



PLACES OF LEARNING  
MEDIA ARCHITECTURE PEDAGOGY

ELIZABETH ELLSWORTH

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# 1

## The Materiality of Pedagogy *Sensations Crucial to Understandings*

The camera cuts to a close-up of a child's face. We see the *look* and witness the *moment* that has become the culmination of so many documentaries about successful schools. It is the dramatic turning point in countless news reports on effective teachers. It is the cause for celebration and the inspiration in scores of teacher education videotapes. This look is the climax in many educational documentaries as well as the exclamation point at the end of numerous dialogs concerning education.

When audiences — especially audiences of teachers — see this look, smiles and nods of recognition sweep the room: They have seen this look on the faces of many of their own students in all manner of contexts. Often, audiences murmur with appreciation: This is the look and the moment that many teachers and parents work for and value. Sometimes, audiences murmur with compassion: There is something naked and vulnerable about this look, even as it signals a child's powerful experience of intense self-presence.

The rhetorically loaded cutaway to this look has become a mainstay of media representations of teaching and learning. Directors have grown to regard it as convention. But, this particular expression, able to provoke both appreciation and compassion in educators, is not associated with just any experience of learning. As educators, we become familiar with a variety of expressions worn by children when they are participating in the experiences that count as learning. We see the look of deep absorption in the task at hand that we associate with students concentrating on step-by-step problem solving while engaging in projects, building things, preparing for tests, or gaining clearly defined skills. We see the look of “turning

gears” — for example, on the faces of the youngsters in *Spellbound*, the award-winning documentary about America’s national spelling bee, as they try to solve the puzzle before them (“Of all of the word lists and pronunciation keys I’ve studied, which one holds the key to spelling this word?”). And, we see the look that says “I’ve got it!” and speaks of satisfaction, relief, and triumph upon arriving at the end of a process and grasping something aimed at — usually the “right” answer. But, these familiar looks are not the one I am talking about here. Each of these other looks hinges on the comprehension of a particular kind of knowledge — a knowledge already gotten by someone else. For various social, political, economic, or pragmatic reasons, someone has deemed this knowledge to be in need of being grasped, passed on, and repeated yet again and in ways that are clearly mapped and understood.

These goal-oriented looks of concentration on a given task, of gears turning, of discovering a solution have too much to do with compliance for my interests here. My intention is to open a discussion regarding an experience of learning that has little to do with *learning as compliance*. I am concerned, instead, with the experience of learning that gives rise to that unmistakable, naked, vulnerable look of simultaneous absorption and self-presence. It is the look that has become, at the hands of media producers, the face of Learning with a big “L” — Learning itself. It is as if media producers sense that they have captured in that look the precious visual evidence of otherwise elusive events. While its poignant appearance in documentaries, news reports, or teacher education videos often substitutes for any further elaboration about what composes it, this look is merely the tip of a very deep iceberg. It signals the presence of complex occurrences in excess of and elsewhere than at the surfaces of cognition or awareness.

It is in the inaccessible-through-cognition-or-awareness events of mind/brain and body that I will locate the experience of the learning self as a self not in compliance but *in transition* and *in motion* toward previously unknown ways of thinking and being in the world. The look on a child’s face as she experiences learning in this sense — as the sensing of new and previously unthought or unfelt senses of self, others, and the world *in their process of emergence* — might now be a media convention, but that has made it no less momentous and no less enigmatic. It is the look of someone who is in the process of losing something of who she thought she was. Upon encountering something outside herself and her own ways of thinking, she is giving up thoughts she previously held as *known*, and as a consequence she is parting with a bit of her known self. The look of the learning self that concerns me here gives form to the sensation of simultaneously being with oneself *and* being in relation to things, people, or ideas outside oneself.

I have chosen the particular designed spaces, media, objects, and events that animate the coming chapters because they “materialize,” in the forces and sensations that they offer, a particular pedagogical desire: the desire for

this look and for experiences of learning as noncompliance and knowledge as in the making. The qualities and design elements that seem to constitute their pedagogical force invite sensations of being somewhere in between thinking and feeling, of being in motion through the space and time between knowing and not knowing, in the space and time of learning as a lived experience with an open, unforeseeable future. They invite the sensation of a mind/brain/body simultaneously in both suspension *and* animation in the interval of change from the person one has been to the person that one has yet to become.

In this chapter, we are going to take an initial look at several sometimes-fleeting moments in interviews, artist statements, and analytical reviews when designers and reviewers attempt to articulate the sensations out of which learning and understanding — in this sense — emerge. I see these moments as efforts to give expression to the events that give rise to the look that I am associating here with learning when it is noncompliant and in the making. These moments give us an opening sense of what it might mean to materialize pedagogical forces in and through places of learning.

We are going to then take that preliminary sense into a series of encounters with a constellation of ideas now emerging from interdisciplinary encounters among the fields of philosophy, cultural studies, science studies, architecture, and media studies. Those ideas, especially as put forth by Brian Massumi (1995) when he uses Henri Bergson and William James to explore what the body's movements and sensations mean for thought, *challenge educators to shift how we make bodies matter in pedagogy*. Some social theorists say that the ideas we will consider here and in subsequent chapters compose a “new pragmatism” or an “experimental pragmatics of becoming,” building as they do on Gilles Deleuze's use of Bergson (especially his ideas about time, space, and experience) to approach thinking as experiment (Kennedy, 2003, pp. 5–6). The particular rethinkings of experience and becoming that we will engage here seem to be driving, as well, a renewed interest in D.W. Winnicott's notion of “transitional space” as the time and place out of which experiences of the learning emerge (Winnicott, 1989).

Read together, the efforts of designers of anomalous places of learning, their reviewers, and some contemporary theorists' efforts to implicate bodies in thought and learning present us with new ways of thinking about the experience of the learning self. Here, I will map some of those ideas and indicate how they draw from and build upon one another. I will then put these ideas to use in each of the remaining chapters to see what they make visible, thinkable, and possible as we look closely at the group of anomalous pedagogies that form the motivation for this book. By reading anomalous pedagogies through these emerging ways of thinking experience, I hope to contribute to efforts to reconfigure educators' conversations and actions about pedagogy as the force through which we come to have the surprising, incomplete knowings, ideas, and sensations that undo us and

set us in motion toward an open future. How might we — can we — “set things up in such a way as to have this kind of experience” (de Bolla, 2001, p. 5)?

### Experiences Crucial to Understandings

I turn first to designers and reviewers of several of the anomalous places of learning that we will revisit in more detail and from different angles in subsequent chapters. How do they articulate the sensations, movements, and experiences crucial to the experience of learning as noncompliance and in the making?

Maya Lin, best known for her design of the Vietnam Veterans Memorial in Washington, D.C., writes that she approaches the process of designing memorials and public spaces, in part, with a pedagogical intent. She says that her intent for a number of landscapes, sculptures, and memorials is that they teach about historical events. Her design for the Southern Poverty Law Center’s Civil Rights Memorial in Montgomery, Alabama, for example, centers around a circular black granite “water table” twelve feet in diameter and engraved with a timeline that reveals “how often the act of a single person — often enough, a single death — was followed by a new and better law” (Lin, 2000, p. 4:28). In writing about such works, Lin declares that the “experience of the work is crucial to its understanding” (Lin, 2000, p. 3:11). In particular, she takes sensations of movement and duration to be crucial to understanding the concepts (for example, that individuals’ actions can lead to new and better laws) that shape her designs (Lin, 2002, p. 2:07):

Time is ... a crucial element in how I see my architecture. I cannot see my architecture as a still moment but rather as a movement through space. I design the architecture more as an experiential path.

Here, we can see that, for Lin, our *sensations* of time and of space as we are put in motion along the “experiential path” — be it a building, landscape, or sculpture as memorial — are crucial to what we make of the history, people, or events that are memorialized.

Adrian Dannatt, art and architectural critic, implicitly agrees that the qualities of an *experience* of learning are crucial to *what* is learned. He describes how the entrance of the U.S. Holocaust Memorial Museum in Washington, D.C., shapes its visitors’ movements and sensations in ways crucial to understanding the concept that the Holocaust is a historical event that has not yet come to rest. Dannatt writes (Dannatt & Hursley, 2002, p. 14):

There are two rows of glass block lit along the floor, a path which ends between two stairways. Like being given a route to discover, it

leads to more choice, another directional dilemma. Neither stairway leads to the display if that is what one is, by now, looking for . . . . This glass trajectory crosses next to a public information counter, the only shelter in the empty plain, where people cluster less for advice than for protection from the dizzying agoraphobia of so much open space. The very idea of advice or assistance seems futile in such an environment.

For Dannatt, the sensations of being given a route to discover which leads only to more choices and directional dilemmas; of being lost in an environment that makes the “very idea of advice or assistance seem futile”; and of being refused The Answer that would presume to relieve him of the responsibility to create his own route through the museum’s materials and his own responses to the Holocaust stake out the limits of pedagogy itself. Upon recognizing pedagogy’s limits, we might shift our efforts from trying to “know” and then “teach” the Holocaust to engaging with it as an event that has not yet ended and to contemporaneously respond to it.

Witold Rybczynski, a professor of architecture, offers another attempt to articulate the relation between the materialities of movement and sensation, and learning. In his review of architect Henry Cobb’s and exhibit designer Ralph Appelbaum’s design of the National Constitution Center in Philadelphia, Rybczynski states the question that faced the design team: “What sort of building is a national schoolhouse?” He then goes on to describe how the designers “answered” this question in the form of an experiential path that is crucial to understanding the Constitution as an ongoing “event” (Rybczynski, 2003, p. 1):

At this point we find ourselves back in the lobby, but on an upper level, overlooking Independence Hall in the distance. It is hard not to be moved by this evocative view of its graceful Colonial spire against the crowded backdrop of downtown office buildings. It is a further example of how the felicitous collaboration of Mr. Cobb and Mr. Appelbaum provides a rich and seamless experience of learning about the past and experiencing the present. It turns what might have been heavy-handed lecturing, or simply boring lessons, into an occasion of considerable civic dignity and circumstance.

For Rybczynski, the *sensation* of past interfusing with present — gained not through heavy-handed lecturing or prescriptive lessons but felt via a lived encounter with the “rich and seamless” juxtaposition of colonial spires against crowded downtown offices — becomes an experience of learning about the past through its material impact on our inhabitations of the present. Such an experience, this design seems to say, is crucial to understanding the relevance of a centuries-old document to a modern citizen — namely, that this document affords citizens considerable dignity by



involving them in the contemporary work of citizenship, work that is both shaped by this document and that reshapes it in response to present circumstances.

Herbert Muschamp, architectural critic for *The New York Times*, also agrees that pre- and nonlinguistic experiences of a place of learning are crucial to what is learned there. He describes his responses to his first visit to the Lois and Richard Rosenthal Center for Contemporary Art in Cincinnati, designed by Iraqi-born architect Zaha Hadid. It is a space, Muschamp implies, designed to invite the visitor into awareness of lived experience as an emergent event (Muschamp, 2003, p. 30):

The building's power is fully disclosed only to those who engage it with their feet as well as their eyes.... Wandering through the building is like exploring the varied and unpredictable terrain of present time....

I gave myself over to the finely tempered rhythm of spatial compression and expansion that draws a visitor through the building....

Up the stairs, you gain the dream sensation of breaking through a solid membrane into an alternative world: the steps lead you up into a soaring atrium space suffused from above with natural light.

Muschamp describes the building's "play of geometric variations," its "artful arrangement of processional spaces," and its presentation of "a rhythm of multiple perspectives," as "roughly synchronized with the movements of bodies propelled by curious minds" (Muschamp, 2003c, p. 30). Through the powerful and indirect "disclosures" made by Hadid's architecture, Muschamp comes to a learning: The present time is varied and unpredictable, it is in a continuous unfolding emergence which makes "staring right into the present ... immensely more shocking than gazing at some corny crystal ball" (Muschamp, 2003c, p. 30). Muschamp both discovers and creates this understanding through his sensations of a "heightened mind-body connection," a connection heightened by the multiple perspectives he gains by walking through, wandering through, being drawn in through, and breaking through a membrane that is merely the imaginary barrier of habitual and conventional ways of perceiving, thinking, and being. For him, this building modulates the compression and expansion of space in a way that offers a material correlate for the experience of the learning self as in the making. It does so by powerfully synchronizing his body's movements with the propulsion of his curious mind toward a particular understanding of the present time.

Lawrence Halprin provides yet another example of a designer's attempt to give voice to the movements and sensations that he considers as being

crucial to the pedagogy of a designed space. He says that his approach to designing the Franklin Delano Roosevelt Memorial in Washington, D.C., was shaped by his memories of other places that had affected him emotionally. Those places had several elements in common (Halprin, 1997, p. 7).

They unfolded like voyages, based on movement along prescribed routes . . . . These processional paths always offered variations in pace through their design, yet there was always a consistent sense of physical and emotional choreography. Visitors were drawn on through a sequence of experiences — some calm, some intense — and there was a pervasive sense of drama. At the end of such experiences, I felt that in a profound way I emerged deeply changed. I felt that I had come through a focused slice of life that affected me intensely and emotionally.

Pervasive senses of drama, being physically drawn through spaces choreographed for variations in emotional intensity and profound, deep self-change — these are the experiences that Halprin deemed crucial to learning about history-making people and events. As central design elements in Halprin's memorial to FDR, they serve as pre- and nonlinguistic experiential analogs to an intellectual understanding: that this era changed people's lives profoundly.

The last example that I will offer of an attempt to articulate an experience felt as being crucial to an understanding comes from the more playful but no less meaningful recollections that some Baby Boomers report having of their grade-school experiences of their “learning selves.” From 1956 to 1964, Bell Telephone Laboratories produced nine films as part of the Bell Labs Science Series. Part animation, part live action, they played for years in public school classrooms and auditoriums nationwide. Famed Hollywood director Frank Capra directed several of the films in the series, which included such subjects as the sun, blood, cosmic rays, and weather. In a newspaper account of some Baby Boomers' nostalgia for these films, Wallace Stevens, a former purchaser of educational materials for Southern California school districts, described their influence as “almost a subliminal one.” He says he “still carries unshakable images from the films themselves, mainly the exposed hearts of animals and the booming voice of the animated Mr. Sun. . . . It's almost like they've been absorbed into our subconscious mind while bypassing our memory” (Templeton, 1999).

Bill Cheswick, a Bell Labs worker, designed a website where he lists the fictional scientist who narrated several of the films (played by Dr. Frank Baxter) as his childhood hero. “When I was in school, I drank up and swallowed everything Dr. Baxter said,” Cheswick recalls. “I remember seeing *Hemo the Magnificent* and running home to brag to my parents that I'd seen an open-heart operation” (Templeton, 1999). Cheswick found the old films in the archives at Bell Labs and began hosting lunchtime film festivals. “I

was impressed by how many times I sat there thinking, ‘Oh, yeah. I knew that. I guess I must have learned it from this movie — and remembered it for 30 years.’ That’s pretty cool” (Templeton, 1999). Templeton quotes one woman as saying, “*Mr. Sun* is my favorite. A very warm childhood memory . . . . The Bell Science films had such a sense of wonder that it stuck with me my entire life. My own sense of wonder about the world may have started right there” (Templeton, 1999).

If we could flash back to the faces of these adults as they watched *Our Mr. Sun* or *Hemo the Magnificent* as elementary-school children, we might see the expression that gives body to the experience of the learning self. It is the look that accompanies the almost subliminal experiences of having the unconscious addressed, of having memory bypassed, of drinking up and swallowing “facts” and “information” in a way that leaves “unshakable images” and ideas that can be remembered “warmly” for 30 years. It is the look that we might have seen on the faces of Lin, Muschamp, Halprin, Dannatt, and Rybczynski as they experienced the sensations they speak of: sensations of ideas being made futile by the environment surrounding them; sensations of being “in motion”; sensations of time and space, finely timed rhythms, and heightened mind–body connections; sensations of drama and of being “drawn through”; senses of wonder, of bypassed memory and cognition; awareness of self-change; and full body involvement.

## The Materiality of Learning

As events, objects, and environments, the anomalous and “poetic” places of learning to which these designers and reviewers refer, as well as others that we will encounter in the coming chapters, materially and profoundly implicate minds/brains in the bodily sensations and movements that are crucial to what may potentially be understood. Their efforts to express how, when, where, and why pedagogically charged spaces and events invite such enfoldings of minds/brains and bodies have sent me in search of critical and analytical languages capable of expressing the power of such times and places and informing efforts to invent more of them.

That search led me to Peter de Bolla’s *Art Matters* (2001), an account of his sustained effort to create a lexicon to deal with sensations and movements crucial to understandings. He locates his effort in the context of his own experiences with artworks — especially those that move him into and within what he calls a sense of wonder. His efforts are useful to me here because, for him, wonder is deeply interfused with the experience of learning. Like the attempts we considered above by designers and reviewers to make communicable to themselves and to others particular forms of experience that they consider as being crucial to particular understandings, de Bolla also strives to articulate how it is that specific forms of experience have composed his “aesthetic education” about various artworks. de Bolla’s perspective on what makes an artwork “art” and what constitutes

its “art component” is especially relevant to the question of the body’s material implication in pedagogy. For de Bolla, the “art component” of an artwork is not something that we can point to in its content; rather, we can detect the “art component” of a work only through the nature of our response to the work. Our response, in effect, constitutes the “material” of the art-ness of an artwork.

The same can be said of pedagogy. Our lived experience of pedagogy is what makes its features *as pedagogy* visible and remarkable. The educational qualities or value of a pedagogical effort — what, in other words, counts as “educational” in that effort — exist only in our responses to it. The educational component of a pedagogy is knowable to us only in our response. Paraphrasing de Bolla, our experience of an event or occurrence of learning constitutes the materiality of its pedagogy (de Bolla, 2001, p. 18). And this makes our experience of pedagogy — our experiences of dwelling in and inhabiting a pedagogy — the proper object of our attention as educational researchers and practitioners (de Bolla, 2001, p. 18).

Not that educators have ignored the bodies of students. They have developed numerous (and often competing) ways to come to grips with the fact that students are not simply brains on tripods. Some take psychoanalytic approaches to questions of pedagogy and explore how our bodies’ histories shape pleasure, desire, repression, and the unconscious and how these in turn shape students’ knowledges and “ignore-ances,” as well as the erotics and counter-transference of the pedagogical relation. Some use theories of ideology and discourse to understand how social, cultural, and sexual differences mark bodies and position them differentially within relations of power. These approaches have shown how some social dynamics make some bodies matter more than others, and that they make social and cultural differences figure in the human interests that shape the social construction of knowledge.

Other educational researchers explore links between bodies and cognition. They have developed pedagogies aimed at addressing aspects of cognition that seem to be enabled and enhanced by the kinesthetic, leading to hands-on, holistic, and project- or arts-based approaches to teaching. Some educators are concerned with the clinical bodies of learners. They focus on the relationship between the body’s development and the brain’s functioning, for example, or on the need to slow some bodies down through medication or pedagogical strategies aimed at increasing attention spans. Some are concerned with the relationship between nutrition, student achievement, and free lunches. Others are concerned with the pedagogical needs and interests of students with differing physical and mental abilities.

Bodies do figure in many discussions and practices that shape pedagogy, but the *terms* in which bodies figure in those discussions privilege approaching bodies as things we *have* (as in “we are minds with bodies”). Most school-based pedagogies focus their address on the mind even if they may

sometimes approach it through the body. For the most part, when bodies figure in educational institutions and practices, they do so in terms that put them in the service of cognition and prefigured cognitive goals. Educational researchers and theorists rarely address pedagogy first and foremost as the occasion and opportunity for studying what de Bolla and others claim has ontological primacy over cognition. Namely, those “immediate somatic responses,” those “frissons of physical encounter,” and those “somethings” that are “more elemental than a process of intellectualization” (de Bolla, 2001, p. 2). Pedagogy is seldom engaged as an *event* in which the *materiality* of a time and place of learning impinges on the *materiality* of the learning self understood as a “processual engagement of duration and movement, articulated through webs of sensation across landscapes and panoramas of space, bodies, and time” (Kennedy, 2003, p. 4) and educational materials. Pedagogy is seldom made to be a question of the artful or banal orchestrations of its materials or of the orchestration of forces, sensations, stories, invitations, habits, media, time, space, ideas, language, objects, images, and sounds intended, precisely, to move the materiality of minds/brains and bodies into relation with other material elements of our world.

What might become possible and thinkable if we were to take pedagogy to be sensational? What if, as educators, we began to consider pedagogy to be a time and space designed to assemble “with the bodies [of learners] in a web of inter-relational flows in material ways” (Kennedy, 2003, p. 26)?

### Pedagogy and the “New Pragmatism”

To engage these questions, I turn to the constellation of ideas now being developed by cultural critics and theorists, including Elizabeth Grosz, Barbara Kennedy, Brian Massumi, and John Rajchman, who are generating interesting and provocative discussions about “experience” as it can be rethought through what some call the “new pragmatism.” Adam Phillips, an essayist and psychoanalyst, contributes to these discussions by offering a reading of Winnicott as a pragmatic empiricist in a way that renders Winnicott’s notion of “transitional space” useful to this new pragmatism. Together, these theorists are providing a powerful set of concepts that I will use in efforts to better articulate and elaborate upon anomalous places of learning and the experiences of the learning self that they invite.

The authors listed above ground their discussions wholly or partially in attempts to understand “aesthetic experience.” Grosz focuses on media and architecture; Kennedy on cinema; Massumi on performance, media, and architecture; Rachjman on the arts; and Phillips on aesthetic experience and creativity. Like de Bolla’s reflections on his own “aesthetic education,” I find it intriguing that these writers’ concerns constantly spill over into the realms of thinking, knowing, and acting. The *terms* in which they see the aesthetic as impinging on thought and action are key to the project of this book and, I believe, to the future of pedagogy.

Their work suggests that the very possibility of thought is predicated upon our opportunities and capacities to encounter the *limits* of thinking and knowing and to engage with what cannot, solely through cognition, be known. Aesthetic practices and experiences provoke precisely such engagements and, to the extent that they are provocative of thought, they are crucial to understanding pedagogy. These theorists' discussions of experience challenge educators to approach the question of the experience of the learning self as a question of sensation. This is not a challenge to look for better understandings of the experience of the learning self within individuals' subjective experiences of learning; rather, this is a challenge, as Kennedy puts it, to explore "affect and sensation as ... 'depth' or an 'intensity' which is felt primordially, in the body, but beyond subjectivity..." (Kennedy, 2003, p. 29).

Affect and sensation felt beyond, without, or prior to subjectivity — what might that mean? Kennedy uses the experience of watching the flight of a butterfly to explain what it is to "feel primordially, in the body" — not in the "psychic body" or in the "ordinary physical body, in its biological determinants" but in a body understood as a "complex set of intersecting forces" (Kennedy, 2003, p. 29). Her example of the butterfly's flight highlights how the "eye-brain" finds various forms of motion to be "more appealing, more alluring, more beautiful" (Kennedy, 2003, p. 116) than repetitive or predictable forms of motion:

... the pathways of the flight of a butterfly will produce the most invigorating, beautiful and captivating pathways of motion, a cartography of visionary dance across the eye-brain.... The highly variable trajectory of the butterfly will make the brain continually break and form, break and form, breaking any symmetry.... The [rhythmic] "eternal return" of the eye-brain activity (and the butterfly) creates the kinaesthetics, wherein the brain's activities are beyond the merely visual, but become tactile, fluid, in process. (As Massumi argues, "beauty pertains to a process, not to a form.")

In other words, we feel beauty, attraction, or allure not merely as affect or as intellection — we feel them materially as processes, as events of the body. They are something we do not merely observe; we live through them. For Kennedy, Massumi, Rajchman, de Bolla, and Grosz, sensation is not merely "subjective, involuntary feeling" that can be simply opposed to "objective, intentional thinking." Rather, sensation, according to Massumi (2002, pp. 97–98), is the...

... immanent limit at which perception is eclipsed by a sheerness of experience, as yet unextended into analytically ordered, predictably reproducible, possible action. Sensation is a state in which action,

perception, and thought are so intensely, performatively mixed that their in-mixing falls out of itself. Sensation is ... pure mixture.... A receding into a latency that is not just the absence of action but, intensely, a poising for more: an augmentation.

In other words, experience is not subjective in the sense that “I have” an experience. When we think of experience as a question of sensation, we remind ourselves that we do not *have* experiences. *We are* experiences. The “I” of an experience does not precede the experience. It emerges from it, or, as Massumi puts it, “the personal” (our sense of self and identity) is the “grand finale” (Massumi, 2002, pp. 190–191):

From what does all individual awareness arise and return? Simply: matter. Brain-and-body matter: rumbling sea for the rainbow of experience.

Phenomenology has certainly been concerned with experience and awareness, but not in the sense that Massumi lays out here (Massumi, 2002, p. 191):

For phenomenology, the personal is prefigured or “prereflected” in the world, in a closed loop of “intentionality.” The act of perception or cognition is a reflection of what is already “pre-” embedded in the world. It repeats the same structures, expressing where you already were. Every phenomenological event is like returning home. This is like *deja vu* without the portent of the new.

[But] experience, normal or clinical, is never fully intentional. No matter how practiced the act, the result remains at least as involuntary as it is elicited.... The personal is not intentionally prefigured. It is rhythmically re-fused in a way that always brings something new and unexpected into the loop. The loop is always strangely open....

Following this thread of Massumi’s thinking, I am going to suggest that the reason that the designed spaces, environments, and events that we look at here appear anomalous from within some approaches to pedagogy is because they invite and support *unintentional*, *involuntary* experiences of the learning self. They do so by attempting to move us through “sensations, prelinguistic and presubjective,” that precede concepts, images, or recognitions as things made and promise to “bring something new and unexpected into the loop.” If this is what makes them anomalous, it also makes them cause for celebration.

## Sensational Pedagogies

The anomalous pedagogies addressed in this book stage learning as a “material process” that arises out of the imbrication of the *material* elements of mind/brain and body (Kennedy, 2003, p. 15). They are concerned with designing, building, and staging objects, mediated environments, events, performances, public projections, configured times, and spaces. They are concerned with making, for example, “prosessual paths” to be walked or “interrogative designs” to modulate and intensify the habits, dispositions, gestures, and speakings that make up the materiality of social relationships on an urban street. The resulting paths, juxtapositions, sounds, interruptions, durations, and rhythms “actually impinge on the body/mind/brain in a multiplicity of ways” (Kennedy, 2003, pp. 27–28) and attempt to provide sensations that create the conditions for potential learning experiences.

As I work through my own encounters with these pedagogically inflected times and spaces, I am not seeking a new sense of pedagogy; rather, my desire is to articulate and better understand *new pedagogies of sensation*. Such pedagogies do not address us as having bodies but rather address us *as bodies* whose movements and sensations are crucial to our understandings. Paraphrasing Kennedy, I consider these times and spaces as “sensation constructions,” in which the “body” of the pedagogic environment, event, or media relates and assembles with the bodies of its users/viewers/observers “in a web of inter-relational flows in material ways” (Kennedy, 2003, p. 26).

The consequences of refiguring pedagogy in this way are far reaching. They encourage us to ask what pedagogy *does* rather than what it means or how it means. Pedagogy as “sensation construction” is no longer merely “representational.” It is no longer a model that teachers use to set the terms in which already-known ideas, curriculums, or knowledges are put into relation; rather, to the extent that sensations are “conditions of possible experience,” pedagogy as sensation construction is a condition of possible experiences of thinking. It becomes a force for thinking *as experimentation*. Paraphrasing Rajchman’s reading of Deleuze on aesthetics, unlike pedagogues who are here “to save us or perfect us (or to damn or corrupt us),” the pedagogic assemblages we will consider in the following chapters set out to “complicate things.” They set out to “create more complex nervous systems no longer subservient to the debilitating effects of clichés, to show and release the possibilities of a life” (Rajchman, 2000a, p. 138).

Regarding pedagogy as experimentation in thought rather than representation of knowledge as a thing already made creates a profound shift in how we think of pedagogical intent or volition — the will to teach. Considering Rachjman’s readings of Deleuze on “aesthetic volition,” it might be possible to think of the pedagogical intent, the will in pedagogy, as



belonging *not* to a known or identifiable agent; rather, education and its pedagogical acts might be thought of as “many different people and disciplines talking and seeing in new ways at once, interfering and resonating with one another, thanks to some as-yet informed or uncoded material of expression” (Rajchman, 2000a, p. 121).

Consequently, we would not understand the will to teach as an individual teacher’s desire for or pursuit of curricular goals and learning objectives, nor would the will to teach be explained by the teacher’s altruism or personal love of learning. Rather, we might begin to think of pedagogical volition as a simultaneity of interfering and resonating desires distributed *across the social body* — across different people, practices, and disciplines such as art, performance, architecture, museum exhibition, and public events. The will to teach then becomes thinkable in terms of a distributed, emergent desire to innovate, design, and stage materials of expression and conditions of learning in which something new may arise. Teaching becomes not a “medium” for communicating the personal expression of a particular teacher’s “artful” instructional skills or educational imagination, because that would make pedagogy a code or language for a preexistent subject, agent, or public; rather, teaching becomes the activity of participating in the “becoming pedagogical” of “expressive materials” distributed across many teachers, sites, events, and interactions (Rajchman, 2000a, p. 121).

Paraphrasing Rajchman, teachers who are drawn to and transformed by pedagogy in this sense or who invent ways to see and say new things through it do not preexist it but are rather invented in the process (Rajchman, 2000a, p. 121). Teachers, understood as being in the making themselves, would necessarily have to create places of learning in embodied terms and in ways that depart from the dominant perception of learning as the acquisition of knowledge driven by cognitive functions. Thinking of teachers as interfering and resonating with one another and with different disciplines in this way disbursts the place of the teacher, and this recasts many of the problematic dynamics associated with the teacher–student relationship, such as the will to know, the desire for the one who knows, and the desire to teach what one knows.

What I sense in the anomalous places of learning that we will look at closely in the coming chapters are attempts to engage learning in the making. I consider their times and spaces to be encouragements and challenges to explore the ramifications of staging pedagogy as the field of emergence of the learning self. They provoke us to ask: What pedagogies, as sensation constructions, as forms of habitation, as modes of existence of the learning self in the making, as risk, will incite a “taste for fresh sensations and constructions of sensations” (Rajchman, 2000a, p. 142)? What pedagogies will incite a “belief in what we may yet become, and in the peculiar time and logic of its effectuation in ourselves and in our relations with one another” (Rajchman, 2000a, p. 142)? In the particular expressions of pedagogical

volition that we will consider here, pedagogy becomes the time and space of the learning self *in the making*.

When thinking pedagogy through Deleuzian notions of sensation, experience, movement, and the logic of the in between, we find at stake the possibilities that “other paradigms of experience outside of language” might be reconceptualized and valorized in and for education: “For example ... the body, dance, movement, and process might be [rediscovered by education] as ways of articulating ideas, feelings, attitudes, and experiences in ways outside of written or oral language” (Kennedy, 2003, p. 32), but something even more disruptive to current educational institutions and practices is at stake. According to Kennedy (2003, p. 13), pedagogic engagements with the materiality of the brain/mind and body prior to language and subjectivity may provoke...

... new affectivities, new intensities between people [that] might provide a mutant sensibility which could prove more significant in changing people’s experiences of themselves and the world than any macro-defined politics.

Such speculation turns many approaches to social and political change on their heads, especially those that would have us believe that meaningful and effective political change happens only or primarily at the macro-systemic level. And, it challenges assumptions that our reasons for initiating particular political action must be grounded in language-based knowledge claims. Rajchman extends these challenges in ways that are significant to those of us interested in pedagogy when he asserts that (Rajchman, 2000a, p. 38):

[Thought] is free in its creations not when everyone agrees or plays by the rules, but on the contrary, when what the rules and who the players are is not given in advance, but instead emerges along with the new concepts created and the new problems posed.

What are we to make of Kennedy’s “mutant sensibilities” and “new intensities” that exist between people and prior to “selves?” And, what might we make of Rajchman’s “players” who do not play the game of thought but emerge, along with the rules of thought, from participation in the game itself?

### **The Materiality of the Learning Self in the Making**

It has helped me to think of these questions alongside Winnicott’s attempts to grapple, in different terms, with the paradoxes of selves in the making, of self-change, and of the self in creative dissolution and self-augmentation. Winnicott invented the idea of transitional space to help him do precisely that. As a clinical child psychologist, he tried to understand what happens when people creatively change how they relate to and “use” themselves,

others, and the world. Some of the designers and cultural critics discussed here use Winnicott's notion of transitional space in order to explain the efficacy of the anomalous places of learning we are considering.

According to Winnicott, the transition at the heart of transitional space is a most difficult one. It is the transition from reacting to the outside world in habitual ways, based only on past experiences, traumas, fears, or senses of who we are and what we want — to responding to the oldness and newness of the outside world, contemporaneously, in the here and now. Winnicott's transitional space is what makes possible the difficult transition from a state of habitual (“natural” feeling) compliance with the outside world, with its expectations, traditions, structures, and knowledges, to a state of creatively putting those expectations, traditions, and structures to new uses.

In Winnicott's view, this event of inner transition is made possible only when we dare to move into relation with the outside worlds of things, other people, environments, and events. We must be able to access something external to our own projections and identifications; otherwise, our entire reality would consist of our own dreams or individual delusions. Our creative transformation of what exists independently from us distinguishes art or knowledge from dreams or individual delusion, but our encounters with the “outside” also necessitate our reengagements of the “inside,” because creative transformation of what is given — outside — happens only by bringing something of our inner reality into the process (Flax, 1993, p. 121). Winnicott called this movement the never-ending work and play of keeping inside and outside both interrelated and separate. In order to learn things and in ways not given in advance, Winnicott believed, we need opportunities and capacities that allow us to be interrelated and separated at the same time. Thus, according to Winnicott, learning, changing, or becoming each requires opportunities and capacities for being (radically) in relation.

Kennedy uses language influenced by Deleuze and Bergson to describe what Winnicott called, in the language of psychology, transitional space. She enlists the help of Nobel Prize winning geneticist Barbara McClintock in an attempt to describe the “separate but interrelated” being in relation that is the experience of learning. McClintock's account of a “learning” gives body to Winnicott's notion of transitional space. For Kennedy (2003, p. 32), McClintock's particular experience of learning about chromosomes came about because McClintock had a capacity for ...

... whole and total engagement with the molecular forces of being in the world. A complete depersonalisation is involved, where subjectivity is rendered subjectless. Barbara McClintock explains how this “depersonalisation” feels in describing her scientific work: “The more I worked with chromosomes the bigger and bigger they got, and when I was really working with them I wasn't outside, I was

down there. I was part of the system . . . . As you look at these things, they become part of you. And you forget yourself. The main thing is that you forget yourself.” Rather than a feeling being felt then by some subjectivity, a feeling is not owned by a subject, but the subject is part of the feeling. In other words, the “subjective encounter” is experienced within the materiality of existence. “The world and I exist in difference, in encounter. In the feeling, being is in sensation.”

McClintock’s experience of existing “in difference” with the world and yet of existing “in encounter” with it, of being “*in sensation*,” is what Massumi calls the “*felt reality of relation*” (Massumi, 2002, p. 16).

Getting to that space between self and other, self and world — a place that is neither self nor other but the reality of relation — requires a “withdrawal from oneself” (Rajchman, 2000a, p. 87). But, according to Rajchman (2000a, p. 86), this withdrawal, this . . .

... impersonality is not an alienation or an “inauthenticity” . . . but, on the contrary, the condition of . . . a lightening-up of life and its possibilities. It is not a generality that abolishes differences but, on the contrary, a condition that frees difference from the determinations of habit, memory, routine and the practices of recognition or identification within which we are caught, opening up other vital possibilities.

For Winnicott, withdrawal from self, the “depersonalization” that Kennedy credits for McClintock’s inventive understanding and that Rajchman credits with the potential for invention, both requires and opens up a third space of simultaneous interrelation and separation that is neither self nor other, inner nor outer. Winnicott called this time and space of being in between, this interval of change, *transitional space*, a term that refers, in part, to the interval, the space of self-difference, and the process self change that opens up in the psyche when an experience of the learning self is in the making.

### **Pedagogy as the Materialization of Transitional Space**

For Winnicott, Massumi, and Kennedy, transitional space is not simply a metaphor or theoretical abstraction. It has a materiality. For Winnicott, “inside” and “outside” are not simply metaphors for referring to the psyche and to “reality.” They also refer to the inescapable materiality of embodiment. As Phillips (1988, p. 78) explains it, Winnicott places . . .

... the body at the root of development out of which a “psycho-somatic partnership” evolved. The self was first and foremost a body self and the “psyche” of the partnership “means the imaginative elaboration of somatic parts, feelings and functions, that is, of physical aliveness.”

The “self” that experiences the self-augmentation that takes place in transitional space is a psyche–soma couple. It is “the body creative.” In it, “the aliveness of the body-tissues and the working of the body functions” are creatively and imaginatively elaborated into new ways of being in the world and making sense of it (Phillips, 1993, p. 135). Transitional space is the space where both real and imagined physical boundaries between the body’s “inside” and “outside” are put into play.

Likewise, for Massumi, there is a materiality even to the psyche’s self-change. Habit, he says, resides not only in conscious and unconscious senses of self. It also “resides in the flesh. Some say in matter. As acquired, it can be said to be ‘cultural.’ As automatic and material, it can pass for ‘natural.’” (Massumi, 2002, p. 11). Habit has an ambiguous double location within both culture and the materiality of the body, and this is what allows Massumi to call habit “an acquired automatic self-regulation” (Massumi, 2002, p. 11).

For Winnicott, the *material* qualities of transitional space and their impingements on our embodied experiences of being in relation were crucial to the event of learning. Frequently, he referred to transitional space as a “holding environment,” and he gave much consideration to the environmental qualities that would make for spaces and times most likely to invite and support the “felt reality of relation.” He saw this “holding environment” as a third zone that is the space of relationship between me and not me. This third zone is opened up when the body that I am is, in Massumi’s words, “in a dissolve: out of what it is just ceasing to be [and] into what it will already have become by the time it registers that something has happened” (Massumi, 2002, p. 200). Winnicott’s holding environment can be seen, in Massumi’s mindset, as the space/time that “smudges” past and present (Massumi, 2002, p. 200).

According to Winnicott, the job of a “good-enough” holding environment is to “hold” without imposition our capacities to sense and creatively use our own processes of self-complication. When it manages to do that, it also holds the potential for our responsive engagement with what is different from our selves. An environment of interrelation holds the potential to become transitional space when it provides opportunities for us to both act in the world and to be acted upon by it — while at the same time offering us the flexible stability we need to risk allowing ourselves to be changed by that interaction. Stability may be offered in the form of limits, forms, traditions, expectations, or conventions. Formations of power may seek to impose stability by attempting to contain change.

Transitional space does not appear spontaneously or simply because we will it to, but it does exist always and everywhere as potential. Whether it is in fact actualized, whether it is “sprung” into a materiality, depends, in part, on how an environment holds stabilizing dynamics such as habit, foundations, and already-achieved “knowledge” with *flexibility*. A flexible, responsive holding environment meets the self-in-transition with curiosity and

playfulness, and the good-enough holding environment is open to itself being changed in turn — as the result of having been in relation with a learning in the making.

### Pedagogy, Transitional Space, and Fields of Emergence

Reading Winnicott side by side with recent writings by Massumi, Grosz, Kennedy, and Rajchman, his notion of transitional space begins to look like a psychologist's description of what Massumi, borrowing from mathematics and the natural sciences, calls a *field of emergence*. Massumi appropriates this concept for the humanities as a tool for thinking about agency and social change. We are able to employ it here to assist our experimental thinking about pedagogy and learning.

Like transitional space, a field of emergence, as Massumi explains it, is an “interaction in the making” — or, in other words, a *relation* (Massumi, 2002, p. 9). A field of emergence (of newness and self change) takes shape when our minds/brains and bodies pass through time, space, and events — and do so with *undetermined directions and outcomes*. What emerges from this uncertain passage are selves as well as social and cultural positions and determinations, including what are then retroactively encoded as subjectivities, genders, races, and knowledges (Massumi, 2002, p. 9):

The field of emergence is not presocial. It is open-endedly social. It is social in a manner “prior to” the separating out of individuals and the identifiable groups that they end up boxing themselves into (positions in gridlock). A sociality without determinate borders: “‘pure’ sociality.”

Massumi uses William James to make the point that relations are as real — and as material — as the social subjects and objects in relation (Massumi, 2002, pp. 230–231):

Participation precedes recognition: being precedes cognition. The separately recognizable, speakable identities of the objects and subjects involved in the unfolding event come into definition only retrospectively. In the event, they are inseparable from the immediacy of the relation. Their coming together precedes their definition. And it is their definition that culminates the event . . . . As long as the event is ongoing, its outcome even slightly uncertain, [the contextual identity of subject and object are] open to amendment.

As in Winnicott's notion of transitional space, Massumi's descriptions of a field of emergence put the terms that make up binaries, such as inside/outside, self/other, subject/object, into motion and interaction. Instead of opposing terms such as stasis/motion or inside/outside, as if they were

logical binarisms, Massumi distinguishes them in a different sense. It is a distinction that “follows the modes by which realities pass into each other. ‘Passing into’ is not a binarism. ‘Emerging’ is not a binarism. They are dynamic unities” (Massumi, 2002, p. 8).

Looking at transitional space in these terms, and paraphrasing Massumi, when the continuous becoming that is the self experiences transitional space, “it” is under “qualitative transformation” (Massumi, 2002, p. 8). In these terms, then, the self, when it is “in” transitional space, is not a discrete entity positioned between a former self and a future self. The self in the midst of an experience of transitional space is in the immanent relation that is change itself. It is “simultaneous and consubstantial” with the “outside,” with others, or with events. The self in transition is participating in the “unfounded and unmediated in-between of becoming” (Massumi, 2002, p. 71). The self who has participated in transitional space is not a separate entity, but a “differential emergence” from a “shared realm of relationality” (Massumi, 2002, p. 71).

The payoff for thinking of the self in terms of transitional space or field of emergence, rather than as “positioned” in relations of agreement (sameness) or opposition (difference), lies in the fact that change itself can then be seen as something other than opposition. It can be seen as “more or other than negation, deviation, rupture, or subversion” (Massumi, 2002, p. 70). Transitional space, as a field of emergence then, as *relationality*, consists in an interactive openness “to being affected by something new in a way that qualitatively changes its dynamic nature” (Massumi, 2002, p. 224).

What might it mean to think of the pedagogical relation in terms of Winnicott’s space of transition or Massumi’s field of emergence? We might begin to consider pedagogy as an address to a self who is in the process of withdrawing from that self, someone who is in a dissolve out of what she or he is just ceasing to be and into what she or he will already have become by the time she or he registers something has happened. In transitional space, this someone is in a deeply interfused encounter with and at the same time in a “differential emergence” from the materiality of the world. The time of that emergence, and pedagogy’s involvement in it, is a time where the past and the future “smudge.” A space/time of learning becomes “more like a Doppler effect than a point: a movement that registers [learning’s] arrival as an echo of its having just past” (Massumi, 2002, p. 200).

The environments, objects, and events that motivate the following chapters strive to address “learning selves” within exactly such a time and space. They seek to mobilize, simultaneously, perception, cognition, sensation, emotion, and imagination in an “anexact way, never prefiguring” what might emerge, twisting away “from addressing [or representing] pre-existing forms and functions toward operating directly as *technologies of emergent experience*” (Massumi, 2002, p. 192). Their “pedagogical strategy” is not to represent, construct, or incarnate a life world but rather to

present us with “strange constructs” that we can “inhabit only through transmutation and or self-experimentation, or from which we emerge refreshed as if endowed with a new optic or nervous system” (Rajchman, 2000a, p. 135).

### The Force of Pedagogy

The experience of the learning self is not composed of the steps up a curricular scaffold of objectives or cognitive schemas, nor is it composed of the standardized tests used to supposedly “measure” its progress, retrospectively, after it has already occurred. The only material evidence we have of what makes a curriculum or pedagogy “educational” is that lived experience. Like an arrow in flight, the lived experience of a learning is “nondecomposable: a dynamic unity” (Massumi, 2002, p. 6). An arrow’s path, Massumi points out, is not composed of positions, despite our attempts to “plot” its path as points on a grid.

One of the consequences of “fluidifying” (Massumi, 2002, p. 6) our approaches to teaching and learning is the realization that, when we look at test scores or curriculum content, we are looking at only one dimension of the reality of learning. That other dimension of learning’s reality — its nondecomposable continuity of movement and sensation, its felt reality of the relation that is experience couched in matter — is as real as test scores or curriculum content. When we overlook *this* dimension of the reality of teaching and learning, we not only impoverish our understandings of what we do as teachers and students, but we also open ourselves, as teachers, to doing harm.

If, as Grosz reminds us through Irigaray, the futures of the self, of knowledges, and, I would add, of pedagogies are “to be made rather than foreseen or predicted,” then we cannot program them in advance. But, we can attempt to bring them into existence (Grosz & Eisenman, 2001, p. 148). We can design pedagogies for and in this other reality of teaching and learning. We are about to see how some people are attempting to do just that.

The camera cuts to a close up of a child’s face, and we see the look. The power of that look to elicit heartfelt responses from teachers — indeed, to keep teachers teaching — lies, in part, in the fact that no matter how familiar this look may be it never arrives as a cliché. The occasion of this look is at the same time unmistakable and unprecedented. This look never emerges in the same way twice. In its newness, it is comparable only to itself (Massumi, 2002, p. 175). It is singular, without model and without resemblance. “It resembles only itself” (Massumi, 2002, p. 163). It always appears on the scene of pedagogy as a surprise and elicits from teachers a sense of accomplishment and triumph: “It’s working! This young person has gone into a dissolve and is on the way to becoming someone who will be a surprise to everyone.” Surprising, uncontrollable moments of learning



in the making like this are what authenticate pedagogy, but anxiety often follows on the heels of such excitement and feelings of accomplishment. There is something naked and vulnerable about this look, even as it signals an intense self-presence. What is our responsibility to this child as dissolve, this child as smudge in the space between its past and future? What will we educators make of this moment — of this child-become-open-ended potential, of this learning self as pure potentiality? Will we educators move *ourselves* to meet this look as, where, and when it emerges? What does addressing the learning self as a mind/brain/body in motion and in transition toward unforeseeable understandings and uses of self, others, and the world do to education?

Unlike other activities that we often call “learning” — activities such as memorization, puzzle solving, compliance, or achieving high test scores — a pedagogy that invites the experience of the learning self as a newness in the making raises questions such as these. That is its power and its promise. It forces the question: “What will we allow anomalous, sensational pedagogies to make of us, as educators?”

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