Rationality, Governmentality, Natio(norm)ality?
Shaping Social Science, Scientific Objects, and the Invisible

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> Theoretico-experimental sciences are distinguished by the practice of making their version of "reason" depend on the power to "give reasons" for or to explain phenomena. This version of reason thus presumes the power of predicting outcomes, of controlling in order to replicate, or purifying to insure the implication of a theory – the power, in sum, to make a phenomenon "admit" its truth.
>
> *Lèon Chertok & Isabelle Stengers*

THE DISCIPLINE of education in Anglophone-dominant contexts has always grappled with a kind of status anxiety relative to other disciplines. This is in part due to the ways in which evidence has been thought about in the theoretico-experimental sciences relative to the ethico-redemptive ones. The former, as Chertok and Stengers (1992/1989) have already argued, have been dedicated to a purification process – the search for a single, causal variable to explain an effect that is replicable across contexts. The latter have had to face the problem of intersubjectivity and suggestibility. Because "the infant's relations with its caretakers are already characterized by what we should recognize as a form of suggestion" (1992/1989, p. xvii) the social sciences[1] which focused ultimately on human-to-human relations and sometimes via their objects, could not so readily make a phenomenon admit its truth via purification: "suggestion puts 'truth' in question, that is, it problematizes the possibility of constructing a theory on the basis of experiment or experience. Suggestion is impure; it is the uncontrollable par excellence" (1992/1989, p. xvi–xvii). The "heart" and "reason" dynamic that Chertok and Stengers identify as integral to the version of rationality produced within ethico-redemptive sciences at large also plays out in contemporary educational research. The complexity of the dynamic and the tendency toward mimesis of higher status disciplines periodically spawns new efforts to reduce conditions of proof to particular forms, indicated not the least by federal level policies in the United States that have found it necessary to issue statements and Q & A's about what evidence-based education (EBE) actually means:

> To say that an instructional program or practice is grounded in scientifically based research means there is reliable evidence that the program or practice works. For example, to obtain reliable evidence about a reading strategy or instructional practice, an experimental study may be done that involves using an experimental/control group design to see if the method is effective in teaching children to read. *No Child Left Behind* sets forth rigorous requirements to ensure that research is scientifically based. It moves the testing of educational practices toward the medical model used by scientists to assess the effectiveness of medications, therapies and the like. Studies that test random samples of the population and that involve a control group are scientifically controlled. To gain scientifically based research about a particular educational program or practice, it must be the subject of such a study. (Smith, 2003, p. 126)

Despite the excellence and profundity of curriculum studies based critiques of such logics (Lather, 2007; Taubman, 2009), the investment in EBE governance projects concerning a will-to-truth continues to hinge upon a series of broader and deeper assumptions about the nature of reality. This includes unspoken agreements in EBE regarding what "what works" means, what counts as empirical evidence, what constitutes the visible and can be counted or tracked, and what can become a "matter of fact" relative to a "matter of concern" (Latour, 2004) or a site for question-posing.

The apparent confidence and consensus in EBE policy and projects raises more questions than it resolves, however. At least two hundred years of debate over what science means and over one hundred years of debate over the efficacy of pragmatism cannot be made to disappear by declarations that attempt to dismiss the noise and generate an order that has not been universally agreed upon. As Daston (2000) has already demonstrated in regard to the biography of scientific objects, the enduring Aristotelian belief that insists that:

> science ought to be about regularities – be they qualitative or quantitative, manifest to the senses or hidden beneath appearances, causal or statistical, taken from commonplace experience or created by specialized instruments in laboratories – has persisted long after the demise of Aristotelianism. Yet regularity alone seldom suffices to pick out scientific objects from the ordinary objects of quotidian experience… (p. 17)

Sixteenth and seventeenth century studies, such as those of Francis Bacon, focused on anomalies, yet still claimed to be science. If regularity alone seldom suffices to pick out scientific objects from the everyday, then, it remains an important responsibility to interrogate the processes that "highlight some phenomena and occlude others" (Daston, 2000, p. 16).

This paper draws from several wider projects that historicize and nuance appeals to the empirical, to the making of scientific objects, and the nature of evidence from beyond the occidentalist penchant for Humean-Kantian debates and realist/idealist binaries. In particular, the wider projects examine ways in which occidentalist social sciences have tried to deal with both what is constituted as the invisible (e.g., forces, suggestibility, influences, etc.) and to develop new forms of rationality around scientific objects that do not remain stable when being studied. There is a rich, variegated, and often subjugated heritage in response to such issues.

The analysis that follows is, then, but one instance of an historical retrieval and counter-memory, pointing toward a moment when questions concerning the nature of evidence, of in/visibility, and of rationality presented themselves as of crucial importance to the direction

several related fields would take. By examining that which was considered to fall to the side of science, even of social science, it thus gives pause for thought regarding contemporary debates over educational science and research, such as around evidence-based education or assumed divisions between the quantitative/qualitative and empirical/conceptual. More significantly, it highlights some of the taken-for-granted parameters and horizons of enactment that inhabit how the study of policies, schools, curricula, and classrooms are today approached, pointing indirectly toward a less-considered set of spatializations and regionalisms in common strategies of analysis:

> Political theory has to attend to the emergence of political rationality in terms not of its rationality, or claims to reason, but in terms of modalities of operation. Behind political rationality does not stand reason, or rather, reason is not the alibi of political rationality; instead, political rationality has to do with the horizon of its enactment (Mendieta, 2002, p. 6).

It is here, in the slippage and the relation forged between rationality, governmentality, and nation(norm)ality that this essay hopes to expose some deeper stakes in past and present concerns with the nature of evidence and its shifting relation to discourses of vision and visuality.

Reapproaching the Invisible[2]

As part of challenging what can constitute a site of legitimate question-posing, I want to take the reader in this paper to a location that would potentially produce discomfort – the topic of death and the possibility of an after-life. Apart from us all finding out sooner or later our own answers to the questions that such pressing phenomena might pose and hopefully not in a macabre way, it's important to note that this topic was actually a central concern for late nineteenth- and early twentieth century scholars, as well as for later twentieth century continental philosophy, including the works of Emmanuel Levinas, Jacques Derrida, Michel de Certeau, and Michel Foucault.

In the United States, at the turn of the twentieth century, the question of death and the possibility of an active after-life that involved spirit-return were handed over to a famous Harvard philosopher called William James (1842–1910) to sort out. He accepted the challenge.

> Richard Hodgson died suddenly upon December 20, 1905. On December 28 a message purporting to come from him was delivered in a trance of Mrs. Piper's, and she has hardly held a sitting since then without some manifestation of what professed to be Hodgson's spirit taking place. Hodgson had often during his lifetime laughingly said that if he ever passed over and Mrs. Piper was still officiating here below, he would "control" her better than she had ever yet been controlled in her trances, because he was so thoroughly familiar with the difficulties and conditions on this side. Indeed he was; so that this would seem prima facie a particularly happy conjunction of "spirit" with medium by which to test the question of spirit-return (James, 1986c/1909, p. 253).

Prior debates over the nature of psychical research and whether psychical research was a science were brought to a point through this assessment by James. Which conditions of proof to affirm in the test of such a thesis were, then, parts of a longer dispute. In publications and internal communication of participants in the American Society for Psychical Research (ASPR) it was

clear that the debate hinged on how what was visible to some was not visible to others and whether a lack of consensus around visibility meant unscientific (James, 1986a/1909).

One can refer historiographically here, then, to such debates as concerning in part discourses of vision and visuality. By discourses of vision and of visuality, I am indicating thresholds of noticeability, not invoking an essentialized blindness/seeingness binary reduced to a physiological conception of the human. James' dilemma concerned more broadly, then, the stronger entrance of (beliefs about) the functioning of a sensorium into (beliefs about) knowledge-production in dominant locales of the trans-Atlantic North and confronted directly the previous elevation of an ocular portal (and its destabilization) in particular. The task James set for himself in order to "test the question of spirit-return," in regard especially to his friend Hodgson's status, thus landed squarely in the middle of centuries of prior disagreement about conditions of proof, discourses of empiricism, materialism, and spirit, as well as rationalism, consciousness, and the nature of the human.

The challenge that James accepted was also arguably conditioned by his previous responsibilities and interests. As already noted (Baker, 2009), James was at one point president of the ASPR and Richard Hodgson was secretary and treasurer of the same when he passed over suddenly, playing handball in New York city in his early fifties. Much of their professional interaction circled around the spirit-return thesis and its veridicality, and in their correspondence they referred to each other as best friends. After graduating with a Masters degree from the University of Melbourne, Hodgson obtained a law degree at Cambridge University and became involved with the newly-formed Cambridge-based Society for Psychical Research (SPR), earning a reputation as a psychic detective, an anti-spiritualist, and a fraud-buster who exposed mediums, clairvoyants, or prophets (in one case the claims of Madame Blavatsky – his most famous debunking). Hodgson was called upon in many such investigations and elaborated the devices and illusions used. After being asked to help the ASPR in New York, he moved there and became caught up in a project that would consume him until 1905 and apparently beyond. He was introduced to Leonora Piper, who had come to the attention of the ASPR through William James' wife, Alice, for her mediumship and other demonstrations. James encouraged Piper to focus exclusively on mediumship, and this became the site of subsequent investigations. She was taken across the Atlantic and tested extensively by the members of the Cambridge-based SPR and after passing all the contemporary fraud-detection tests of those involved, was eventually paid a retainer for her services by the ASPR.

Hodgson tracked Piper and her husband for over ten years, both personally and using other private detectives to follow and scrutinize them, trying to detect character flaws and marks of deception. Piper was eventually described as of humble background and of upright morals and standing. After years of analysis, Hodgson wrote what became known as his Confession of Faith, a long, multilayered article in the 1898 Journal of the ASPR drawing on transcripts from her trance sessions and years of tracking. Hodgson goes through all the available explanations for what he has observed, weighing their merits and limits in legalistic, cross-witnessing fashion. He concludes that he now believes in spiritism, because he can find no other explanation that fits better for what Mrs. Piper does and reveals.

The spirits whom Piper was said to channel across the years had various names and were called, tellingly, controls (i.e., the spirit who was in control of any others trying to get through from the other side and/or speaking and/or writing through the channel that Piper was taken to represent). The controls are spoken about in the archival documents as who, not as that or which, in the grammar and style one would speak about the embodied living. The first repetitive control

was known as Phinuit, presented as a highly entertaining Frenchman whose accent and sense of humor were often remarked upon by sitters (observers who were allowed into the trance setting and who sometimes subsequently wrote up their impressions). The Phinuit-control lasted for several years across the 1890s. A second control appeared after Phinuit. It was called the Imperator-band, believed by some members of the ASPR to be former members of the SPR who had passed over, with the dominant personality being called Rector and considered by some to be Frederick Myers, an SPR founder. Rector was like the director – he would determine whom of the others could come through and when.

James notes that Hodgson jokingly agreed with him that should he pass over first he ought to try to return through Piper to clarify once and for all the spiritist thesis (James, 1986c/1909). Eight days after his heart attack, Leonora Piper claims to be channeling Hodgson. James explains the transcripts that he reviews in his final *Report* are from the American sittings collated from December 28, 1905 to January 1, 1908. William, and sometimes Alice, attended the Piper-Hodgson sittings. "Hodgson" was described as eventually speaking in his own name without the conduit of Rector (the spirit thought to control things on the other side), with his name suspended in quotes in the transcripts to indicate uncertainty over the status. James read and wrote up his review of the transcripts in the same period as his thoughts on pragmatism, radical empiricism, and pluralism. They were published a year before James passed over, at which point another series of claims regarding James being channeled were set off up until 1930 (Blum, 2006).

Although James is an iconic and enigmatic figure in US-based history of social science today, there is very little sustained analysis of this series of events in mainstream disciplines. My interest here is not in who or what is right but rather that this topic was raised as a matter of concern in such high status circles. Its subjugation for much of the twentieth century tells us something rather than nothing and alludes to the epistemological structures that must have initially buried it.

In terms of reapproaching subjugated events, Foucault's toolbox is helpful here analytically and also as point of departure, for Foucault did not directly study James, psychical research, or the uptake of curiosity in what came to be seen as "invisible forces" and sometimes "the occult" in the United States. In Foucaultian terms, however, the way in which discourse produces its objects and rationalizes them, such as characterized across disciplines in *The Order of Things: An Archaeology of Human Sciences* (Foucault, 1973), his brief excursus into governmentality (Foucault, 1998), and the theorization of biopower, especially here as "to make live and to let die" (Foucault, 1988), remain well-suited to the topic. The cocktail combination of appeals to the rationalization of objects for study, governmentality (i.e., as govern-mentality, not as Government-ality), and biopower collectively produce by the twentieth century what I refer to as a concern for natio(norm)ality, a border-formation and second order normativity that assisted the crystallization of other territorializations and deterritorializations, including the divisions between the sciences and slippage and excess around them. Through an examination of debates over psychical research (today parapsychology), the in/visible, and whether the ghost exists and can be treated as a legitimate scientific object (i.e., verified), a redeployment of the connection between scientific objects, governmentality, and biopower becomes possible, offering new analytical leverage on what past and present debates over the nature of evidence raises and elides in social scientific thinking especially.

Rationality, Governmentality, Natio(norm)ality

In the much-cited chapter on governmentality, Foucault (1998) posits that at a fifteenth-century crossroad in Europe two discrete tributaries moving in different directions emerged in debates over how to be governed and by whom; the formation of great territorial, state- and colonial administrations, and how to be spiritually led (Foucault, 1998). Foucault's briefly-elaborated yet richly-textured notion of governmentality is both a necessary and inadequate vector, however, for approaching the formation and fabric of social sciences in the United States, and in this case what James called psychical research as distinct from psychical science. The difference lies in part in incommensurable versions of rationality that emerged in efforts to govern, disagreement regarding what counts as science and evidence, and the unique pathways to nation-formation that erupted across the Atlantic.

Such difference comes to the fore, for instance, in James' manner of approach to transcripts as technicalizing instruments and in his conclusions to the study of the Piper-Hodgson sittings. James explains against backdrop of much earlier involvement with Piper in his career that until the Spring of 1906 he had no sittings with her for nine years but kept up with records in the ASPR. Upon reports of Hodgson being channeled, James attended some of the sittings. The transcripts produced are taken not as evidentiary but as that which must be analyzed for incidences and events that could be seen as evidentiary, as good test cases, for deciding upon the spirit-return thesis. The second-order normativity embodied in the approach – that there are conditions of proof for what can count as proof at all – places most of the transcribed sessions outside of detailed focus. Some remain, however, in the *Report* for instructive purposes. For instance:

RH: Did you get my messages?[3]
WJ: I got some messages about you are going to convert me.
RH: Did you hear about that argument that I had? You asked me what I had been doing all those years, and what it amounted to. [R. H. had already sent me, through other sitters, messages about my little faith – W.J.]
WJ: Yes.
RH: Well it amounted to this, - that I have learned by experience that there is more truth than error in what I have been studying.
WJ: Good!
RH: I am so delighted to see you to-day that words fail me.
WJ: Well, Hodgson, take your time, don't be nervous.
RH: No. Well, I think I could ask the same of you! Well, now, tell me, - I am very much interested in what is going on in the society, and [Frederick] Myers and I are also interested in what is going on in the society over here. You understand that we have to have a medium on this side while you have a medium on your side, and through the two we communicate with you.
WJ: And your medium is who?
RH: We have a medium on this side. It is a lady. I don't think she is known to you.
WJ: You don't mean Rector? [another control who appears through Mrs. Piper]
RH: No, not at all. It is -------- do you remember a medium whom we called Prudens?
WJ: Yes.
RH: Prudens is a great help. Through Prudens we accomplish a great deal. Speak to me, William. Ask me anything. What I want to know first of all is about the society [ASPR]. I am sorry that it could not go on.

WJ: There was nobody to take your place (James, 1986c, p. 324).

In a later moment, Alice James sits with William for one of the sessions and poses her own questions.

WJ: Hodgson, what are you doing apart from Mrs. Piper?
RH: Why, I am working with the society, William, trying to reach other lights, trying to communicate, trying to get in touch with you all.
WJ: Why can't you tell me more about the other life?
RH: That is part of my work. I intend to give you a better idea of this life than has ever been given.
WJ: I hope so.
AJ: Hodgson, do you live as we do, as men do?
RH: What does she say?
WJ: Do you live as men do?
AJ: Do you wear clothing and live in houses?
RH: Oh yes, houses, but not clothing. No, that is absurd. Just wait a moment, I am going to get out.
WJ: You will come back again?
RH: Yes.
Rector: He has to go out and get his breath (James, 1986c, p. 330).

Besides the entertaining content, especially if one considers why clothing would be any more absurd than housing "on the other side," the non-selected transcripts are important to consider here. The nature of Alice and William's questions indicate something rather vague but significant about the commonsensical role of the visible and invisible in truth-production. They gesture toward the different conditions of objectification and unique pathways to science-formation already aggravating the disconnect between the nascent theoretico-experimental and ethico-redemptive sciences.

The Elevation of an Ocular Portal and Objectivity in Mental Representation

The conditions of objectification were tied historically to a concern for appearances, for what to make of that which seemed present and visible to the naked eye of the sighted observer. For several decades now, however, critiques of ocularcentrism in occidental thought have been well-formulated. The historicizing literature generally follows the Philosophy 101 arc – from ancient Greece to the nineteenth century West – pointing up shifting inscriptions of being, truth, light, vision, and knowing in different epistemes (Jay, 1993; Levin, 1997). The role of what are now called the senses in epistemology, and especially the eyes, has more recently been attributed to North Africa, particularly cosmologies circulating within Egypt, subsequently modified by Aristotle, whose preservation and reinterpretation as text is then attributed to Islamic scholars and Celtic monks, and thereby reintroduced into medieval Latin Europe where Aristotelianism flourishes among the Scholastics (Bynum, 1999; Clark, 2007). The difficulty of "looking backwards" as though a continuous line has been in place is, however, as Foucault (1973) noted part of the problem – and expectation - of a modern episteme, where single origin is sought and

continuous sequencing required, where the notion of continuity is protected and located in the generationalism of the conscious, human subject.

As Clark (2007) has already pointed out, though, ocularcentrism has been on the defensive for more than a century:

> mirroring, imaging, and anamorphosis were all part of the reconceptualizing of vision that was fundamental to the psychoanalytical theories of Jacques Lacan. Richard Rorty's influential assault on modern philosophy was built, likewise, on undermining its dependence on the mind as the 'mirror' of nature. Above all, perhaps, thanks to developments in art history, visual anthropology, and visual hermeneutics we now take for granted the constructed nature of vision and the extent to which visual perception and visual meaning are fused. (p. 9)

This fusing, especially of optical theory with cognitive philosophy Clark attributes in part to the pivotal role of "the tenth- to eleventh-century Islamic scholar," Alhazen, who characterizes vision as transmission of image or picture through the optic nerve to the brain – a belief infused into medieval and early modern thought. A shift from attempts to make linear perspective equivalent to vision to the idea that vision itself was pictorial was facilitated by the idea of a point-by-point mapping onto the eye of rays of lights transmitted from objects along a "visual pyramid." Alhazen suggested that after leaving the object as a mosaic of visible color and light the custodial power of the optic nerve preserved the picture with perfect integral order to reach the forefront of the brain intact (Clark, 2007).

Key here is the cosmological assumption that drives the process of attribution: "That the entire process was dictated by causal demands that made each form in the sequence a cause of its successor and an effect of its antecedent also helped to ensure that the picture of reality occurring in the brain was veridical" (Clark, 2007, p. 16). Perceptual certitude becomes assured because categories or species are taken as natural signs of their objects, making the external object, the species, and the mental representation of it ontologically continuous. The integrity and coherence of the image between object and brain was taken as a radical new line of thought in which it was postulated that if things external to us "are able to reproduce their essential qualities in our senses and minds, then the content of the mind is assuredly objective" (quoted in Clark, 2007, p. 16).

Time, Space, Observation, and Object-making

Even if, though, ocularcentrism is dubiously flattened out as a singular historical category and rendered backwards as that which links medieval and early modern sciences, the task for James is not the same as for Alhazen, Galileo Galilei, or the seventeenth- and eighteenth-century Christian scholar, Sir Isaac Newton. Newtonian conceptions in particular shift the grounds upon which claims to objectivity are made, especially in regard to time as linear, space as place, and the observer as distant. For example, in "Melting Boundaries: Subjectivity and Intersubjectivity in the Light of Parapsychologial Data," Walach, Schmidt, Schneider, Seiter, and Bösch (2002) set a date for the transformation that bequeaths modern science a set of assumptions about space, time, and observation: 1336. Here, they argue that Francesco Petrarca, who they count among the inaugurators of the Renaissance, wrote a letter to his teacher and friend, the Augustinian monk Dionigi Roberti da Borgo San Sepolcro, in which he described his experience when climbing Mt.

Ventoux at the outskirts of the Alps near Avignon. In a rather grandiose gesture, his description of the splendor and thrill of seeing a landscape from a distance as opposed to being immersed in it is positioned in the following way:

> And for the first time in recorded Western history, an individual conscious subject became aware of perspective of distance and thereby of space and time. This experience and its publication marked the beginning of the modern concept of space. It made possible the concept and practice of perspective in painting and thereby marks one of the most prominent and least questioned presupposition of the modern way of seeing and understanding the world, ourselves and others: that we as subjective observers are distant from what we observe, from other observers, and from the world. It marks what later came to be called the separation of subject-object, and this separation presupposes a conscious understanding and a concept of space. Petrarca's experience is a milestone for both, and from this experience the rise of modern consciousness, or what Gebser (1985) calls the perspectivistic or mental structure of consciousness, began. (Walach et al., 2002, pp. 72–73)

While the single origin that such an account encourages is questionable, it is important to underscore the latter of the presuppositions that Walach et al. raise through this vignette. They argue that the Petrarca experience indicates not only that the foremost and most important tacit presupposition is that the observer and the observed, subject and object are distant, but also that with this presupposition comes the belief that subject and object do not directly influence each other. They note the follow-through of this presupposition - that in the jargon of modern physics, the locality thesis asserts that all causes are now local, and non-local distant causes thus become a scientifically obscene notion. In more contemporary terms, Petrarca's experience would be theorized, contra Alhazen, through photons: Petrarca could see the distant landscape as distant because photons are carried from the object of perception to the perceiving subject where they cause a complex perceptual image to arise:

> Were it not for the many photons traveling the distance, we could not see at all. Thus, the cause for our seeing objects are not the objects themselves, but the photons, which, locally in our retina, cause a perceptual image, which by our brains is structured into a percept of the object. Distance, then, has become some general objective category with Petrarca's experience, and a lot of scientific thought and effort is poured into the question, how causes can bridge distances. (Walach et al., 2002, p. 73)

Walach et al. argue that time also becomes a new element here. It is not as for St. Augustine, for instance, a category of the soul, of inner experience. Rather, time also becomes something external and inextricably connected with space – the traveling photons take time to cross the distance hypothesized as a gap, marking absolute time. In contemporary theories, nothing is supposed to be faster than light,

> and thus light, or in other words, electromagnetic signals, mark the boundaries of the time arrow as well as of the space which can be bridged by it. Time and space, then, are seen as something absolute, outside of our consciousness, rather categorical, absolute presuppositions in the same sense as Aristotle or Kant used the notion of 'category',

> outside of which we cannot perceive, exist, think, let alone gather knowledge. (Walach et al., 2002, p. 73)

Walach et al contend further that the concept of Nature and Universe that eventuates, for example, via Descartes and then Newton, is prepared for through dualisms that continue to assume space and time as objective phenomena. The Cartesian distinction between matter ("extended thing – *res extensa*") and mind or consciousness ("thinking thing – *res cogitans*") assumes matter as already involving an implicit concept of absolute external space such that Newton's codification was only a prolongation and logical extrapolation of Descartes' concept of matter. "Thinking things" are characterized by having or producing thoughts "which are not in a specific place or localizable, but thoughts come in sequences. Therefore, time is intricately connected with the life of the mind, or, in other words, time is the mode of the mind" (Walach et al., 2002, p. 74). Contra the Scholastics, then, Descartes introduces a split of kind and substance between matter and mind - mind and matter are not two aspects of one substance but categorically different, marking unique realms of Being. While Walach et al. do not consider the later writings of Descartes, such as the *Passions* in which the interpenetration between the realms is more tantalizingly gestured at, the structural separation is what makes the claim to interpenetration recognizable in the first place.

Moreover, they argue that, via Newton, Petrarca's experience is made into a kind of scientific law. Absolute space is posited as something, and a something in which things are ordered, placed, and stowed away. Relations between things became secondary to this placement of objects in absolute space so, in analytical terms, objects become primary and relations between objects follow. In the process of these calcifications, the very act of experiencing becomes redefined:

> A subject experiencing space and matter and objects as distant and outside of itself cannot but take this act of experiencing as something different from the object. Thus, positing material objects out there in an absolute space, which Petrarca did implicitly, and Descartes and later Newton, did explicitly so, is tantamount to positing mind or consciousness as something completely different from material objects. (Walach et al, 2002, p. 74)

As founding assumptions within shifting conceptualizations of rationality and the new procedural relation between knowledge, truth, and right, such themes explicitly guided the appeal to rigorous methods or implicitly inhered in them:

> This dualism between matter and mind has since haunted modern science. While science proper just strode along the path delineated by Newton, regarding only material objects sitting in absolute space and disregarding consciousness, the humanities have ever more tried to adopt the effective methods of natural science to understand consciousness. The irony and dialectics of that process is that the very philosophy Descartes used to find a firm foundation for science and consciousness at the same time, seems to eradicate exactly the foundation from which the whole process starts: mind and consciousness as a separate ontological substance or category…. But even if modern scientists often do not reflect on those presuppositions of their work and do not take a definite stance, or adhere to a vague and implicit materialism in their work, the methodological dualism introduced

> by Descartes is still the necessary precondition even of the hardest science, namely physics. Physics always presupposes some conscious observer, who in the equation of physics, is outside of the system itself. (Walach et al., 2002, p. 74)

For a Galileo, Descartes, or Newton, then, in postulating gravity as an invisible force that brings a discrete apple into contact with a discrete ground surface, as viewed by the outside observer the question was not whether there was such a thing as apple or earth but rather what mediates their contact. For James, the first question in the spirit-return thesis arose at the level of legitimacy of the object, not simply of relations between a priori objects. Moreover, the discourse of visuality and its role in veridicality changed dramatically by the turn of the twentieth century - confidence in the integrity of mental representation, its neutrality, has wained, while the mechanism of sight's formation has been transformed (Crary, 1999; Foucault, 1973).

Destabilization of an Ocular Portal and Subjectivity in Appearances

James argued, for instance, that maturity brought a development away from thought in terms of pictorial imagery to thought in terms of word-based language and, in particular, sentences. While this has also been posited as a broader Christian-based disciplining of the pictorial as the feminine, marking the turn away from iconography a turn away from domains of expertise historically associated with the feminine (Clark, 2007), the separation of words from things generated complexities that included and exceeded concerns predicated on dual-sexed models of World (Foucault, 1973). In particular, it bequeathed an orientation to knowing that in refusing revelation as a pathway on the one hand (or at least modifying what were previously coded as revelations into being coded as egoic projections of an unconscious), accepted on the other hand the disturbance in the ontological continuity of the external object, the species, and the mental representation. This required a search to restore the cause-effect sequence through a different mechanism, that of public corroboration - of the match between the word and thing, of language as representation of representation, and hence the role of transcripts in mediating new possibilities for "visibility" or appearances.

The difficulty in the spirit-return thesis, however, was the apparent absence of the thing to which to match the words. Compounding this is also, for James, the possibility of non-discreteness – a "spirit" either speaking through, inhabiting, being channeled, interpenetrating, or co-mingling with a subject already positioned as "medium" and "in a trance state" complicates any search for mechanical explanation if the object is legitimated. What would one say was Leonora Piper's "self" in such a circumstance? How would the medium that Hodgson claims to make use of on the other side be verified and tested? Where would the discrete locus of origin, and if not origin then cause, for the communication be placed?[4]

James' dilemma in deciding whether to confirm or deny the spirit-return thesis not only confronts these obstacles to knowledge-production and object-verification in the wake of new claims to perspectivalism and subjectivity but also furthers specifically modern ones concerning the nature of attention. As Crary (1999) argues, attention becomes a specifically modern problem only because of the historical obliteration of the possibility of presence in perception; attention will be both a simulation of presence and a makeshift, pragmatic substitute in the face of its impossibility. As noted above, for Alhazen, a shift from attempts to make linear perspective equivalent to vision to the idea that vision itself was pictorial was facilitated by the idea of a

point-by-point mapping onto the eye of rays of lights transmitted from objects along a "visual pyramid." By the twentieth century, with the break in confidence of vision's neutrality and new theories based on traveling photons for the mechanism of sight, shifts in the pathway to knowledge-production eventuated. The rise of physiological optics across the nineteenth century displaced models of vision that had been predicated on the self-presence of the world to an observer and on the instantaneity and atemporal nature of perception.

In addition to the above difficulties James faced, then, other consequences of such shifts included the destabilization of routes to a metaphysics of presence, an attention-perception-vision-presence problematic that was being studied anew. The emergence of attention as a model of how a subject maintains a coherent and practical sense of the world generated models of truth- and knowledge-production that were not primarily optical or even veridical. Normative explanations of attentiveness arose directly out of the understanding that a full grasp of self-identical reality was not possible and that human perception, conditioned by physical and psychological temporalities and processes, provided at most a provisional, shifting approximation of its objects (Crary, 1999, p. 5).

James' previous lectures and publications on exceptional mental states (1983/1896), on "two supposed objections" to human immortality (see 1986b; 2009), on varieties of religious experience, and his essays on radical empiricism (1912), indicate his willingness to engage this new research, to see beyond "seeing," and to refuse to be wholly located within the camp of those he called the physiologists and their Other, the Absolutists. The direct engagement with the problematic of attention, especially in his analysis of the research done on hypnosis, had already modified and complicated, then, his orientation to discourses of vision and what it became possible to "see" with the eyes closed, in "altered states," or under a different model of attentiveness.

Conclusion: Horizon of Enactment, Lines of Flight, and the Quandary of Object-making in the Face of "the Invisible"

A case can even be made to the effect that the rise of modern social theory…is intimately connected to the development of the nation-state and in some ways has been helpful to it (Day & Thompson, 2004, p. x).

After a series of convoluted arguments in which James self-regulated his proximity to the term rational, he concluded, hesitantly, that the spirit-return thesis in this case could not be verified and that it was a question for posterity, which may in due course overturn his conclusions if the mass of cognate evidence was to be considered rather than isolated transcripts or incidences. In the end, the breakdown of the transcripts suggested to James not that the model for vision and condition of proof was inadequate to the specificity of the subject-matter but that the subject-matter did not exist. What is one to make of this, then, beyond seemingly internal disputes within a discipline or titillating fascination with "the occult" among a trans-Atlantic scholarly elite?

There are multiple possibilities for considering the implications and impact of James' conclusions amid horizons-in-the-making and their seepage. Among the multifarious potentialities, they include and gesture toward: 1) a more postcolonial orientation, such as the simultaneous protection of whiteness and Westerness that comes with deontologizing the ghost and subtly attributing belief in it to a pagan exoticism - distant, dark, and/or irrational; 2) a more

sociology- and history of science orientation in which knowledge-production within a modern episteme sees projection of science and the visible *as* the corporeal governing the veridical (i.e., the corporeal-as-density is positioned as holding the final card), thus creating new versions of anomaly and non-scientific or quotidian objects (Daston, 2000; Latour, 2007); 3) a more Foucaultian orientation focused on bio- and thanatopower in which the body becomes the slate for *étatisation*, for studying life in terms of capacities and *which* capacities to maximize or invest in, including a potential capacity for life beyond the grave; or 4) a more de Certeauean orientation in which James could be seen as defending an inaccessability confronted, keeping the veil in place, which in turn aids the formation of "mystics" as a separate and abjected field of interest– a research pursuit, not a science.

I suggest here, however, that at stake amid such interpretive possibilities is a broader and deeper horizon of enactment in (non-total) formation that James' rigorous analyses open a window onto. A *religion-science-nation-West horizon* has to be both projected and protected in order for other kinds of status anxieties to be assuaged beyond disciplinary ones. Several of these entanglements are worth elaborating in order to delve more deeply into what was and is thought to be at stake in disputes over the nature of evidence and its relationship to the in/visible.

It is not, for instance, until the twentieth century that a category called World Religions came into existence and it is across the nineteenth century that the previous taxonomic quadratic structure for defining nations and peoples – Christians, Jews, Moslems, and Others (often called heathens, pagans, and idolators, de-capitalized) was modified. Masuzawa (2005) argues that the modification concerned the reworking of the boundaries of the West through an Indo-Aryan turn that was accompanied by the Semiticization of Judaism and Islam and a German interest in Sanskrit. The Christian West needed to create a new, bleaching narrative about origins and at the intersection of comparative philology and comparative religion it was found(ed) (Masuzawa, 2005).

In his genealogy of the terms religion and mysticism, King (2005) makes both a similar and different point – that the labeling of Christianity as a *religion* that attempts to dominate village life, especially through the medieval period, meant that Christianity had become the reference point for what constitutes a religion. *Religio* as tradition and as "to close" (such as to close eyes and ears for revelation or to close into secret initiations) in ancient Rome was transformed into *religio* as "to bind" in the medieval period – to a set text, a series of rituals, and presumption of shared beliefs that could be referred to systemically. That religion could become distinct at all, separated from other possibilities and treated as a category rather than as way of life suggests not a disciplining of Christianity for King but a move into a new colonizing mode of occupying the point of reference, for organizing all comparisons. While Masuzawa sees secularization as a torsion within Christianity, which masks European universalism in the language of pluralism, King argues that secularization arises out of a public/private division in which the domination of the index of what counts as a religion is placed in association with the private, the irrational, the mystical, and the feminine. Hence, even when or where Christianity is pushed to the side, it still dominates the criterion for determining what counts as public and what private amid nation-formation – what one by extrapolation might think of as natio(norm)ality – the regulation of "public norms" in the governmental projects of populational management.

For King, the nations that form the area known in the nineteenth century as Europe were dependent in part upon prior obsession with norms indebted to religious homogeneity – the belief in a shared essence emerges around "to bind" and especially, but not only, around Protestant and Catholic versions of what it meant to bind. More strongly, King posits that it was religious

particularity as viewed through Christian theological templates that enabled the idea that nations could operate as enforced groupings with constitutional boundaries. With the Enlightenment, "the mystical" becomes relocated, ejected within the messy intersection of religion-nation-rationality, the mystical is separated from science and literature, attributed to the East, to the invisible, the personal, to that which cannot be publicly corroborated. At the same time, the mystical is posed as already existing within the West's story about itself, repressed as pagan or occult – by extension one might say that "the mystical" operates as the unconscious of the West, the unknowable and unfaceable alterity within and without.

The social sciences in the United States interpenetrated a unique nation-building project that constitutionally rejected both monarchy and conflation of Church and State, however. The separation that Foucault (2005) posits in his *Hermeneutics of the Subject* lectures between religion, philosophy, and science remains questionable, even within that juridical originality. In the US, the interpenetration of religion, philosophy, and science in the nascent disciplines now known as social sciences (and their margins such as psychical research) set the stage for the continuous debate over the nature of evidence, obfuscating that which Foucault posits as discrete domains elsewhere. The challenge James set for himself and the dilemma and tensions he referenced around it were legitimate ones for the time and, in different ways, still now. Confirming or denying the ghost as a scientific object to be studied thereafter meant thinking through profound cosmological assumptions, engaging, for instance, with such an apparent abyss as the after-life, unique models of causality, and the "mechanics" of invisible objects. To affirm the ghost would potentially threaten the neat packaging of nascent disciplines trying to present themselves as sciences, as well as potentially undermine the presumption of a finite, this-worldly horizon, *and* trouble the enforceability of boundaries around such entities as geopolitical territories, religions, and selves. This was the uneasy dilemma within which James found himself located as adjudicator. Moreover, if the ghost is verified as a scientific object (i.e., not subjected to consideration of whether it exists but continuously analyzed for its attributes), then the reinforcement of a West/Orient division upon which James comments directly elsewhere (e.g., *Talks to Teachers,* published 1899) is also at stake – the borders around the stereotype of the Orient as mystical, as past-life oriented, as transcendentalist would become blurred.

The interpretive possibilities briefly alluded to above cover quite a range and are not easily settled or reduced. The above layers of analysis thus enable different and almost inexhaustible orientations to the question of why it would matter whether there was such a thing as a ghost. They open onto all the problems of borders, territoriality, porousness, intersubjectivity, and suggestibility that now mark the ethico-redemptive sciences, their inscription as Western, and the (un)availability of authenticity and purity in academic inquiry that generated a different pathway to object-making than the theoretico-experimental sciences, including a penchant for "heart" and "reason" rationality in order to manage the conflicting trajectories infusing possible "perceptions."

The bricolage of interpretive possibilities accounts in part, then, for several contemporary issues in social science research more broadly and educational research specifically. In regard to the former, the marginal position of psychical research relative to other social science projects can be understood beyond the usual framing - less in relation to other disciplines, their mastery of "empirical" conditions of proof, and technicalizing instruments like transcripts that render the (presumed) invisible visible and more in relation to onto-theo-philosophical regionalism in which "the mystical" comes to be redefined, separated from science, from realism, from literature, and from the West, while operating from "within" other social science disciplines as a

necessary yet subordinate, constitutively unstable node in the new logics of perception. Significantly, that very important but difficult to capture sensibility of the excess that quantitative and qualitative methods can never seem to represent in their scales or interview protocols remains a key thematic that is integral to the double-movement around the requirement for "empirical evidence" and perception of its ultimate inadequacy. In regard to the latter, to educational research more specifically, I suggest here that this active sublation of what became the invisible-mystical couplet, a sublation whose effects actually exceed discipline-specific debates and James' work, subtly conjoins more than separates contemporary assertions of scientific-based research *and* today's repetitive critical theoretical and post-foundationalist critiques of EBE as reductionist and inappropriate to its social scientific subject-matter.

Notes

1. Chertok and Stengers refer to the ethico-redemptive sciences, and this includes what in the United States is called social science. In some continental European literature the classification is sometimes rendered as the human sciences, and in other academic locales, the arts, humanities, and social sciences are not separated out. I am using ethico-redemptive and social sciences interchangeably here.

2. For the purposes here, it is important to understand the relation to the term invisible. Invisible does not here remain synonymous with absence. Rather, the "it" of the invisible is still configured within a metaphysics of presence as identifiable as such. It refers more broadly, then, to what Diane Coole (2000) calls the politics of negativity and is related obliquely to what Michael Sells (1994) calls the ineffable and the strategies of performative apophasis that mark mystical languages of unsaying. The tactics developed across the nineteenth century to speak of or identify a presumed invisible we are still deploying. While this paper does not claim to be beyond their play, if not their necessity, it is pertinent and timely to think more deeply about the tools upon which we rely to make judgments about matters of concern, justice, quality, and equality.

3. RH = "Richard Hodgson"; WJ = William James; AJ = Alice James.

4. James popularizes Peirce's term pragmatism, and Peirce subsequently deploys pragmaticism to distinguish his own philosophies from others that had become associated with pragmatism. Jamesian pragmatism disarticulates origin from cause and is built around the corridor metaphor – different rooms can house different ways of seeing, but the corridor through which all must flow represents a kind of second order normativity that anchors the metaphor. See James, William. 1931/1907. Pragmatism: A new name for some old ways of thinking: Popular lectures on philosophy. New York: The Riverside Press.

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