
CHALLENGING THE GAZE: THE SUBJECT OF ATTENTION AND A 1915 MONTESSORI DEMONSTRATION CLASSROOM

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A glass-walled classroom in the Palace of Education and Social Economy was one of the major attractions at the 1915 San Francisco Panama-Pacific International Exposition. In this room Maria Montessori's pedagogical methods were demonstrated for four months, producing attentive subjects on both sides of the glass. Attention was central to the teaching and learning going on in this classroom, as it has been in theories of teaching and learning through the present day. Attention is a feature of human perception that has become an object of knowledge with such popular currency nowadays that even its absence — conceptualized as a "disorder" and "deficit" — can circulate widely. Attention is related to the organization and management of individuals; in the exercise and selection of what one is attuned to and how one is attuned to it, attention becomes a knowledge of the self that embodies regulatory practices. This article addresses what we might learn about attention by studying Montessori's 1915 San Francisco classroom.

The glass walls of a demonstration classroom set up at an early twentieth-century world's fair could easily be theorized as an instrumental device for producing attention. In trying to understand how the object *attention* is produced as a thing of reason that orders principles of action and participation, one possibility would be to turn to Michel Foucault's work on panopticism and see a dynamic of visual tensions that position and distribute individuals. In this article, however, I argue that the visual-spatial framework suggested by the surveilling gaze is inadequate for coming to grips with attention and with Montessori's pedagogy in particular. The gaze has helped to give us insightful critiques of educational practice, particularly of progressive education, but it reaches an analytic limit when applied to the theorization of attention.¹ In place of reliance on an ocular surveillance paradigm, I propose that attention be approached in alternate ways, including through an analytic of power that looks at the production and organization of desire. Montessori's 1915 demonstration provides an opportunity to rethink the roles power and subjectivity play in the formation of human attractions. Ultimately, I argue that thinking through Montessori offers an important and relevant approach to examining attention in contemporary schooling.

1. Valerie Walkerdine, "Progressive Pedagogy and Political Struggle," in *Feminisms and Critical Pedagogy*, eds. Carmen Luke and Jennifer Gore (New York: Routledge, 1992).

DEMONSTRATION CLASSROOM, SAN FRANCISCO 1915

The Montessori glass-walled demonstration classroom was a major draw for visitors to the Panama-Pacific International Exposition's Palace of Education and Social Economy. Since this 1915 classroom serves as the primary empirical base for my theorizing, it will be useful to examine archivally what was happening in and around it with regard to attention. A San Francisco newspaper reported that the four-hour morning classes attracted a crowd of spectators, many of whom visited repeatedly during the four months that the school was in operation — "as warm a coterie of 'fans' as any home club with a winning streak ever drew inside a baseball grounds."² The crowd of spectators became known as the "bleachers" and often completely surrounded the classroom, with people having to arrive early to be sure of getting one of the auditorium-style seats and others feeling lucky just to get a standing-room place that offered a good view.³ "Like tourists at an aquarium" was the description offered by another source.⁴ Such reports of plentiful and loyal spectators who paid intense and constant attention to what was happening in the classroom suggest that a particular set of attentive practices was operating in San Francisco in 1915. In the analysis of attention that follows I will argue that the spectators' attention strongly resembled the attention being cultivated on the students' side of the glass.

Though she did not lead the classes personally, Montessori was present at the exposition, which was the first major demonstration of her pedagogy in the United States.⁵ Local newspapers reported that sense training and education by suggestion were the core of Montessori's methods.⁶ Both the popular press and Montessori's own writings identify human perception as the target of these pedagogic interventions. These texts problematize perception as being simultaneously voluntary and involuntary. A calculus of compulsion and free will is central to Montessori's pedagogy (this is not unique to Montessori, of course).⁷ An example of this dual movement is captured in the *San Francisco Chronicle's* 1915 claim that "the

2. Frederick R. Hinkle, "A Day with Dr. Maria Montessori and Her Youthful Charges Is an Eycopener for the Average Parent," *San Francisco Chronicle*, September 11, 1915.

3. Rita Kramer, *Maria Montessori: A Biography* (New York: G.P. Putnam's Sons, 1976), 216.

4. Frank Morton Todd, *The Story of the Exposition*, vol. 5 (New York: G.P. Putnam's Sons, 1921), 66.

5. This was actually Montessori's second trip to the United States, but it was the first to feature a large-scale public presentation of her methods, which she had initially developed a mere nine years earlier. See Sol Cohen, "Montessori Comes to America, 1911–1917," *Notre Dame Journal of Education* 2, no. 4 (1972): 358–372.

6. *San Francisco Chronicle*, "Education by Suggestion Will Be Aim of Montessori Class at Fair," August 5, 1915.

7. We can think of this calculus as part of a larger modern movement: the joining, as Peter Wagner puts it, of registers of social administration and freedom. Peter Wagner, *A Sociology of Modernity: Liberty and Discipline* (London and New York: Routledge, 1994).

secret of the Montessori theory is to bring out the individuality of the child and force it to exercise its own initiative."⁸ The primary object the pedagogy worked on — and the thing that promised to resolve all apparent paradoxes — was the child's *attention*. Attention was the main site of Montessori's intervention. Speaking to the National Education Association (NEA) in Oakland, California, in 1915, Montessori encapsulated her method in the declaration "When you have solved the problem of controlling the attention of the child, you have solved the entire problem of education."⁹

To be sure, there is much evidence that students paying attention in school is a long-standing, persistent concern of educators. For several centuries now, references to the attention of the child have appeared in educational literature. An eighteenth-century American manual for tutors and governesses, for example, spoke of the need to keep order among children, noting that "feuds and contentions are continually arising among them, which always take off their attention from learning."¹⁰ In this instance the child's attention is understood as an aid to instruction and as subservient to it. By the late nineteenth century attention had become a central concern across a range of domains.¹¹ In educational theory, for instance, attention was no longer considered merely an add-on to instruction; instead, there was an increasing sense that attention could be the crux of schooling, the solution to the entire problem of education, as it was for Montessori.

In her 1915 speech to the NEA, Montessori provided an account of how she came to place such an emphasis on attention. She described a three-year-old student in her Rome school who was "deeply absorbed" in a wooden block activity:

The expression of her face was that of such intense attention, that it was almost a revelation to me. Never before had I seen a child look with such "fixedness" upon an object, and my conviction about the instability of attention which goes incessantly from one thing to another, a fact which is so characteristic in little children, made the phenomenon the more remarkable to me (*SE*, 65).

It is important to note that Montessori understood the child's "intense attention" as purposeful and not as an expression of involuntary, distracted perception. Her realization that "fixedness" was possible did not, for Montessori, disprove the notion that the child's attention might also shift rapidly and distractedly. Instead,

8. "Education by Suggestion Will Be Aim of Montessori Class at Fair."

9. *San Francisco Chronicle*, "Child Study Explained by Montessori," August 17, 1915. This adage was quoted in a subsection of the article headed "Attention Must Be Held." For the complete text of her address to the NEA, see Maria Montessori, "My System of Education," *Journal and Proceedings and Addresses of the National Education Association* 53 (1915): 64–73. This work will be cited as *SE* in the text for all subsequent references. I have chosen to focus on this particular NEA speech in this essay because it represents a concise general statement of her methods and objectives and was probably the lecture that reached the widest audience. The numerous other talks that Montessori gave in California in 1915 have been collected and published in *The California Lectures of Maria Montessori: Collected Speeches and Writings*, ed. Robert G. Buckenmeyer (Oxford: Clío Press, 1997).

10. Tommy Littleton, *Juvenile Trials for Robbing Orchards, Telling Fibs, and Other Heinous Offences* (Boston: F. Nichols, 1797), xiii.

11. See Jonathan Crary, *Suspensions of Perception: Attention, Spectacle, and Modern Culture* (Cambridge: MIT Press, 1999).

this stable attention, when placed alongside an observed instability of attention, suggested both a surface and techniques for shaping the individual. Montessori continued the story,

I watched the child without interrupting her, and counted how many times she would do her work over and over. It seemed that she was never going to stop. As I saw that it would take a very long time, I took the little armchair on which she was sitting and placed the child and chair on the big table. Hastily she put the frame across the chair, gathered blocks and cylinders in her lap, and continued her work undisturbed. I invited the other children to sing, but the little girl went on with her work and continued even after the singing had ceased. I counted forty-four different exercises which she made, and when she finally stopped, and did so absolutely independently from an exterior cause that could disturb her, she looked around with an expression of great satisfaction, as if she were awakening from a deep and restful sleep (*SE*, 65).

Here, according to Montessori, the child's fixed, stable attention produced a calmness and serenity that was the expression of some sort of internal resolve/resolution. The child was not diverted by potential distractions. The repetition that was displayed seems to have fatigued no one, neither the child nor the observing teacher. Instead, repetition produced a change in the observer, just as it produced a change in the child. Montessori said of her own response, "the impression I received from the observation was that of a discovery," and added that "all that was confused and drifting in the conscience of the child seemed to assume a form" (*SE*, 65). The "Montessori method" that crystallized out of this discovery was a collection of techniques and educational philosophy that I am naming a *pedagogy of attention*. In her own words, "the fact on which it was possible to establish my system is the psychological fact of the 'attention' of the child, intensively chained to any exterior object or fact" (*SE*, 65). Attention, as an apparent fact, could resolve the confused and the drifting. An analytic tool for describing a certain kind of human perception became here an object of reality that could be organized to act as the controlled expression of a free will.

As with many pedagogies, especially those elaborated in the Progressive Era, remaking the individual child was only one objective of Montessori's attention pedagogy. The child was merely an intermediate step, a means toward the ultimate goal of refashioning societies.¹² Visitors outside the glass walls of the demonstration classroom at the Panama-Pacific International Exposition were drawn into this remaking of the social. The pedagogy intervened on what it meant to be present and attentive. It organized, as I will argue subsequently, a form of collective synthesis.

It bears noting that accounts of the glass classroom consistently mention how seemingly undistractable the children were. In its first article on the demonstration, the *San Francisco Chronicle* remarked that "the children appeared oblivious to the watching crowds."¹³ Along these same lines the official history of the San Francisco exposition noted that children set themselves to tasks "by their own will," and "for long stretches they hardly noticed the spectators, so well were their wits

12. See Thomas S. Popkewitz, "Dewey, Vygotsky, and the Social Administration of the Individual: Constructivist Pedagogy as Systems of Ideas in Historical Spaces," *American Educational Research Journal* 35, no. 4 (1998): 535-570.

13. *San Francisco Chronicle*, "Education by Suggestion Will Be Aim of Montessori Class at Fair."

concentered [sic] on their work."¹⁴ Another mention of Montessori students being undisturbed by observers comes from Elizabeth Harrison of the National Kindergarten Union. In her report on a 1914 study mission to Rome, she recounted, "I have seen as many as 80 visitors in the room where there were only a dozen children, but none of them were in the least disturbed by or seemingly conscious of the presence of visitors."¹⁵ This artifactual evidence does not mean that no child ever stared back at the crowd in the Palace of Education and Social Economy. These reports are important because they clearly demonstrate that the absence of distraction was considered noteworthy.

In 1915 attention and distraction provided points of reference and descriptors for naming something that could be reasoned about and manipulated. Spectators saw transfixed children who had been "captured" by their learning. Moreover, the attention of these spectators (that is, their own "captivation") was also remarked upon, pointing to a way of reasoning that — it is important to note — was not only about the child. To be attentive was to enter a social field in which effects of power circulated. How to theorize this social field is an important matter, since this will significantly affect how we think about the kinds of subjectivities that were produced within it. I will next consider what a panoptic surveillance analytic would imply.

GAZING SUBJECTS

An enormous body of scholarly literature on the public exhibitions and displays of objects and people in the nineteenth and twentieth centuries relies on some notion of the "gaze," frequently one that can be linked to Foucault's writings on panopticism and surveillance.¹⁶ In current educational literature the gaze also features prominently in analyses of technologies for governing.¹⁷ What is of greatest interest for our purposes here is how the gaze is identified as the central nexus for the formation of modern subjectivity.

Foucault used various notions of "the gaze" throughout his work. In the *Birth of the Clinic* he spoke of the medical gaze, while in *The Order of Things* he argued that the appearance of the figure of "Man" in *Las Meninas* "demanded that the entire space of representation should at last be relaxed to one corporeal gaze."¹⁸

14. Todd, *The Story of the Exposition*, 67–68.

15. Elizabeth Harrison, "The Montessori Method and the Kindergarten," *U.S. Bureau of Education Bulletin*, no. 28 (1914): 21–22.

16. See, for example, Micaela di Leonardo, *Exotics at Home: Anthropologies, Others, and American Modernity* (Chicago: University of Chicago Press, 1998); Peter H. Hoffenberg, *An Empire on Display: English, Indian, and Australian Exhibitions from the Crystal Palace to the Great War* (Berkeley: University of California Press, 2001); and Saloni Mathur, "Living Ethnological Exhibits: The Case of 1886," *Cultural Anthropology* 15, no. 4 (2000): 492–525.

17. Some recent analyses that bring the notion of panopticism into their theorizing in insightful ways include the papers collected in Thomas S. Popkewitz and Marie Brennan, *Foucault's Challenge: Discourse, Knowledge, and Power in Education* (New York: Teachers College Press, 1998).

18. Michel Foucault, *The Birth of the Clinic: An Archaeology of Medical Perception* (New York: Pantheon, 1973); and Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Pantheon, 1971), 312. See also the excellent discussion in Martin Jay, *Downcast Eyes: The Denigration of Vision in Twentieth-Century French Thought* (Berkeley: University of California Press, 1993), 384–416.

Here I will focus on Foucault's work on the gaze as it relates to the notion of panopticism.¹⁹ Foucault's use of Jeremy Bentham's panopticon to illustrate how disciplinary power circulates and operates on bodies is well-known in contemporary criticism. For the purposes of the present examination of attention, it is important to look at how this theorization of gazing uses space and visibility to conceptualize the subject: "He who is subjected to a field of visibility," Foucault's argument goes, "assumes responsibility for the constraints of power.... He becomes the principle of his own subjection."²⁰

An excellent example of how the gaze forms subjects comes from Timothy Mitchell's analysis of the 1889 Universal Exhibition in Paris, which featured a model of a Cairo street scene. Drawing also on Martin Heidegger's notion of the perspective of the perceiving subject, Mitchell argues that when French colonizers subsequently went to Egypt to experience the "real" Cairo, they saw it as an exhibit to be ordered.²¹ One can find similar examples of the gaze as an ordering colonial technique in the United States as well. At the St. Louis World's Fair in 1904, for example, 1,200 Filipinos and Filipinas were organized into villages that were to represent different stages of civilization.²² In these cases one could argue that a series of gazes formed and operated on subjects (American, French, Egyptian, and Filipino), causing them to inscribe in themselves power relations that divided and confined. A key feature of using the gaze as an analytic of power/knowledge is the inference that the subject is formed through a combination of gazes. This said, we should note that clear lines of sight are not critical to the power/knowledge optics of the panopticon. The exposition visitor, or prison warden, or whatever it is that surveys, may become hidden and invisible, even as the field of visibility that is crucial to Foucault's generalizable model remains.²³ Invisibility of the gaze, in fact, amplifies the automatic functioning of disciplinary power by creating permanent visibilities. Such visibilities make possible the *physics of forces and bodies* that, in Foucault's argument, fabricates the modern individual.²⁴

19. In this analysis, I am drawing on Michel Foucault, *Discipline and Punish: The Birth of the Prison* (New York: Vintage, 1979); Michel Foucault, "The Eye of Power," in *Power/Knowledge: Selected Interviews and Other Writings*, ed. Colin Gordon (New York: Pantheon, 1977/1980); Michel Foucault, "The Punitive Society," in *Ethics*, vol. 1 of *The Essential Works of Michel Foucault, 1954–1984*, ed. Paul Rabinow (New York: New Press, 1973/1997); and Michel Foucault, "Truth and Juridical Forms," in *Power*, vol. 3 of *The Essential Works of Michel Foucault, 1954–1984*, ed. James D. Faubion (New York: New Press, 1973/2000).

20. Foucault, *Discipline and Punish*, 202–203.

21. Timothy Mitchell, *Colonising Egypt* (Berkeley: University of California Press, 1991).

22. Robert W. Rydell, *All the World's a Fair: Visions of Empire at American International Expositions, 1876–1916* (Chicago: University of Chicago Press, 1984), 176.

23. Recall that the prisoner in Bentham's panopticon did not know when guards were watching him. Note as well that Foucault describes the panopticon as "machinery" that can be operated by "anonymous and temporary observers"; see Foucault, *Discipline and Punish*, 202.

24. In my thinking about the ways that "forces" and "physics" enter Foucault's analytics, I am indebted to Bernadette Baker's mapping of conceptions of power. See Bernadette Baker, "Moving On (Part 1): The Physics of Power and Curriculum History," *Journal of Curriculum Studies* 33, no. 2 (2001): 157–177; and Bernadette Baker, "Moving On (Part 2): Power and the Child in Curriculum History," *Journal of Curriculum Studies* 33, no. 3 (2001): 277–302. See also the Foucauldian analysis of Montessori's ideas on individual work in Kevin J. Brehony, "Montessori, Individual Work and Individuality in the Elementary School Classroom," *History of Education* 29, no. 2 (2000): 115–128.

Applied to the Montessori classroom of 1915, a consideration of the surveilling gazes potentially at play would suggest that the child's attention served to make the child visible for surveillance. Becoming the principle of one's own subjection means that knowledge of the self (of one's own "attention" in this instance) is one of the effects of power. The implication is that the glass walls that orchestrated a matrix of gazes simultaneously generated internal self-surveillance on the part of both students and spectators.

However, there is more to attention than panoptic surveillance. From the available archival material related to the Montessori demonstration, there is little evidence of the mutual optical tension between spectators and students that a surveillance paradigm would suggest. Instead, the dominant dynamic seems to have been between the individual and the object of their attention: the student in relation to some device or activity, and the spectator in relation to the child, or, more precisely, the child's attention. Even when we consider that the Foucauldian use of the gaze leaves leeway for — even requires — the metaphoric and figurative, it still appears that the network of relations exhibited in Montessori's demonstration classroom operated according to different tactics of subjectification. Throughout the rest of this article I will explore additional ways in which the subject of the gaze and the subject of attention are very different entities.

The "challenge to the gaze" that I am presenting here is a challenge to its universal analytic applicability. The discursive practices of attention in San Francisco in 1915 were enmeshed in a project of fixing and stabilizing the human subject; however, these were not processes that can be analytically distilled to be understood merely as disciplinary power working through the panoptic, surveilling gaze. In the case of schools, of course, there is much to suggest that disciplinary power does circulate through the gaze and practices of observation — one thinks immediately of portfolio techniques, state standards, even community service requirements. My argument is not against this analytic per se, but rather against its automatic deployment when it comes to theorizing attentive practices. To come to terms with the uses of attention in schooling, we need more elaborate and specific studies of how power circulates in different locales (a Foucauldian project, in fact). Montessori's 1915 demonstration classroom is an ideal site for exploring the making of subjects of attention. In the interests of a specific study, we now turn to the attention Montessori sought and why this was so attractive.

ABSORBING THE CHILD

Montessori's completely absorbed child was elevated as a model of the attentive subject whose senses were all fixed in attention. The *San Francisco Chronicle's* reports on the demonstration made frequent reference to the children's attention. On September 11, 1915, it was reported that "the other morning, during the circle-walking demonstration, one little girl spent an hour circling the chalked ring before she turned her attention to something else."²⁵ This exercise was designed to develop balance, and it is likely that the girl would have been carrying

25. Hinkle, "A Day with Dr. Maria Montessori."

a glass of water. According to Montessori, the child who marched along a line trained the “equilibrium” of his or her body — that “governing essential with which all perfection is bound up.”²⁶ Movement training and muscular training were integrated into a harmony of attention. Montessori addressed visual attention, for example, through color recognition activities. The central feature in Montessori’s attention pedagogy, however, was not visual discrimination or body balance and muscular control; it was the concentration that the sense of touch afforded.

Montessori’s theories drew on the work of a mid-nineteenth-century physician and pedagogue, Edward Seguin. In *The Montessori Method* she summarized Seguin’s method as “to lead the child, as it were, by the hand, from the education of the muscular system, to that of the nervous system, and of the senses.”²⁷ Montessori’s pedagogy of attention similarly led children by the hand through this progression, and like Seguin she also worked initially with “defective” children. Her first school was the *Scuola Ortofrenica*, or “mind-straightening school,” whose pupils were from asylums for the “feble-minded” in Rome.²⁸ By 1906, at her renowned *Casa dei Bambini* in the San Lorenzo tenements of Rome, she was given the chance to apply, in her words, “the methods used with deficient to normal children.”²⁹ Seguin, the French specialist on working with “defectives” who had studied under the psychologist and pedagogue Jean Itard and emigrated to the United States in 1850, maintained that “the idiotic hand is as idiotic as the brain” and suggested “frequent hand exercises, in which the powers of perception, volition and execution would be drilled to their utmost rapidity and precision.”³⁰ Like Montessori would a half-century later, he too thought that “educating the hand” could be transferred over to the education of “normal” children. One device that Montessori adopted from Seguin consisted of a series of graded cylinders, each having its appropriate receptacle in a wooden case. The apparatus was intended to develop the ability to recognize cylindrical shapes and discriminate among them by size. It trained both the eye and the hand, for in addition to visually matching each cylinder with its appropriate hole, the child was to clutch the cylinder in his or her hand and, with the fingertip, trace the hole into which it fit. Seguin described such training as “the exercise of [the] function of receiving impressions at the windows of the senses, and of returning them idealized at the door of the organs of execution.”³¹ In the early twentieth century the sense of touch could be theorized as a central component of perception. A 1911 article reported that because of Seguin, Montessori “realized that the sense of touch, the basis of all the other senses, was the great interpreter of vision and guide to accuracy of perception.”³²

26. Maria Montessori, *The Discovery of the Child* (Madras, India: Kalakshetra Publications, 1948), 124.

27. Maria Montessori, *The Montessori Method* (New York: Schocken, 1912/1964), 40.

28. Josephine Tozier, “An Educational Wonder-Worker: The Methods of Maria Montessori,” *McClure’s Magazine*, May 1911, 4.

29. Montessori, *The Montessori Method*, 44.

30. Edward Seguin, *Report on Education*, 2d ed. (Milwaukee: Doerflinger, 1875), 104–105.

31. *Ibid.*, 181.

32. Tozier, “An Educational Wonder-Worker,” 6.

If touch was the basis of perception, it could also be the foundation of attention and the most accurate sign of the attentive subject. In this way Montessori's pedagogy of attention overlapped with Seguin's concerns, but it also moved beyond them, expanding the provenance of touch and reworking the nineteenth-century psychology of sensations into something wholly new: an ordered and controlled system for fixing the human subject. The Montessori pedagogy demonstrated in San Francisco in 1915 emphasized putting subjects in touch with objects.³³ In Montessori's pedagogy an entire body could be seen to be attentive; all the child's senses (those many "windows") could be seen to concentrate on an external object; and, in this sense, attention was part of a semiotics that signaled something about the child.

Even silence was harnessed to produce total attention; many visitors to Montessori classrooms in the 1910s remarked on the "silent activity." As Montessori described it, "children, ecstatic with joy sit in absolute and complete silence," which was to accustom them to "immobility."³⁴ The attentive Montessori child was a child whose powers of attention were trained, controlled, and physically embodied.

The pedagogical production of the absorbed child was, in Montessori's scheme, an everywhere-applicable, universal technique. Other historical data from the early twentieth century demonstrate that the hand, when brought into a pedagogical theory that uses a notion of developmental stages, can become a device for qualifying and disqualifying individuals (for example, the "hand-minded" child who was slated for vocational education).³⁵ Nevertheless, in Montessori's case, touch and attention were deployed broadly — for example, across social classes.³⁶ The "feeble-minded," the poor children in Rome's San Lorenzo housing project, the children of diplomats posted to Rome, and the progeny of the San Francisco elite were all worthy subjects of attention.³⁷ Still, even though Montessori's sense training of 1915 did not distribute and divide children according to socioeconomic status, the production of the "absorbed child" intersected with racial and colonial discourses and disclosed a subject incapable of sustained attention and self-possession (a topic I will return to subsequently). It is important to note, however, that there is more going on here than the distributions and exclusions that have become recognizable as a result of numerous analyses. Montessori's project was the (re)assertion of a universal.

33. I would suggest that this emphasis on putting subjects in touch with objects unifies the different forms Montessori pedagogy has taken in the twentieth century, which is one of the reasons that it is extremely rare to find images of Montessori classrooms where a child's hands are not in contact with an object.

34. Montessori, *The Montessori Method*, 205.

35. See Herbert Kliebard, *The Struggle for the American Curriculum 1893–1958*, 2d ed. (New York: Routledge, 1995).

36. For a good analysis of how touch can become a mark of social class, see Thomas J. Otten, "The Spoils of Poynton and the Properties of Touch," *American Literature* 71, no. 2 (1999): 263–290.

37. Josephine Tozier, "The Montessori Schools in Rome: The Revolutionary Educational Work of Maria Montessori as Carried Out in Her Own Schools," *McClure's Magazine*, December 1911, 137.

Over and above the divisions that a Foucauldian analysis would reveal to be necessarily embedded in such a project, Montessori's pedagogy of attention worked at constituting wholes through the mechanism of a universalized attention.

THE ATTRACTION OF ATTENTION

The strategy of cultivating attention to achieve individual and social aims was not idiosyncratic to Montessori's demonstration classroom but intersected with ideas about perception and progress that circulated through a number of social fields. The development of architectural color schemes in the early twentieth century is a good example of a widely circulating interest in the control of human perception. In fact, the Panama-Pacific International Exposition is noteworthy as the first world's fair to have its own official Director of Color.³⁸ Both the architectural design of the exposition and the Montessori demonstration emphasized the fabrication of human attention. These homologous projects aimed to produce attention that would be fortifying and soothing and to avoid the distraction and overstimulation that could tire and degenerate both the individual and society.

The exposition's color scheme used a pale pink and gray marble as its base, to which were added soft yellows, blues, reds, and several greens, all chosen so that "they were curiously and beautifully related, in some subtly harmonious way."³⁹ A guidebook prepared by Eugen Neuhaus, a professor of art at the University of California, noted, "nothing excites the Exposition visitor more than the color scheme of the buildings." However, Neuhaus quickly amended this claim by observing that "excite" was not quite the right word since nothing was further from the designer's mind "than to create excitement, unrest, or any of those sensations that might lead to fatigue or even create nervous breakdown."⁴⁰ Contemporary press and visitors' reports contain frequent references to the color scheme, and it is important to note that this "manipulation" was not hidden but was made known to the general public so that all could enjoy its effects.⁴¹ The exposition visitor who was aware of the color design meant to soothe and awe him or her and the spectator who watched Montessori's demonstration classroom attentively for hours on end were similar in that both were engaged in the deliberate process of working on their own attention.

An attraction of attention was that it offered a form of synthesis in a world understood as somehow epistemologically unstable. Jonathan Crary argues that, during the late nineteenth century, the inability of the subject to present

38. Eugen Neuhaus, *The Art of the Exposition: Personal Impressions of the Architecture, Sculpture, Mural Decorations, Color Scheme and Other Aesthetic Aspects of the Panama-Pacific International Exposition* (San Francisco: Paul Elder & Co., 1915), 48.

39. Todd, *The Story of the Exposition*, 348.

40. Neuhaus, *The Art of the Exposition*, 11.

41. See, for example, Laura Ingalls Wilder and Almanzo Wilder, *West from Home: Letters of Laura Ingalls Wilder to Almanzo Wilder, San Francisco, 1915*, 1st ed. (New York: Harper & Row, 1974), 36.

the world to itself in terms of reflection or correspondence is apparent in the multiple attempts to reconstitute a cohesive visual field. Crary sees work in the visual arts such as Edouard Manet's *In the Conservatory* and Georges Seurat's *Cirque* as calculated constructions aiming at new semantic and cognitive models.⁴² On this interpretation Edward Muybridge's well known photographs of a horse in motion are important because they disrupt claims for the "naturalness" of vision, suggesting that human vision is a process of active composition and fabrication, not a matter of passive reception. As a counterpoint to this denial of direct vision, a priori intuition, and fixed positions, an educational theory like Montessori's could present the universality of attention as a way human beings could reliably turn to perception and actively synthesize images of the world and themselves.⁴³

In her 1915 address to the NEA, Montessori discussed how the careful development of attention can form a stable, reliable foundation for progress. According to Montessori, the child possesses attention to begin with, though initially it is "wandering and scattered." This attention has a "reflective and passive character" and is one of the ways that the child can lose self-possession. With a wandering attention, "the child seems to belong less to itself," Montessori wrote, "than to any object that may attract its attention" (*SE*, 66). A pedagogy of attention, for Montessori, focused on the proper development of something natural to the child. (In this we see how Montessori pedagogy can be "child-centered" in the sense specified in her oft-quoted dictum "follow the child": in this process, the adult does not bestow a power upon the child; rather, the child is empowered through the training of something that he or she already possesses.) The fear of losing self-possession echoes the discussion of distraction and the color scheme at the 1915 World's Fair. In describing how a teacher could misguidedly provide "an overabundance of material" that "may distract the attention," Montessori cautioned that "these extra objects (materials) are useless and amid them the soul may lose itself" (*SE*, 69). The notion that distraction leads to loss is central to the pedagogy and helps to illuminate the gains that attention promised.

In 1915 attention was explicitly linked to levels of "civilizational" progress. Montessori called the initial innate "wandering and scattered" attentive powers of the child "primitive." The child who is surrounded by too many objects "gives way to lower tendencies, foolish laughter, and disorderly acts" (*SE*, 70). As is evident in

42. Crary, *Suspensions of Perception*.

43. The assertion of interpretive, constructive processes in morality and epistemology is evident, for example, in the pragmatist writings of C.S. Pierce, William James, and John Dewey. However, there are convincing arguments that this trajectory begins earlier, with the postrevolutionary situation in the early nineteenth century that enabled and obliged individuals to create their own rules for social order and action. For this interpretation, see Peter Wagner, *A History and Theory of the Social Sciences* (London: Sage, 2001); and Gordon S. Wood, *Radicalism of the American Revolution* (New York: Vintage, 1992). In Foucault's writings one can point to the modern episteme, and the emergence of "man" as a conditioned subject who constitutes his representations on the basis of those conditions, as a way of situating this instability and uncertainty that we find running through a wide range of social and cultural fields. See Foucault, *The Order of Things*, 352; see also Ian Hacking, *The Taming of Chance: Ideas in Context* (Cambridge, England, and New York: Cambridge University Press, 1990).

Montessori's pedagogy, in the late nineteenth and early twentieth century the notions of progress and uplift were haunted by fears of degeneration and racial relapse.⁴⁴ Montessori was concerned that the child have enough energy to "uplift himself" (*SE*, 69), and she deployed ideas of racial recapitulation. For example, her opposition to the use of creative play in kindergartens (a position that was strongly criticized by many American educators, including William Kilpatrick and Elizabeth Harrison) was based on the argument that the state of the imagination was the natural state of the savage and that dwelling in it would hold back the child in a "prehistoric," "primitive" period.⁴⁵ A distracted attention, in Montessori's pedagogy, dissipated the possibility for progress — only through attention and the refinement of the child's discriminating powers could progress be ensured.

FIXING ATTENTION

Attention in Montessori's 1915 demonstration was both a means and a goal. It became an object of knowledge closely linked to the production and regulation of desire. Interlinked with Montessori's project for reconstructing the individual and the social are principles of subjectification that order the making of subjects of attention. To further understand how power circulated through this locale, we should examine how these mechanisms employed notions of interiority and self-possession in producing sustained, stable attention.

A condition of possibility for organized pedagogy of any form is a distinction between the external and the internal, a distinction that reverberates throughout Montessori's texts. Bernadette Baker argues that the existence of an "inner" realm that could be affected by an "outer" realm appears in thinking about the child from the late 1600s onward.⁴⁶ On Montessori's view the "external" object was to help produce some change in the "interior" of the child. Sustained attentiveness produced a "psychic state" in which "the phenomenon of interior development and auto-formation takes place" (*SE*, 68). The interest in creating a mental state in the child that allows for his or her interior development helps to explain Montessori's interest in repetitiveness. In part, her deployment of repetition was based on Seguin's ideas about habit formation and the training of perfection. It also derived from a corollary that the child is demonstrating control and mastery through careful repetition, which leads to the important problem of how Montessori theorizes the end of sustained attention and the cessation of repetition. If a wandering attention is to be trained out of the child, on what grounds, then, can the child's attention legitimately shift?

44. For studies of these general concerns, see J. Edward Chamberlin and Sander L. Gilman, eds., *Degeneration: The Dark Side of Progress* (New York: Columbia University Press, 1985); and Daniel Pick, *Faces of Degeneration: A European Disorder, c.1848–c.1918* (Cambridge: Cambridge University Press, 1989).

45. See Maria Montessori, "Education and the Imagination of the Little Child," *Journal and Proceedings and Addresses of the National Education Association* 53 (1915): 661–667.

46. Baker, "Moving On (Part 2)," 280.

Montessori's claim that the repetition of activities creates opportunities for inner development put her in an excellent position to answer the criticism of this type of repetition from such authorities as Kilpatrick.⁴⁷ Many American educational reformers had denounced rote learning and recitation as de-individualizing techniques that merely prepared students for factory work, and Montessorian repetitive activities could seem to fit with preparation for assembly-line styles of economic labor. Montessori advanced her arguments on different grounds, however, and it is important to note that her writings from the 1910s do not employ utilitarian arguments. These texts do not attempt to justify her pedagogy by referring to the social good or to the social value of training in repetition. Montessori's strategy was to construe the repetitive activity not as a path to alienation or loss of self, but as a route to the precise opposite: the finding of self and the celebration of the individual. Given this reasoning, then, she was compelled to find an internal resolution for shifting attention; an external resolution such as the end-of-shift whistle or the distraction of classmates' singing would undermine her case. According to Montessori, the end of repetition and the breaking of concentration can healthily occur when "the child spontaneously abandons the objects, but not with signs of fatigue." Were attention to shift due to exhaustion, it would be a sign of weakening and degeneration. In contrast, sustained attention and the ability to repeat activities for prolonged periods (for example, forty-four times in a row) have the effect of creating "new energy" in the child, indicating that "his mind is capable of abstraction" (*SE*, 69).

Repetition is, in Montessori pedagogy, a good in itself. First, it enables the psychic state in which internal development can be achieved. Second, it works semiotically. Repetition — or, rather, its cessation — offers crucial evidence about the child's interior. In other words, the attention can shift when the child has proven him- or herself a competent subject through full possession of his or her internal powers. The child is strengthened by the repetition, not weakened. Similar to Sigmund Freud's theorization of sleep and the dream, Montessori suggested that some sort of voluntary/involuntary fumbling about one's own interior could constitute a renewal, permitting the organized progression through a set of tasks.

The importance of devices and objects to Montessori's attention pedagogy reminds us that her work is related to the "object lesson" developed by Johann Pestalozzi in the early nineteenth century. A brief comparison is illustrative. Pestalozzi's work on sense and sensation was guided by the belief that the "sense-impression" was the human being's primary means of acquiring knowledge — a belief Montessori shared.⁴⁸ Furthermore, the Pestalozzian teacher used objects to create and develop sense-impressions somewhat analogously to the Montessori teacher's use of devices to train the child's senses, except that by 1915 educational and social thought no longer assumed a presituated subject with a transparent

47. William H. Kilpatrick, *The Montessori System Examined* (Boston: Houghton Mifflin, 1914), 27–28.

48. In particular, see Letters V and VI of Johann Heinrich Pestalozzi, *How Gertrude Teaches Her Children: An Attempt to Help Mothers to Teach Their Own Children and an Account of the Method*, ed. Ebenezer Cooke, trans. Lucy E. Holland and Francis C. Turner (Syracuse: C.W. Bardeen, 1801/1915).

understanding of external objects. For most of the nineteenth century the primary focus of the psychology of sensations was to uncover how the external world was reliably represented inside the subject. As indicated by both the color scheme and the Montessori demonstration classroom, however, by the time of the Panama-Pacific International Exposition, the quest for an authentic, reliable external world had all but disappeared. Perception was no longer a surface of intervention used ultimately to reveal objects and, by extension, to reveal a natural, or even a constructed, world. Instead, perception revealed a subject to itself. Subjectivity attained in this manner was an effort to apprehend presence. What this presence would look like for Montessori emerges in her comments about the undistractable three-year-old student who performed forty-four exercises while elevated in the center of a classroom:

This reminded one of the life of man that may be scattered indiscriminately in a chaotic condition, until a special object attracts it and gives it a fixed form, and then only is man revealed unto himself and begins to live (*SE*, 64).

At the beginning of the twentieth century the fixity that comes thanks to objects speaks not to position but to the formation of desire. Montessori's object lessons are affirmative strategies for managing attention. The object that attracts attention does not become the object to be mastered, which would be one strategy for affirming the self. Instead, one's own *attraction* is what is to be mastered: one is made to desire the self-regulation of desire.

SUBJECTS OF ATTENTION

In thinking about how attention is managed in present day educational settings, it can be helpful to turn to the way attention was problematized in this 1915 demonstration classroom. Subjects of attention became visible in San Francisco. In this instance, however, subjects, while visible, were not formed exclusively within a field of spatial visibility. Deliberate, controlled, and sustained attention to external objects helped to fabricate human interiority. In assuming responsibility for the direction of their own attention, individuals were managing their "insides." Attention became a surface for intervention as individuals assumed responsibility for their own conduct. Through the present day, "attention" has continued to circulate in classrooms and in theories of teaching and learning as an object of knowledge. It is beyond the scope of this article to chart the variety of ways that it recurs now or has functioned in other historical configurations. However, the preceding study of how attention circulated in this specific locale does suggest a number of things that any analysis of attention would do well to take into consideration.

First, the mechanisms of attention differ from the mechanisms of the shaming norm. As we have seen, in the cultural milieu of the 1915 World's Fair, bodies transfixed were bodies in suspension. Effects of power circulated through these bodies and attentive subjects regulated their own conduct. However, this self-regulation did not result from an amalgamation of forces acting upon individuals — in other words, this did not emerge in accordance with the panoptic model in which the norm is precisely that which acts on exteriors and surfaces to effect

changes in that which is established as the internal. The command “pay attention!” seems often to work through the mechanism of the norm, as part of a regime of spatial visibility that produces truths about human interiors and governs through shame. Nonetheless, the “attention” that is to be directed by the individual can be theorized differently: it is a different kind of surface, one folded into the inside; in Montessori’s pedagogy we see it conceptualized as a proper possession of the self. In place of the amalgamation of forces (or, stated differently, the combination of gazes), the mechanisms of attention exclude interferences and narrow the field of relations down to one relation, that of the subject and the object of its attention. Repetitions and sustained attention are not the hallmarks of a struggle between subject and the *idée-force* of the object; instead, they are the hallmarks of a struggle within the subject, a struggle to establish the self for which the object is an enabling device. Montessori understood this as “auto-formation,” a reading that reminds us that effects of power are, of course, present all the same. They are present, for instance, in the notions of autonomy and freedom that are called forth when the process of constituting interiority is theorized as “auto-emerging.”

Second, attention is a form of governmentality. If one of the effects of producing the subjects of attention who gathered on both sides of the glass at the 1915 Montessori demonstration is that individuals have come to be more responsible for their own conduct, this points to a significant alignment of ends with the production of subjects of the gaze. In Foucault’s arguments about the gaze, individuals come to internalize the norms of disciplinary power, thus making the functioning of the panoptic mechanism continuously effective. Both cases, then, engender what Foucault called governmentality, the arrangement whereby the reasoning individuals use in their own decision making is tightly bound up with the rationales used in the administration of society. One could theorize attention as the internalization of disciplinary power, but it is such a highly perfected internalization that the assertion of some originating external reference becomes less convincing. The subject’s direction of his or her attention is, by definition, continuously in effect. This is an organizing, regulating activity through and through. Add to this the idea of attention as both a means and an end, and the subject of attention can be nothing other than a governmentalized subject.

Third, the manipulation and deployment of tactility in learning theories have historically been linked with the production of attention. Montessori’s demonstration classroom reminds us that the objects of schooling are anything but incidental and untheoretical. Things (*qua* things) that are to be manipulated, touched, and thus learned through construct subjectivity. They represent strategies for organizing human perception that rely upon a theorization of attention as deliberate, cultivated, and affirmative of certain truths about the subject.

Fourth, the child’s attention is not only about individual constructivism but has to do with the production of collective synthesis. Popular fascination with attention — as disorder and deficit as well as asset and order — speaks to the

construction of epistemological and ethical certainties. The old question of how can we know that we all see the same world is reinvigorated when individuals are understood as actively composing their perceptions, excluding certain things as they focus on a specific thing. Concern with attention is related to concern with fragmentation, regardless of whether one chooses to represent this as a "postmodern" explosion of possibilities or to emphasize the folly of living without "foundations." Montessori's demonstration classroom is but one of many historical instances which show that inasmuch as multiple perspectives create instability, this instability can be mitigated immediately by being placed in relation to social and institutional collectives. These collectives, even if they are multiple, can be the guarantors of centripetal synthesis. In this project the cultivation of attention is not necessarily either rearguard or avant-garde. The crucial point is that human attention is not idiosyncratic; when we rely on human perception for our learning and knowing, attention promises centripetal synthesis in the form of reliability, consistency, and real insightfulness. As we saw in the case of the 1915 exposition, both with Montessori's demonstration and the generally circulating idea that "man" could be "revealed unto himself" and "begin to live," attention can be an important part of social imaginaries. As a form of "self-chosen" and "auto-emerging" governance, attention can guarantee collective synthesis (or syntheses) and stabilize consensus on proper ways of being in the world.

Finally, Montessori's glass-walled classroom offers suggestions for an analytics of power to be used in studies of attention. One consequence of Foucault's conceptualization of power as a physics of forces and bodies is the notion that power makes things visible. Baker comments that "while Foucault's analytics of power attempted to undermine power as sovereign and possessed, its spatiality never enables it to depart from the centre."⁴⁹ Thinking about attention through Montessori suggests that we might want to approach power in this locale as a "chemistry" rather than a "physics." Attention, attraction, and absorption might be better understood as a chemistry where molecular bonds form and break. Instead of forces and bodies that cause movement and distributions, power here could be thought of as operating in attachments and detachments that assemble and disassemble entities. In such a setting we can locate desire in the sense described by Gilles Deleuze and Félix Guattari: as something that produces rather than as something having to do with lack.⁵⁰ This could be the setting for Zygmunt Bauman's claim that panopticism has been overtaken by seduction as the principle of internalized social control.⁵¹ The 1915 Montessori demonstration suggests that attention needs to be theorized in relation to the production of desire and with an

49. Baker, "Moving On (Part 2)," 292. See also the discussion in Bernadette Baker, *In Perpetual Motion: Theories of Power, Educational History, and the Child* (New York: Peter Lang, 2001), 39–41.

50. See the discussion in Gilles Deleuze and Félix Guattari, *Anti-Oedipus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1983), chap. 1.

51. Zygmunt Bauman, "On Postmodern Uses of Sex," in *Love and Eroticism*, ed. Mike Featherstone (London: Sage, 1999).

analytics of power that can account for a continuous flux of stabilizations and destabilizations.

“Challenging the gaze” can be something more than returning the stare. The problem of attention in modern pedagogy pushes the panoptic gaze against its analytic limits. In exploring Montessori’s glass-walled classroom, we can find ways to move outside a strict reliance on a visual-spatial analytics. This is not to deny the fact that through the glass of one-way mirrors, camera lenses, chemists’ beakers, and classroom doors, significant regimes of truth have been produced during the course of the last century. Transparency — an elementary Enlightenment desideratum — has indeed become a pervasive form of governance in modern societies. Foucault likened Bentham’s device to Jean-Jacques Rousseau’s work and the Enlightenment interest in eliminating spaces of darkness.⁵² The interest in attention that developed in the late nineteenth century entailed a keen awareness of the inevitable movement of things into and out of view. Montessori’s attention pedagogy, for example, was attuned to the chance that some darkness would always be present. Attention occupies a space inside the subject that cannot be illuminated fully, but, as the 1915 demonstration indicates, it is still something that can be regulated and managed. Attention works to create a subject — not a subject that is present and fully revealed through its own transparency, but a subject that is internally present to itself through the mastery and organization of its own obscured and enchanted attractions.

52. See Foucault, “The Eye of Power,” 153–154.

