Attention and Spectatorship: Educational Exhibits at the Panama-Pacific International Exposition, San Francisco 1915

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During the exposition it will serve as a recreation center for many people who will linger in the seclusion of the groups of shrubbery and watch the shadows of the afternoon sun creep slowly up the surrounding walls. As an exhibition feature the Court of the Four Seasons is a decided innovation. At St. Louis, for instance, in 1904, everything seemed to have been done to excite, to overstimulate, to develop a craving for something new, to make one look for the next things. Here in the Court of the Four Seasons, one wants to stay. Most emphatically one wants to rest for a while and give one's self over entirely to that feeling of liberation that one experiences in a church, in the forest, or out in the ocean. I could stay in this court forever.¹

As with most of the other architectural and landscape design features of the 1915 Panama-Pacific International Exposition (PPIE), the Court of the Four Seasons was a carefully designed space that, as the above report from Eugen Neuhaus a University of California professor of art suggests, was intended to produce a certain effect within visitors. Neuhaus' guidebook to the San Francisco Exposition advised that an all-consuming sense of serenity and focus could be found in this particular setting, yet one finds that this courtyard was far from unique or exceptional in this respect. The central argument of this article is that we see crystallized at the San Francisco exposition an early-twentieth-century concern with controlling the visual field, manipulating human perception, and fabricating a human attention that would fortify the individual and would serve as a vehicle for social progress. This objective crossed multiple domains and this article begins by examining how it played out in the architectural design of the fairgrounds and major buildings and then examines homologies that can be found in the organization of exhibits and displays within the Palace of Education and Social Economy.

An interest in sustained, concentrated attention circulated across these different areas in conjunction with the fear of what was perceived as its opposite: a distracted, over-stimulated, and scattered attention. This contrast appears in the above description of the Court of the Four Seasons, in Neuhaus' comparison of the 1915 and the 1904 expositions. Characteristic of the St. Louis exposition, according to Neuhaus, was a design or deliberate intent "to excite" and "to develop a craving for something new". On this account, the visitor in St. Louis was led from one thing to the next, devoting sustained attention to nothing. Whether this is an entirely accurate portrayal of the general experience of a visitor to 1904 Louisiana Purchase Exposition is not a research concern here; instead, Neuhaus' account can be considered useful for speaking to the goals and ideals that went into organizing the 1915 event - goals and ideals which are, in part, revealed through the historical comparisons that


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Neuhaus (and others, as we will see below) made earlier public spectacles and international expositions. The setting for Neuhaus' comparative gesture was a courtyard that allegedly promised to be a destination for leisure, rest and relaxation for exposition visitors. In this instance, 1904 and 1915 were linked by a contrast in what effects were produced in the visitor. Juxtaposed to an intent "to make one look for the next things" was a "recreation center" where people would "linger". The absence of hurry and rush might lend people to watch shadows "creep sandly". In Neuhaus' guide we witness relaxation being produced through manipulations of the visual field. His suggestion is that the organization of the visual environment and the ways people were attentive to it would produce certain states of mind and emotional patterns within the human being. In both St. Louis and San Francisco, craving/desiring was connected with looking/watching. The point of difference lay in whether the mode of seeing generated fleeting, transitory, and ephemeral desires or sustained, consistent and rooted desires.

The analytic assumption that distraction and concentration are mutually opposing alternatives engulfs a prominent position in current-day academic scholarship thanks in part to a popular interest in the work of Walter Benjamin as a theorist of "the modern". Benjamin's well-known and widely cited essay on "Art in the Age of Mechanical Reproduction" argued that modernity brought excess stimuli and the destruction of earlier visual forms of integrity and unity. For Benjamin, film and architecture were two modern paradigms of "reception in a stage of distraction". This model of human perception in conditions of modernity has become, the art historian Jonathan Crary argues, a baseline for analyses of modern subjectivity in European-American critique. Crary maintains that an exclusive focus on human perception as fragmented and dispersed has led to an undertreatment of what he terms the "reciprocal relation of attentive norms and practices". The emphasis on producing stable, sustained attention that we see across different social fields at the 1915 exposition suggests that perceptual unity is not necessarily an historical antecedent to perceptual fragmentation. (This becomes especially clear when we consider the contemporary contrasts that were drawn between the 1915 exposition and the over-stimulation and distractions purported to characterize previous expositions.) At the same time, and somewhat analogously, neither should we consider these emphases on concentration and coherence the nostalgic, conservative project of a "return" to tradition. Attention, in 1915, was being produced as part of the making of new "modern" people and "modern" ways of living. Attention and distraction can be profitably analyzed for the ways that they are connected and not just separated; these modes of human perception can be seen, in Crary's proposal, as inside "a continuum in which the two ceaselessly flow into one another as part of a social field in which the same imperatives and forces incite one and the other." This article

3 Ibid, 31.
examines how this social field was configured at the 1915 PPIE, and in doing so seeks to contribute to our broader understanding of how norms of spectatorship at international expositions vary historically. In the conclusion I explore how this might shape our analyses of the general “educating” function performed by these expositions. The article also seeks to situate a particular set of World’s Fair educational exhibits, not just within the structural trajectory of the development of systems of schooling within a given country, but also in the context of broader social and cultural practices.

Concentration, Harmony and Coordination in the Architecture of the Panama-Pacific International Exposition

The signature architectural features of the 1915 exposition in San Francisco were a unified color scheme and a centrally coordinated architectural design. The relevance of this for my present paper lies in the ways in which color and architecture were linked to the production of particular modes of viewing and forms of attention. I argue that these coordinating efforts can be analyzed as pedagogical strategies that were deployed widely across large numbers of spectators. Harmony and concentration were tied to the production of an aesthetic sensibility and kinds of freedom that would both ensure social progress and avert the possibility of degeneration. The spectacle presented by the physical design of the exposition was of a form of discipline that individualized as it tutored the masses of visitors.

We know the Panama-Pacific International Exposition as the first World’s Fair to have its own official “Director of Color.” It was partly from his efforts that the sense of calm which Eugene Neuhaus so poignantly found in the Court of the Four Seasons was to flow. A 1913 San Francisco tour guide that any of the nineteen million exhibition visitors could have purchased gave the anticipated color scheme a glowing review, stating that it would “contribute largely to the enchantment and artistic splendor of the Exposition City.” The central element of this “splendor” was the pale pink and gray buff of an imitation Travertine marble, which was complemented by the soft yellows, blues, reds and several shades of green that were featured in the detail work. Frank Morton Todd’s official history of the exposition explained that rather than the “noisy contrasts [these] names suggest, shades of these colors were chosen that ‘matched’—they were curiously and beautifully related, in some subtly


The person responsible for this color scheme was Jules Guerin, a visual artist and theater designer. Guerin wanted colors that were "mellow" and he allegedly sought to avoid harsh contrasts. As we have seen in the 1913 tour guide, discussion of this design as deliberate circulated widely. The notion that the color scheme would contribute to the "enchantment" of the exposition suggests that it was to have effects on the emotional and affective "insides" of exposition attendees. Interpreting its note is that, contra the Weberian argument about modernity as a disenchantment of the world, we encounter here forms of reenchantment simultaneous to—and arguably even overlapping with—whatever scientific, technological and industrial artifacts of progress were also on display at the exposition. 

That the color scheme had been carefully calculated, and that this was widely remarked on, speaks to the "overt" nature of the manipulations of human perception that this article takes as one of its key interests. Rather than understanding this "manipulation" as hidden, the construction of particular forms of attention was something that took place "in the open", with visitors complicit in and actually "attentive" to the very ways that perception was being structured. At least one visitor reported being quite taken by the color scheme. On the first day of her visit, Laura Ingalls Wilder, author of the Little House on the Prairie books, took a small motor-driven train through the Exposition grounds in order to "see the Exposition as a whole and get a sort of wholesale impression". She wrote home to Missouri:

> The foundation color of the buildings is a soft grey and as it rises it is changed to the soft yellows picked out in places by blue and red and green and the eye is carried up and away by the architecture, spires and turrets, to the beautiful blue sky above. I have never imagined anything as beautiful. 

The aesthetic sensibility of the color scheme assumed that a peaceful and harmonized visual field could create interior tranquility and a harmony of the senses. Ingalls Wilder's perceptions speak to that harmony, and her account suggests that she found a certain serene beauty in the "wholesale impression" she received of the fairgrounds. The theme of vertical ascension that Ingalls Wilder captured in the report of her eye being "carried up and away" is one that recurs, as we will see, in other accounts of the exposition and other conceptualizations of "the progress" and innovation that the exposition represented.

that the exposition would be seen "as a whole" was quite clearly one of the organizing principles embedded in its color scheme and architecture. The previously mentioned 1913 San Francisco tour guide remarked that Guerin had "imagined the magnificent buildings, terraces, courts and promenades as one huge painting, in which all of the colors should blend

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8 Todd (1921), 348.
as harmoniously as on a tiny canvas". A coordinated, coherent visual field was not only presented, it was presented as such.

Linkages between the exposition’s color scheme and emotional excitement also figure in Eugene Neuhous’s guidebook. "Nothing excites the exhibition visitor more than the color scheme of the buildings," he wrote. However, Neuhous also followed this exclamation with the clarification that the kind of excitement the color scheme would generate was, in point of fact, quite different from the dissipating "excitement" that was the keynote feature (allegedly) of the 1904 St. Louis exposition. He commented that 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 to a nervous breakdown." The connection between the architecture of the San Francisco exposition and concerns about psychological health (specifically the concept of "melancholy") has been studied in some detail. This article argues that the visual coherence of the exposition is extremely significant as a strategy for avoiding the unrest, dispersal and breakdown that would be the hallmarks of degeneration both in social terms and in terms of the individual’s psyche.

Beyond the color scheme, the architectural consistency of the various exposition pavilions (at least outside the amusement zone) was an additional tactic by which harmony and concentration were produced at the 1915 exposition. Todd’s history notes:

At San Francisco the beholder standing in any court of the central group was surrounded by the work of one man, who had built parts of the walls of two or four different buildings; and the result was of necessity a unit impression.

Consistent with the blending of all the design elements "as on a tiny canvas" and Ingalls Wilder’s "wholesale impression", the exposition visitor - who was represented here as a "beholder" - would "necessarily" receive a "unit impression". This unity and coherence was due to the authority granted to Bernard Maybeck, as the exposition’s chief architect, to ensure that a certain "style guide" directed the design of all the exposition’s major buildings. Unity within the visual field was at one and the same time an end and a means; it demanded a certain kind of perception from its spectator, one that was more a "reception in a state of concentration" than in a state of distraction. Yet, the specter of non-coherent, non-unitary perception seems to have also haunted the architectural designers.

Todd’s official account of the exposition linked notions of distraction/discord and concentration/harmony with thinking about freedom. Similar to what we saw earlier, this was

12 Neuhous (1915): 11.
14 Todd (1921): 287.
articulated through a comparison with previous international expositions. In juxtaposing San Francisco’s coordinated, standardized and harmonious architecture with the motley architecture of other expositions, Todd wrote:

At previous expositions one man would design a palace and another the palace adjacent. Try as they would to harmonize their plans, individualism would assert itself, and the visitor standing between two structures was conscious of the fact that they were unlike and at some points discordant. 13

At the Panama Pacific International Exposition, the visitor would be “surrounded by the work of one man.” And thus, “all chance for discord had been eliminated.” 16 As in earlier examples, this discussion of the exposition’s architecture assumed that the visitor would have a “consciousness” of the design – in other words, would be aware of the intended effects. The extraordinary effort that the organizers of the 1915 San Francisco exposition put towards presenting a unified tableau constructed a conformity, yet this conformity was construed as by no means interfering with freedom. Even though the above excerpt from Todd’s history takes a jaundiced view of “individualism” among architects, the production of harmony through coordination and standardization could be directly harnessed to the production of certain kinds of individual freedom. In Todd’s judgment of the architecture:

A pronounced social atmosphere resulted. In its architecture the Panama Pacific Exposition was most democratic. It was not designed for the greater glory of individual architects, but for the enjoyment and intellectual stimulus of the public. It did not overwhelm; but it satisfied utterly. 17

Most important here was the end result: the production of a democratic public. The architecture would not “overwhelm”; it would soothe and “satisfy” and become a democratic pedagogy for visitors. The architecture would be pedagogical in the sense that it was to teach the visitors about aesthetic appreciation and would be democratic in the values it purported to impart. Notable in this regard is that coordination and unity were construed as routes to the production of a public composed of democratic individuals, with considerably greater freedom to be found through harmony/concentration than distraction/discord. The desired effect of this control of the visual field and fabrication of a mode of perceiving through unit impression and concentration was precisely that “feeling of liberation” that Neuhaus reported in the Court of the Four Seasons.

Coordination and Unity in the Palace of Education and Social Economy

Visitors to the Panama Pacific International Exposition’s Palace of Education and Social Economy 19 saw educational displays that had been organized with an eye to controlling the

13 Ibid.
16 Ibid.
17 Ibid.
visual field, and with objectives similar to what we have seen in the previous section. The pavilion hosted displays from the United States Government; from a number of states, including Massachusetts, New York, Pennsylvania, Illinois, Oregon, Utah, Wisconsin, and California; and from foreign countries such as China, the Philippines, Argentina and Uruguay. 

In this section my analysis focuses on the exhibits of the US states. For the purposes of this paper, my chief objective is to understand what exhibitionary styles and curatorial principles were employed in the education pavilion. As will become clear, this allows us to see what forms of attention were desired and produced as American education was presented to the world and its further advancement envisioned.

To be sure, linkages between education and social progress, as well as linkages between international exhibitions and social progress, were the fundamental constitutive elements of both the school and the international exposition as cultural institutions of significance in the late 19th and early 20th centuries. To highlight the point that the 1915 Palace of Education and Social Economy in San Francisco was designed to generate progress is not to reveal a groundbreaking, new historical insight. What is significant, in my view, is the means employed to produce this. Namely, the careful, considered manipulation of human perception, an interest that I have found crossing the domains of architecture, exhibition design, and pedagogy.

The central organizing principle of the exhibits of the American states was that each participating state would confine its exhibit to "one distinct system or process in which he

14 A separate pavilion for "social economy" was originally planned for the exposition, though never built. This resulted in displays relating to what was broadly referred to as "social service" (being both included in the Palace of Education and Social Economy) as well as in other locations such as in the Palace of Movable and in some of the Independent buildings (e.g. the New York City building). Additional education exhibits could also be found in other parts of the fairgrounds, though my main focus here is on those that were located within the Palace of Education. See Pope, Alvin E. (1915): "The Exposition - Its Purpose and How to Appreciate It," in: California Teachers' Association (ed.): Complimentary Souvenir Book: Fifty-Third Annual Convention National Education Association and International Congress of Education, San Francisco: Arthur Harvey Chamberlain.
exceeded; to one definite lesson which he was capable of teaching the world. In some measure, this selectivity and winnowing gesture stands in contrast to the comprehensive, all-comprehending viewing "as a whole" that was discussed in the previous section with reference to the architecture and color scheme of the exposition. Yet, we find that the kinds of attention to be produced were, in fact, quite analogous and that concerns about dispersal and concentration were pervasive throughout this particular palace as well.

The objective of having each state select systems or processes in which they excelled was that the exhibits of all the states together would add up to a cohesive display. The author of the US Bureau of Education's report on the exposition, Carson Ryan, reported that the organizers' goal for a "unified display rather than numerous exhibits" was "carried out consistently." This juxtaposition of "numerous exhibits" with a "unified display" suggests an interest in constructing a coherent visual (and intellectual) field. This concern was reflected in the careful orchestration that went into selecting exhibitors: Alvin E. Pope, the chief organizer of the education palace, is quoted by Ryan as saying:

"These exhibitions were restricted in order to avoid duplication and the visual exhibits were so assembled as to portray the salient features of modern American education. We have outgrown the old-style educational display consisting of comprehensive, duplicate exhibits, composed chiefly of pupil work."

Important to note here is the contrast between a concentrated visual field and an ill-defined visual field marked by duplication. Relevant to the St. Louis / San Francisco comparisons discussed earlier, the "progress" that had been made in exhibitionary practices by 1915 was portrayed as one of "maturity" and "growth", as in the claim "we have outgrown the old-style educational display". In Frank Morton Todd's official PPIE history, additional information is provided on why the older styles of educational exhibits were considered "immature":

"The world had outgrown the old-style display of pupil's papers showing how much like the copy book little Johnny and little Mary could write, and what long words they could spell at the age of seven years without getting them on the paper: for, people were beginning to say that the best spellers did not always turn out to be the best scholars. Moreover, with hard enough drudgery on the teacher's part it sometimes happened that a blankless prodigy in a most inferior school surpassed the best product of the good institutions. Such exhibits showed nothing valuable, and the public had found it out."

This passage, mindful as it is of public reaction to previous education exhibits, echoes the expectation on the part of the exposition's architects and color designers that PPIE visitors would be aware of the exhibition's design considerations and would notice the curatorial and aesthetic principles that were relied upon.

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61 This particular wording of the directive that was attributed to Alvin E. Pope, the director of the exposition's Department of Education, is taken from Ryan, W. Carson (1916). "Education Exhibits at the Panama-Pacific International Exposition," Bureau of Education Bulletin 1, 7.
62 Ibid.
63 Todd (1921), vol. IV, 35-6.
The "new-style" displays in the education palace had a distinct and explicit objective, one suggested in the demand quoted above that exhibitors present something in which they "excelled". Pope is quoted as also noting that each exhibitor was to "deal with the fundamental principles of education, illustrating the means used to develop a child into the highest type of citizenship." These 1915 educational displays were intended to highlight "excellences", with the notion of vertical ascension (of the "highest type") a key component of how this progress was conceptualized. Excellence and a striving toward "perfection" became the central lessons that were to be learned in the palace of education.

This attempt to construct a unitary visual field closely overlapped with what has been termed the "nationalizing synthesis" that marked American World's Fairs from 1893 on. How education displays could help achieve this is nicely explained in the official PPIE report published by the State of New York, where it was noted that:

It was Mr. Pope's intention in planning the organization of education at the Exposition to have the United States Bureau of Education exhibit the American system of education, for notwithstanding the diversity of administration and procedure in the several States, our nation has progressed to the point where it may be confidently stated that we have a truly American system of education, including the elementary, the secondary and the higher.

The decentralized nature of the American public education system has been a perennial concern of policymakers (one can look to the recent "No Child Left Behind" legislation to see a continuation of this anxiety). The 1915 presentation of "the American system of education" assembled a synthesis out of various parts, each of which, as mentioned above, highlighted work done to develop "highest types" of achievement. As examples, one can note that: Massachusetts decided to focus on vocational secondary education and textile education; New York chose to emphasize the "centralization of authority" that marked its school system; and, California turned its school architecture and the use of "educational exhibition pictures" as the state's strongest educational features. The "unity" that marked the US exhibits in the Palace of Education and Social Economy did not come from a standardization in terms of the styles of visual presentation, as in the case of the exposition's architecture and color. Instead, it came through the selection of "special" and "distinct lessons" which could be taught to the world and which could be synthesized to signify a national education system.

22 Ryan (1916), 8.
23 See Rydell / Foulding / Peile (2000), 5.
Tied into the preference for these "new-style" displays were concerns about fatigue that echo those voiced above. Alongside a desire to prohibit unnecessary duplications in the Palace of Education and Social Economy, it was noted in a State of Massachusetts report on the San Francisco exposition that "the exposition authorities had decided that it would be inept, inefficient, and unprofitable to attempt to have complete educational exhibits from each State." The partial, focused exhibit as opposed to the "complete", comprehensive presentation would be more rewarding, the suggestion being that less energy would dissipate and that concentration would be a more secure route to guaranteeing progress.

Similar principles and similar historical comparisons pervaded the Philippines exhibit at the Panama Pacific International Exposition. Given the extent to which the Philippine school system was integrated into the 1915 exposition, and a colonial mandate extended to American educators, there is a certain sense to including the Filipinos in what otherwise has been here a discussion of the curatorial organization of the "domestic exhibits" in the Palace of Education and Social Economy. In an official guide to the Philippine exhibits, visual style and the structure of the displays were directly linked to concepts of progress. It was noted that:

> Those who have visited exhibits from the Philippine Islands at other expositions, and particularly at the exposition held in Saint Louis in 1904, are likely to be impressed by striking differences in this exhibit. In former exhibits, emphasis was placed upon what is strange, curious or tousés in the Philippines — sometimes to startle people or to amuse them. The purposes of this exhibit along such different lines are self-evident: to give proper publicity to the eight millions of cultivated Filipinos. It is the purpose to show in what manner the Philippine public schools have fulfilled their task by giving enlightenment to the rising generation, and what may be the possibilities of the Filipino educationally, industrially, and as a people. 24

24 A fine example of the expansive US interest in Philippine education circa 1915 can be found in an article on the Philippine public schools that was featured in the complimentary souvenir book distributed to attendees of the 1915 annual conference of the National Education Association (held in Oakland, in conjunction with the San Francisco exposition). The article remarked that "Philippine schools employing 500 American teachers among their 10,000 strong teaching force... suggest that Philippine's directive carried some weight in structuring the Philippine exhibit at the PPIE. See article also noted three "principal features" of the school system, namely "the physical training is making for a better and stronger race, industrial and vocational guidance is providing for high home standards, and vocational guidance is providing for high home standards, and the academic instruction is the instruments of a great intellectual awakening." See Clyde, Frank L. (1915). "The Philippine Public Schools — Some Salient Features," In California Teachers' Association (ed.), 50.

Absent from the Filipinos’ 1915 display were the living anthropological displays that had been a key feature of the 1904 exhibit. At the earlier exposition 1200 Filipinos and Filipinas had been brought to Missouri and organized into villages that were to represent different stages of “civilizational” evolution. A model missionary school was displayed where loin-clothed Igorots – one of the higher-ranked ethnic groups – demonstrated their potential to be further civilized to President Roosevelt by singing “My Country ‘Tis of Thee”. The St. Louis / San Francisco shift was from an “attraction” that was “strange, curious or bizarre” and designed to “startle” or “amuse” visitors to an exhibit that would be a “proper” public presentation. The 1915 display was designed so as not to distract from the civilizing process underway. It would instead direct attention to accomplishments: to systems and processes, the “manner” in which enlightenment was being carried out. The display would also direct “proper” forms of attention – not the attention that would be seized by a startling, transient curiosity but attention that would be a more studied and reflective intellectual concentration.

The Design of Enlightenment in Individual Educational Exhibits

Motion pictures, slide shows and specialized lighting were among the key innovations in the education exhibits of the 1915 exposition. A 1916 US Bureau of Education report on the PPIE education exhibits recorded in its introductory note that “motion pictures assumed unprecedented importance at this exposition”. The Palace of Education and Social Economy contained seven motion picture theatres and “nearly every booth had automatic lantern—slide machines in operation at all times.” The 1916 account remarked that attendance was extremely high in the theatres and at slide shows – which were sometimes also referred to as “stereomagnographs”, a particular drum-type of automatic slide projector. Even though moving picture projections had been in wide popular circulation since 1896, it bears closely examining how the forms of vision and perception connected with illuminated and moving

18 Rydell (1984), 176.
20 Cray (1996), 344.

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images were understood and reasoned about by those who designed and commented upon the 1915 exposition.

Jonathan Crary argues that it was in the mid-nineteenth century, particularly with the invention of the stereoscope, that the "classical" understanding of vision as an external sense began to come undone. That two near-identical stereoscope images, when viewed properly, formed a single three-dimensional panorama seemed to increasing numbers of people to suggest that physiological activity was a key piece of vision. If the image produced was an active synthesis on the part of the viewer, this meant that theories of perception could move from an idealist notion of the Kantian "transcendental subject" towards a more materialist orientation that considered humans subject to historical conditions. Somewhat later in the century Edward Muybridge's well-known photographs of a horse in motion similarly disrupted the idea that there was a "naturalness" to vision and suggested that it involved active composition and not passive reception. The development of cinema further strengthened the emerging popular and scientific consensus that perception involved composition and synthesis. These principles seem to have informed the State of California's film exhibit in the Palace of Education and Social Economy, with - as we have seen in other domains - the activity of composition and perceptual unification being as-if raised a level and taken as the essence of how humans could grasp the broader social world.

California's theatre was reported to have the most elaborate of the education-related films and included a weekly program indicating, at half hour intervals, which cities or regions were being featured. It is important to note that these were not "educational films" in the sense of being designed for use in a classroom but were rather films of a "documentary" nature. The Los Angeles film, for example, consisted of seven separate reels, "each descriptive of a different phase of the educational work of that city." Even though lectures accompanied the films and the California exhibit also included miniature models to spotlight school architecture, it appears that, in a certain sense, the films stood on their own. The US Bureau of Education's report noted:

> Through these motion pictures it was possible for the visitor to the exposition to carry away a rather complete and accurate picture of actual school conditions in the State of California with considerably less danger of wrong emphasis than if he had tried visiting a few schools in person.\textsuperscript{21}

The concerns about inaccuracy of vision and perception that we see here are quite worthy of note. In the face of anxiety that visitors would assemble for themselves a faulty picture of the California schools, carefully selected sets of images were exhibited. Yet, rather than a single "documentary" film about the California school system, we find that various (silent)

\textsuperscript{21} Unfortunately, I have not been able to locate any surviving copies of the films shown in the California exhibit, nor, for that matter, films shown in any of the other exhibits.

\textsuperscript{22} Ryan, "Education Exhibits at the Panama-Pacific International Exposition", 26.

\textsuperscript{23} Ibid.
reels of footage were presented to visitors. This means that, as in earlier instances, we find the composite elements for "a complete and accurate" picture being provided—and provided in such a way as to ensure that visitors synthesized the correct sort of picture.

The manipulation of human perception through the careful use of light was also seen in certain of the exhibits of the Palace of Education and Social Economy. The Massachusetts booth was self-described as "unquestionably the most conspicuous and most beautiful of both State and foreign structures within the Palace of Education." Suggesting a coordinated design similar to that of the exposition as a whole, the report noted a "brilliant lighting effect" and "general color scheme" and added that the furniture and the "woodwork of all exhibit apparatus" were mahogany stained. Special lighting also featured notably in the New York State exhibit. To display what was referred to as the "centralization of control with the decentralization of service" the New York organizing committee exhibited a 34 by 27 foot relief map of the state. This 3-D map featured small incandescent lights representing various educational institutions in the state, including "at Albany a miniature model of the Education Building lighted at all times to show that the centralized educational administration emanated from this building." Other educational institutions would be illuminated in turn, with, for example, all the libraries in the state shown by little blue lights across the display. Electric lighting was, of course, well established in 1915, though the New York State report on the exposition, claimed credit for an innovation:

For the first time in the history of expositions, and doubtless in the history of the world had the principle of electric lighting been applied to a topographical map. This exhibit presented a new principle of exposition, adapted to the visualization of all manner of industries, products and interests, so that the exhibits became a study not only for those interested in the progress of education in the Empire State, but as well for all who were interested in history or presenting in a striking way information of whatsoever kind.\[5\]


\[6\] New York State Panama-Pacific Exposition Commission, State of New York at the Panama-Pacific International Exposition, 298.
The style of the display may have been "striking" and the exhibit may have elicited "comments of surprise and pleasure" as the report goes on to claim,34 however, even with this use of blinking lights, we are still far removed from the "startling" and the "over-stimulation" alluded to characterize the exhibits of earlier expositions. In fact, the illuminated relief model of New York State makes a good metaphor for the main thrust of the curatorial principles that organized the domestic exhibits of the Palace of Education and Social Economy. With the image of enlightenment spreading out from a unifying central point, the control over the ensuring progress could be "centralized", even as this progress would have various "decentralized" manifestations.

The Attention of the PPIE Spectator

The consideration given to constructing a coherent and progress-producing visual field at the San Francisco exposition was linked to the production of particular kinds of individuals. A set of suggestions from the chief organizer of the education building on how properly to "appreciate" the exposition provide revealing evidence of the kind of individuality that was to be fabricated through the conformities and coordination that targeted the masses of visitors. In a complimentary souvenir book prepared by the California Teachers Association, Alvin E. Pope addressed the educators who assembled for the 1915 National Education Association (NEA) annual meeting held in Oakland, California. His recommendations for a visit to the fairgrounds across the bay emphasized reflective solitary experience and the careful sustained attention of visitors.

To begin with, Pope advised, when visiting the Panama Pacific International Exposition one should "avoid a large party" for "one can profit more from being alone or with not more than two companions." Pope recommended the purchase of a guidebook and suggested that the NEA conventioneers begin with a "general view which will give an idea of its underlying principles". Just as Laura Ingalls Wilder had done, this first objective could be accomplished by taking one of the car-train tours of the fairgrounds. Pope counseled trips in this manner both by day and by night and wrote, "Do not hurry. Enjoy it -- you will absorb much."35 Following this, the visitor should proceed to a leisurely survey of the exhibit palaces. Pope then advised:

After this casual survey begin the thorough study of some particular exhibit of interest. Follow this up by an exhaustive study of as many exhibits as possible. You will find most of them arranged for the casual inspection of the general public, but containing information for the amateur, material for the professional and suggestions for the trained expert. Each visitor will find that he himself belongs first to one and then

34 Ibid., 300.
35 Pope, "The Exposition - Its Purpose and How to Appreciate It," 64.
Differing attentive styles were attached to the classes of visitors that Pope specified ("general public", "amateur", "professional", and "trained expert"). The "casual inspection" of the general public contrasted with the "effort and time" devoted to "serious study" that the professional and expert would bring to viewing certain displays. For Pope, extensive study was clearly an ideal that would follow the initial leisurely and casual survey of exhibits - exhibits which were arranged to be amenable both to this first kind of restful, leisurely attention and to a more sustained, enduring attention. Implied in Pope's scheme was the idea that "exhaustive study" would involve the expenditure of effort (and time), an acknowledgement that the "exhaustive" had the potential of being "exhausting" as well. Pope's touring instructions form a program for the management of a visitor's attention, beginning with the injunction that a slow-paced appreciation of the spectacle presented by the exposition ought to be something experienced individually or with two others at most. Careful study was presented as an excited objective towards which visitors should strive. "Your pleasure, appreciation and benefit is limited only by time, effort and capacity," Pope noted. As for Neuhau's visitor in the Court of the Four Seasons, prolonged reflection was a calculated "giving one's self over entirely" for the purposes of enlightenment and improvement. NEA conventiongoers were advised to "study the Exposition thoughtfully, and you will carry home much which will benefit yourself, your friends and the community."

The coordinated organization of the San Francisco exposition's architecture and exhibits, with its focus on proper forms of human perception, worked to construct reflective, concentrating individuals who could be agentive actors affecting both individual self-improvement and social progress.

**Spectators of Attention: The Montessori Demonstration Classroom**

Extant reports indicate that the Montessori demonstration classroom captured the most attention of all the exhibits in the Palace of Education and Social Economy.35 Over a period of four months, within a glass-walled classroom, a school for children between two and six years old operated and Montessori's methods were demonstrated to visitors. Maria Montessori herself was in attendance, though the school itself was run by her chief US representative, Helen Parkhurst. In an earlier publication entirely devoted to this particular

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34 [Ibid., 65.](#)
35 Ibid.

37 See, for example Hinkley, Frederick R. (1915): "A Day with Dr. Maria Montessori and Her Young Folk. Charley Is an Eyepooper for the Average Parent," *San Francisco Chronicle*, 11 September; Todd (1921), 66.
classroom exhibit I have made the argument that Montessori's theories about attention are more central to her pedagogical methods than is commonly recognized. I have also argued that the conjunction between what occurred in her classroom and what PIE organizers were trying to accomplish with regard to the management of human perception helps to explain the popular appeal and success of the Montessori demonstration. The educational system displayed in the Montessori exhibit made considerable use of objects and tasks related to these objects, such as lacing or appropriately sorting graded wooden cylinders. Like many other reports, Frank Morton Todd's official history of the exposition discussed this didactic material in relation to a concept of freedom. Her methods were 'intended to produce, not a repressed and standardized child governed from above, but an individual child, self-governed,' he noted. In a direct parallel with his description of the Exposition's color scheme, Todd described the physical apparatus of the Montessori classroom as "a matter of a designed environmental factor for a definite purpose." The interior décor of the Montessori classroom also received attention. A photograph of the classroom printed in the 1916 US Bureau of Education report bore a caption noting that "the color scheme was lavender; the furniture a pearl gray." The text that this image accompanied is unique in being one of the very few hesitant and lukewarm analyses of the glass-walled classroom. The author, W. Carson Ryan, wrote:

While the demonstration was carried out under such artificial conditions that it was difficult to obtain accurate impressions of the true value of the Montessori work, visitors could not but be impressed with the attractiveness of the surroundings - the harmonizing color effects; simple, tasteful furnishing, and the delightful manner of the direction.

Other reports on the demonstration are considerably more enthusiastic, frequently noting that the children were rarely distracted by the visitors - sources indicate that considerable numbers of spectators spent hours an end sitting in the auditorium-style seating that surrounded the classroom. The above passage from Ryan's report is useful, however, for indicating the extent to which the aesthetic principles discussed above pervaded even the evaluation of an innovative, modern teaching method. Ryan's concerns about artificiality interfering with an accurate picture notwithstanding, spectators of the Montessori demonstration classroom seem to have been well aware that they were present to a properly held and utilized attention.

"When you have solved the problem of controlling the attention of the child, you have solved the entire problem of education," the San Francisco Chronicle quoted Montessori as declaring.
at the NEA conference held during the PPIE. A minor but revealing textural difference appears in the version of the text that was published in the official NEA proceedings, where the "problem of education" is rendered as the "problem of its education," thus referring more specifically to the individual child rather than the problem of education in general. However, if we assume that the NEA proceedings are more accurate to what Montessori said, the editing of this declaration in the popular press can be seen to reveal the insertion of a narrative of social salvation. Properly controlled attention would be the cornerstone of a progress-oriented social order that valued and nurtured individuality and freedom. The slippage is entirely understandable as this is precisely what Montessori herself also argued. As she put it at a different point in the same address: when attention is properly directed, "then only is man revealed unto himself and begins to live." All of this suggests that the practices of attention (and the cultural and scientific discourses surrounding it) embedded in and circulating through the glass-walled Montessori demonstration classroom were strikingly in sync with the serenity, self-reflection, self-government and regenerative fortification that Eugen Neuhaus - as is noted at the outset of this article - saw being effected through the proper structuring of human perception in the PPIE's Court of the Four Seasons and across the exposition as a whole.

Conclusion

At San Francisco in 1915, a concern with manipulating the visual field appeared across multiple social domains. From the PPIE architecture, to the curatorial principles that guided the US educational exhibits, to the design of these exhibits and extending as far as specific pedagogical strategies, we see a widespread concern with manipulating spectators' perception so as to fabricate "proper" forms of human attention. This was an attention that would be fortifying and a vehicle of progress; it was to be an attention that would surmount distractions, be inured to over-stimulation, and prevent the scattering of human powers. Across these different cultural fields, careful planning and coordination evidenced the production of sustained, stable attention as an objective whose realization was tied to the making of modern individuals, modern forms of social organization and modern educational systems and methods. And, across all of these domains, human attention provided a surface and suggested techniques for engineering the certainty of progress.

In appraising the innovations and educational features of the 1915 Panama-Pacific International Exposition, these findings suggest that we go well beyond a recounting of technological and design "firsts" and consider the broader context of what the featured

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68 Ibid., 64.
innovations represented by fairgoers, spectatorship and the production of human subjectivity. A 34 by 27 foot relief map of the state of New York with a threefold vertical exaggeration, enough copper wire (it was claimed) to convey the electricity that would be needed for a city of 50,000 inhabitants, and a paper mache surface made from 300 pounds of pulped, discarded US currency is much more than a pathbreaking illuminated model.44 It is a display of cultural and educational ideals that becomes considerably more intelligible when we situate it in relation to what else was occurring at the San Francisco exposition with light and attempts to capture and focus the attention of visitors. This analytic strategy allows us to see the educational work of this early-twentieth-century international exposition as not simply inhering in the industrial processes, public health exhibits, and lecture programs. Instead, we can also see "educating" and the formation of human dispositions and modes of being in the very manner of how spectators were to experience the exposition.

The educational exhibits in the Palace of Education and Social Economy benefit from being similarly viewed in terms of the broader social and cultural context. The national synthesis that the US exhibits were collectively to represent speaks in one part to attempts to establish that the US had a "national" system of education. In another part, however, it speaks to particular concerns about the cohesion and fragmentation of human perception — the very conditions on which the discourse of a national system of education rested. The significance of attention to spectatorship at the 1915 PPE suggests yet another dimension in which international expositions are cultural productions of profound significance for understanding trends and transformations of the modern world.

44 New York State Panama-Pacific Exposition Commission, State of New York at the Panama-Pacific International Exposition, 298.
Résumé

San Francisco 1915

A l'exposition internationale de San Francisco 1915, la problématique concernant le contrôle du champ visuel et la manipulation de la perception humaine circulait à travers plusieurs domaines. De l'architecture de l'exposition aux principes principaux qui ont guidé les expositions éducatives américaines, tout comme les présentations individuelles, on observe un souci permanent de concevoir des formes appropriées de l'attention humaine. Cet article est une discussion sur les voies employées, à travers les différents domaines culturels, pour atteindre l'objectif clé qui était de maintenir l'attention soutenue et continue et le résultat escompté d'une planification et coordination attentives. L'attention humaine a fourni une plateforme d'intervention, a suggéré des techniques pour construire la certitude du progrès, et est devenue, comme l'article l'explique, l'une des préoccupations éducatives centrales de l'exposition de 1915.