

THEORIES AND METHODOLOGIES

Sensitivity Training

ERICA FRETWELL

Aesthetic education is a labile term that variously denotes art appreciation, fostering the imagination, and the cultivation of taste. But we tend to overlook an elemental definition: learning to perceive. This meaning indexes the *aesthesis* that underwrites European aesthetic philosophy, first defined by Alexander Baumgarten as the “*scientia cognitionis sensitivae*” (“science of sensitive knowing”; qtd. in Davey), or the study of intuitive knowledge arrived at through the senses. This “sensitive knowing,” Friedrich Schiller posited in *On the Aesthetic Education of Man* (1795), has a civilizing function—hence aesthetic education is a liberal project of spiritual cultivation that has the potential to engender the moral freedom necessary for a self-governing community of taste. In this Schillerian vein, the early-twentieth-century educator Maria Montessori wrote, “The sensory education which prepares for the accurate perception of all the differential details in the qualities of things . . . helps us to collect from the external world the material for the imagination” and thereby renovate society (*Advanced Montessori Method* 248). One way to understand aesthetic education, then, is as sensitivity training: as learning to differentiate “details in the qualities of things” through the micro-operations of perception. At the granular level of sensory experience—distinguishing periwinkle from purple, or velvet from satin—sensitivity training takes part in the broader imperative of aesthetic education to realize *sensus communis*, a community organized around shared judgments or sensing in common, by “negotiat[ing] the tension between democratic autonomy and cultural authority,” in Jesse Raber’s words (15).

While Schiller’s philosophy is a useful reminder of aesthetic education’s basis in sensitivity training, it is eighteenth- and nineteenth-century literacy training that discloses what sensitivity training looked like in practice. Literacy is typically considered a technical skill, a

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springboard for reaching the symbolic heights and imaginative flights of the literary. One effect of literary criticism's subordination of literacy to literature is that the college classroom has become enshrined as the decisive site of aesthetic education, to the exclusion of the primary schoolhouse. As Patricia Crain has argued, "the materials of literacy, historically considered, [have] a central and essential . . . place in literary studies" (5). Alphabetization—defined by Crain as the process of internalizing the alphabet by means of eighteenth- and nineteenth-century print technologies—represented a new kind of literacy that systematized the self, that underwrote the liberal subjectivity with which aesthetic education historically is aligned. In the case of sensitivity training, the self-possessive personhood that literacy buttressed entailed cultivating a literal and intuitive feeling for alphabetic letters. This feel for language opened up new avenues of affective and intellectual absorption yet was itself at risk of being absorbed into the capitalist market. Practiced in institutions to teach children literacy, sensitivity training instantiates aesthetic education as a humanist project whose liberatory potential cannot help generating new modes of governance.

Situating literacy within the domain of aesthetic education requires tracking two crisscrossing genealogies of the sense of touch: a scientific one that moves from sensationalist epistemology to experimental psychology, and a philosophical-philanthropic one that moves from moral sensibility to progressive pedagogy. Crucially, both genealogies lead us through disability. For although the scenes of investigation may change (the laboratory, the asylum, the school), the one constant is blindness—both hypothetical and real. Following Mara Mills's insight that media theory emerged alongside and through the construction of disability, I argue that aesthetic education developed through lived and imagined blindness. Returning aesthetic education to its bodily orientations entails addressing the physical constraint—specifically, visual impairment—that makes judgment possible. Disability, an idiomatic blind spot in aesthetic philosophy, reframes literacy as a practice of knowledge arrived at through tactile, not visual, conduits of feeling.¹ Taste, in other words,

begins with touch—a sense that transforms judgment from an act of disinterested reflection into one of intentional intimacy. At the nexus of philosophy, psychology, and philanthropy, sensitivity training demonstrates that the written alphabet is a concrete form to be engaged on its own sensuous terms and that, in turn, imaginative acts inhere in the "merely" mechanical.

[1]

Sensitivity training has origins in John Locke's *Essay concerning Human Understanding* (1689), which laid out his sensationalist epistemology: that ideas are not innate but engendered by the senses. Locke used a thought experiment, called Molyneux's problem, to explain his theory: If a blind person has their vision restored, will they immediately be able to recognize objects visually? No, he argued, because knowledge is acquired through experience. Forty years later Locke's speculation received empirical validation. The surgeon William Cheselden removed cataracts from a blind man, who although newly sighted needed to learn how to perceive objects visually. The surgery not only proved Locke's theory but also revealed the importance of blind people to studying how the mind, an alleged tabula rasa, acquires knowledge.

As the science of mind increasingly favored empirical over speculative methods, blindness transformed from a thought experiment into an object of laboratory experimentation. In the 1830s, the founder of psychophysics E. H. Weber investigated how tactile perception shapes cognition by re-creating the conditions of blindness: he blindfolded test subjects and then pricked them on the forearm with two calipers, which he moved closer together until the subjects felt those two sensations as one. By century's end the calipers had been refined into an aesthesiometer for measuring tactile sensitivity (see fig. 1). Touch duly acquired a central place in the New Psychology, from Wilhelm Wundt's research on tactile sensitivity in so-called hysterics to William James's theory that touch manifests the surfacing of the hidden self. At the 1893 Chicago World's Fair, the psychologist Joseph Jastrow used

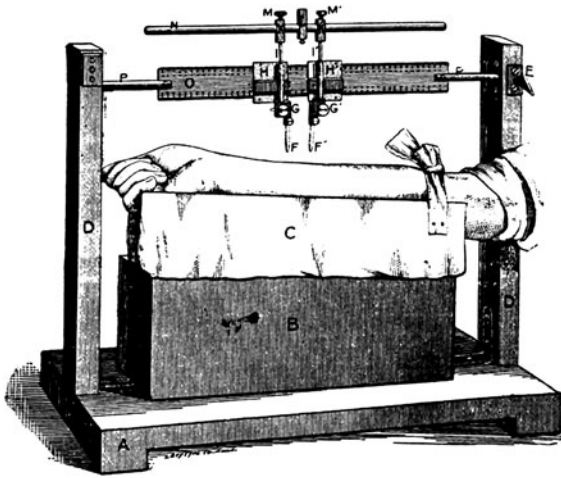


FIG. 1. From O. T. Mason, "A New Aesthesiometer." *The American Journal of Psychology*, vol. 1, no. 3, 1888, p. 552.

the aesthesiometer on a subject who needed no blindfold: Helen Keller, whose tactile sensitivity allegedly proved the mind's ability to form ideas despite diminished sensory input. Keller embodied what Weber's student Gustav Fechner (who himself had suffered temporary blindness) called "Aesthetik von Unten" ("aesthetics from below"), the perceptual sensitivity that both precedes and makes possible aesthetic experience.²

Lockean epistemology generated a sensationalist science of mind and, concurrently, the moral philosophy of sensibility, which was predicated on "the sentimental-empiricist elevation of feeling as the ultimate arbiter of truth" (Riskin 191). Blindness again became an important test case—this time for determining how perception shapes our beliefs. Denis Diderot, for instance, claimed that because sight is the main conduit through which knowledge enters the soul, blind people must be solipsistic, incapable of sympathy, and insensible to moral, aesthetic, and religious ideas. Taking up Diderot's cause at the end of the eighteenth century, Valentin Haüy established a free public school for blind children with the aim of assimilating these socially isolated persons. If blind people could emerge "as fully developed rational beings," Mark Paterson explains, "a more perfect emblem of Enlightenment education and the supposed

abstracted knowledge within darkness . . . would be difficult to find" (140). In 1800 the physician Jean-Marc Gaspard Itard famously socialized Victor, the languageless "Wild Boy of Aveyron," at the Paris Institute for Deaf-Mutes. Itard's pedagogical experiment provided crucial clues into the development of language and judgment, and it demonstrated the potential for education to civilize "pre-cultural" beings—not simply the poor disabled people constituting Europe's "dependent" classes but the African, Asian, and aboriginal "savages" European nations colonized as well. Midwife to the liberal state, sensibility philosophy found institutional expression in medical-cum-philanthropic efforts to inscribe the blank minds of the world with "enabling" knowledge.

While literacy was a cornerstone of social membership broadly, these new institutions for blind and deaf children installed a notably nonnormative, socially distinct relation to language. At Haüy's school, students employed pinpricking to write and read by touch; they used a pencil-like object with a pin at the end to puncture alphabetic letters into paper. Haüy appropriated these and other inventions to develop a system of embossed print—enlarged alphabetic letters that stood out in relief from the surface of the page—that remade literacy into an exclusively tactile practice. In the 1820s, Haüy's student Louis Braille created the innovative Braille system, and a decade later the American reformer Samuel Gridley Howe invented his own print type, Boston Line Letter.³ Howe established an embossed printing press at the newly founded New England Asylum for the Blind, which provided students with textbooks, primers, and New Testament passages they could read. His celebrated deaf-blind student Laura Bridgman embodied the promise of tactile literacy. In her biography of Bridgman, Elisabeth Gitter explains that the girl's ability to use touch for the purposes of communication and ideation "proved that modern education worked, that humans were perfectible, and that the optimism of the reformers was neither naïve nor presumptuous. . . . If Laura could be rescued, anyone could" (101). Touch, the medium of literacy, yoked aesthetic education to the institutional treatment of disability.

These adjacent genealogies of tactile sensitivity converge in the Progressive Era Montessori classroom. Like thinkers and reformers before her, Montessori believed that ascertaining the sensory basis of ideas required “blank minds” to study, and that those blank minds (whether housed in disabled, juvenile, or racialized bodies) acquire ideas first through touch. “The natural way for little ones to learn about things is to touch them,” the author and activist Dorothy Canfield Fisher reported in her domestic manual *A Montessori Mother*. “Dr. Montessori found that the fingertips of little children are extremely sensitive, and she claims that there is no necessity . . . why this valuable faculty, only retained by most adults in the event of blindness, should be lost so completely in later life” (58). Overturning centuries if not millennia of Western thought that prioritized sight as the most important conduit of knowledge, Montessori made sensory education foundational to children’s education and, further, enshrined the skin as a primary point of entry into literacy and learning. In 1906, she opened the Casa dei Bambini (Children’s House)—really a room in a tenement building—to the children of Rome’s working poor. (The president of a holding company for the Banca d’Italia asked Montessori to keep the children busy while their parents worked, because they were defacing investment property when left to their own devices.) The success of Montessori’s program—resulting not simply in urban renewal but in five-year-old children able to read and write with ease—brought her international fame.⁴

The novelty of the Montessori method was that it applied the pedagogical methods and materials developed for disabled children to nondisabled children. In her book *The Montessori Method*, Montessori explains that her “touch-first” pedagogy, when “used with deficient *makes education possible*, while with normal children it *provokes auto-education*,” or self-motivated learning (169). If sensitivity training increased the self-reliance of disabled children, then it could nurture self-cultivation in so-called normal children. Indeed, the principle of self-cultivation was a cornerstone of nineteenth-century educational reform. Compulsory education

had produced schools that “resemble[d] factory floors” and that implemented literacy training through “rote learning, regimentation, and examination,” Deidre Lynch writes (106). In response, pedagogues drew on the Romantic educational philosophy of Jean-Jacques Rousseau to advocate for the child’s autonomy and for the primacy of experience to learning. Johann Pestalozzi, for instance, created “object lessons” in which “the *examination*, the process of learning to perceive, . . . matters” more than the material itself (Carter 1). Later, his student Friedrich Fröbel invented the kindergarten as a space for children to learn through object-oriented play. John Dewey’s laboratory school at the University of Chicago upheld a similar philosophy, though it favored “strongly practical activities” like sewing and weaving as a vehicle of learning and “of ultimately transforming society” (Ogata 131). In keeping with this pedagogical tradition, Montessori devised her own plan for self-directed and experience-based learning for young children.

That plan involved using the New Psychology to update reformist pedagogy. *The Montessori Method*—its scientific aims clearer in the Italian title, *Il metodo della pedagogia scientifica* (*The Method of Scientific Pedagogy*)—duly begins, “Experimental psychology which, from Weber and Fechner to Wundt, has become organized into a new science, seems destined to furnish the new pedagogy” (1). Sensitivity training was the means to rebuild “the old and crumbling walls of the school” with the “stones of the experimental laboratory,” Montessori argued (7). One such stone was the aesthesiometer, which Montessori used not to measure but “to *exercise*” the child’s tactile sensitivity (168). And as with Weber’s psychology experiments, her sensory exercises required blindness: the child either is blindfolded or “hold[s] his eyes closed while he touches” different objects, Montessori explains, so that “he will be able to feel the differences better” (185). Scaffolding literacy, sensitivity training rendered the fingertip and the blindfold the child’s first writing tools (see fig. 2).

Montessori’s method was notable not for its originality but for its synthesis: a reformist pedagogy that implemented the Romantic principles of



FIG. 2. Photographs of blindfolded children distinguishing shapes and textures and of students learning to read and write by touch. From Maria Montessori, *The Montessori Method*. Translated by Anne E. George, Stokes, 1912, p. 282.

individual autonomy and lived experience by using not only the instruments of the New Psychology but also the didactic apparatus developed for disabled children. To teach literacy as a tactile practice, Montessori combined the blindfold with materials—slips of sandpaper, cards, newspaper—she had borrowed from the Franco-American physician Édouard Séguin, an acolyte of Itard who taught so-called feeble-minded children to read and write by first honing their sensorimotor skills. As Fisher explains in her manual, managing touch as a “systematic examination of an object by the fingertips such as a blind person might make” ensures that the child touches these varying textured surfaces “*always* from left to right, so that the muscular habit will be established which will aid them greatly later when they come to ‘feel’ their letters” (60, 59).

Feeling becomes the basis of reading and writing; the blindfolded child progresses from systematically differentiating surfaces and shapes to tracing—in linear fashion, left to right—the outline of alphabetic letters so that they come to know the form of the letters through specific textures and gestures. Bridgman would have been familiar with many of the tools Montessori used to build alphabetic muscle memory, including pinpricking. These tactile-motor activities proceed “day after day,” Fisher narrates, until one day they “all invisibly converg[e] towards . . . the painless acquisition of the act of writing” (83). Although Montessori students do not use the same tactile alphabet as blind and deaf-blind children (e.g., Braille), every activity up to the moment they lift the pencil or turn the page stems from disability materials and methods. In Montessori’s classroom, literacy is not simply a skill but a sensitivity to form: the fingertips know each letter by the lines and curves they trace, while the sandpaper ABCs in turn coarsen and inscribe the skin.

[II]

Caught in the contradictions of liberal modernity, sensitivity training displaces the ethics of disinterest aligned with vision, installing in its stead a mode of apprehension tethered to the erotics of texture, pressure, and weight. Sensitivity training thus has the potential to channel aesthetic education toward the illiberal humanism that, Kandice Chuh argues, can surface “suppressed ways of knowing and being” while underscoring “the conditions and processes of subordination” (123, 124). After all, tactile discrimination has literacy as its pragmatic end, but over the course of this journey the child learns the extralinguistic art of attentiveness. And what is attentiveness if not an internalized blindfold, a means of deepening the experiential field by shielding the mind from distraction? Montessori designed the classroom to teach children to pursue their own passionate absorptions: a decentralized space managed by a “directress” who—figured as part psychologist, part mother Mary—worships the natural phenomenon (that is, the child) she observes, and

whose purpose is to “awaken in the mind and heart” of each child “an attitude of one who has prepared an experiment and who awaits a revelation from it” (Montessori, *Montessori Method* 9). Guided by the invisible hand of the directress and the classroom itself, the child is oriented toward literacy as a type of experience. Neither empty vessels of signification nor mere conduits to ideation, alphabetic letters are aesthetic materials—dimensional forms—that constitute their own body of knowledge. Aslant Western taxonomies of intellection, then, sensitivity training shears judgment away from vision. A disability history of aesthetic education, from the Molyneux problem to the Montessori aesthesiometer, recovers taste as a haptic practice: a proprioceptive mode of attention or “observant care” that holds close what it beholds (“Attention, *N*”).

Yet the sensuous encounter with language that sensitivity training facilitates does not necessarily constitute a counterhistory of aesthetic education. To situate literacy along a trajectory of self-cultivation that begins in primary school is invariably to confront the aesthetic processes by which biopolitical subjects are made. For however liberatory the possibilities of aesthetic education, a sleight of hand is at play in sensitivity training. Borne out in the didactic materials, sensory exercises, and curated space that quietly direct behavior and attention, the Montessori classroom demonstrates that the Romantic pedagogical principle of the “absolute freedom of the child” is discipline all the same. As Ramsey McGlazer argues of Progressive Era education, “the inescapable imposition of language masquerades as the child’s spontaneous self-expression,” such that the “painless” acquisition of literacy is but a more occluded form of constraint (7). From this Foucauldian perspective, “absolute freedom” swaps out an authoritarian model of instruction for a distributive, faceless imposition: no teacher but a directress; no desks but project stations; no rote memorization but sensitivity training. Aesthetic education does not do away with discipline so much as it shifts the burden of regulation to the student.

The institutions that the Montessori classroom merged and from which it emerged—the laboratory, the clinic, the asylum—help account for the

development of sensitivity training as both a vehicle of subordination and itself a suppressed or submerged aesthetics. Speculative blindness and physiological blindness catalyzed new ways of being, thinking, and feeling while science and the state used tactile sensibilities to further discipline blind and deaf-blind people. Indeed, the inner and outer knowledge that arrives from the tactile “explosion” into language and humanity accompanied the injunction to become a self-sufficient subject: state asylums taught needlework and basket weaving not simply to accelerate sensitivity but to equip students with trade skills needed for economic independence. At times difficult to distinguish from manual labor, sensitivity training constituted a decidedly industrial branch of the “science of sensitive knowing”—aesthetics less an escape hatch from and more a hidden door into the market. As a civilizing project that targeted disabled and poor children, aesthetic education situated moral freedom and “free” labor as the obverse of each other rather than as opposites.

Sensitivity training thus brings our attention to an ordinary fault line in aesthetic education: what is development (*Bildung*) for some is training (*Heranbildung*) for others. Nonetheless, as Chuh reminds us, the instrumentalization of the senses is also always an invitation to forge alternative sensibilities. Sensitivity training upends the transcendent trajectory of aesthetics while sketching out a haptic basis of reflection, in which judgment and other forms of “sensitive knowing” are immanent to sensuous embodiment, to intimate engagement with the world of things. When historically situated, then, the conceptual and material force of blindness in European philosophy and pedagogy might be said to spin aesthetic education on its axis. The illiberal ethics and erotics of handling that disabled people forged in, through, and beyond the scene of their institutionalization teach us that much.

NOTES

1. Conversely, though, aesthetics has been crucial to disability studies. See Siebers.

2. See Ortlieb et al.
3. On the history of embossed print in the United States, see Weimer; Fretwell; Altschuler.
4. For a stunningly synthetic account of Montessori's philosophy, biography, and cultural milieu, see Stewart-Steinberg.

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