationism.files.wordpress.com/2013/05/williams-and-srnicek.pdf.

Starbuck, W. (1996). "Unlearning Ineffective or Obsolete Technologies." *International Journal of Technologies.* http://archive.nyu.edu/fda/bitstream/2451/14188/1/IS-97–30.pdf.

Tokuhama-Espinosa, T. (2011). *Mind, Brain, and Education Science: A Comprehensive Guide to the New Brain-Based Teaching.* New York: W.W. Norton.

Verwoert, J. (2008). "Exhaustion and Exuberance: Ways to Defy the Pressure to Perform." In *Art Sheffield 08: Yes, No and Other Options* [exhibition pamphlet]. Sheffield: Sheffield Contemporary Art Forum, pp. 90–112.

Vogrin, V. (2010). "Ten Questions for Lucy Corin" [interview]. *Sou'wester,* vol. 38, no. 2, pp. 67–70.
White, S.D. (2005). "Weak Ontology: Geneaology and Related Issues." *The Hedgehog Review,* vol. 7, no. 2, pp. 11–25.