



Issue No. 25 2014 — New Immaterialities

Immateriality, Affectivity, Experimentation: Queer Science and Future-Psychology

By Lisa Blackman

Introduction

During the nineteenth century scientists, philosophers, artists, engineers, medics and fascinated audiences were interested in phenomena and experiences which appeared to confound, disturb, disrupt and unsettle distinctions between the self and other, inside and out, natural and cultural, real and unreal, material and immaterial, subjective and collective and past and present. This included mediumship, table-tilting, rapping, hypnotic suggestion, telepathy, hallucinatory phenomena and other unusual entities and processes. These experiences have largely now become the subject and object of a particular research field within psychology and the cognitive sciences, known as the "psychology of anomalous experience." However, their mystery and puzzling and enigmatic status continue to engage our imaginations and carry longstanding reflections related to the question of what it means to be human, what it means to be embodied, and what remains inexplicable and un-representable. I will use the term immateriality in this paper to describe these processes, practices and phenomena; as in its usual definition immateriality refers to processes taken to have no material body or form (also to be unseen, invisible or ghostly). One common example related to this version of immateriality is that the mind is immaterial (related to ideation) and separate and distinct from the body as a material substance or process. The designation Immaterial also often assumes that something is of little or no relevance or consequence. These are all assumptions I wish to challenge. I am mindful that the term immaterial also has other genealogies within contemporary philosophy and media and cultural theory, which challenge this thinking. These are the subject of other papers in this special issue, and which this paper I hope can be read in dialogue with.

I want to start by reflecting on what is articulated by the term, new, in *New Immaterialities*, the focus and title of this special issue. The prefix *new* suggests a turn to something overlooked, obscured, undiscovered or genuinely new in discussions of power, technology, the human and non-human, the body and subjectivity, for example. This has now become familiar terrain across the arts, humanities and social sciences, with increasing attention being paid to what are taken to be common ontologies emerging across science and the humanities. In a special issue on Affect, for example, I argued with Couze Venn that interest in the themes of immaterial and affective labour and the capitalization or economization of affect and emotion through teletechnologies and a multitude of therapies have drawn attention to affect as a phenomenon in need of fresh study. Advances in the fields of genetics, the biological sciences, mathematics, quantum physics/ the physics of small particles, neurosciences and media and information theory have contributed to an epistemological shift. In its wake, there are seen to be common ontologies linking the social and the natural, the mind and body, the cognitive and affective, the material and immaterial, grounded in such concepts as assemblage, flow, turbulence,

emergence, becoming, compossibility, relationality, the machinic, the event, the virtual, temporality, autopoiesis and the informational, for example.

These common ontologies have created some of the conditions for new research traditions and fields to emerge, often articulated as "turns." One example of this is of course the turn towards "New Materialism," a turn that although subject to critique (see Ahmed) has provided a rubric and focus for debating questions of ontology and for encouraging a rapprochement with the biological and life sciences (see Rose and Abi-Rached). This is often framed as bringing an end to particular kinds of critique and a move towards developing a closer, sensitive and intimate connection with science (Wilson). Often turns are not just marked out as particular research areas, but register "various paradigmatic breaks" with the past (Wetherell 350), wearily reproducing the very progressivist and linear narratives that have been reworked over and over in our critical thinking. Rather than attending to the more "complex and contested process(es) of iteration and transformation" (Kember), turns assume movements from one episteme to another; from one set of theories, concepts, methods and explanations to others. The rejection of the idea of a turn is explored in my book Immaterial Bodies: Affect, Embodiment, Mediation through a genealogical method of inquiry, which also recognises that as well as historical discontinuities one can also examine those aspects of historical continuity that are passed and transmitted through silences, gaps, omissions, echoes and murmurs. This is more akin to a hauntology, which recognises the disjointedness of time and space and how, as Karen Barad in her later reflections on hauntology argues, what we might witness are rather "entanglements of here and there (and) now and then" (244).

As Christina Hughes and Celia Lury similarly argue, "rather than the currently ubiquitous narratives of "turns" with their endless twists, ruptures and sudden encounters, such returns are products of repetition, of coming back to persistent troublings; they are turnings over. In such re-turnings, there is no singular or unified progressive history or approach to discover" (787). In previous work, I have also drawn on Isabelle Stengers, who has advocated a "going back" in order to resurrect archives, figures and theories that have seemingly been forgotten. She cogently shows how reversing the logic of scientific invention enables one to see, in a contemporary light, how "questions that have been abandoned or repudiated by one discipline have moved silently into another, reappearing in a new theoretical context" (49). She argues that it is never simply the case that questions have been definitely abandoned or refused. As I argue, what we might be more likely to see is the way in which questions are slightly modified or translated, or particular theories exist in a dynamic relationship with those that elide or disavow the claims they might make. This is the "background context" that Vincianne Despret argues is what makes practices of science-making so creative and inventive. They exist in relations of disequilibrium, disqualification, coexistence, conflict and continuation with those versions that are kept in the background. This relates to what Stengers refers to as the "deep communications beyond the proliferation of disciplines" (49). As the reader might be aware therefore, I do not wish to articulate my interest in immaterialities as a turn, but rather I wish to (re)turn to an archive of psychological experimentation at the turn of the 20th century. I argue that this archive provides an important case-study for thinking through what is at stake in delineating specific entities, objects, processes and phenomena as immaterial. What such a designation might *do* in our theorising is the important focus of this article.

Immaterial Bodies

In *Immaterial Bodies* I return to an archive of psychological experimentation, which acts as an interesting precursor to the performative approach to experimentation that we find in the work of Barad for example. Barad's writing and particularly her book *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* has been hugely influential in shaping what has come to be known as New Materialism, or the Material Turn, and for introducing new concepts, methods and formulations, which have shaped what has come to matter for many theorists. I will return to Barad's work later in the article as there are

interesting overlaps with my approach to immateriality and Barad's own analyses of the liveliness of matter. The particular experiments I analyse in my book, relevant to this discussion, are those which took place at William James's Harvard Psychological Laboratory, under the tutelage of Hugo Münsterberg. These experiments involved two psychology undergraduate students, Leo Solomons and Gertrude Stein. Münsterberg might be more known to readers for his work on cinema published in his 1909 book, *Photoplay: A Psychological Study.* Stein is more commonly known as the lesbian avant-garde modernist writer. However, prior to her literary career she experimented with a particular apparatus, which was designed to induce hysteria within the laboratory.

Solomons and Stein were not interested in proving or disproving theories of hysteria, but rather approached hysteria as an expression of automatism; of the feeling of being moved or directed by someone or something else. This might include the feeling of being directed by an extrapersonal force or entity for example. There were many experiences that were considered examples of automaticity that psychologists, artists, economists, medics and scientists were interested in studying at the time, including hallucinations, all manner of suggestive phenomena, including hypnotic suggestion, crowd psychology, delusions, dissociative experiences (hysteria being a primary example), various contagions, and psychic phenomena, such as telepathy, mediumship, clairvoyance and precognition; the capacity to apprehend and *feel* the future, for example. I argue in my book that they approached these experiences as threshold phenomena that displaced and blurred boundaries between past and present, self and other, material and immaterial, psychological and social, and human and non-human. The concept of immateriality that I put to work recognises these displacements and the productive potential of focusing on threshold phenomena as a way of retaining my interest in what is often carried by the term "psychic," or sometimes the problem of subjectivity or personality. However, within the approach I develop in the book the psychic is never ideational or bounded by a singular human subject. The psychic is part of what I term immateriality (as it took form within this archive) and I argue that the problem of mind-matter relationships that this raises is far from solved, or sometimes is barely even recognised.

Stein's and Solomons's interest in threshold phenomena was primarily technical (also see Andrew Barry in relation to Gabriel Tarde's interest in hypnotic suggestion); whether and how experiences of automaticity might be staged and enacted within a laboratory setting. Münsterberg's interest in technicity and the performativity of non-human agents and actors has been cogently documented by Henning Schmidgen, who has produced a virtual archive of the various devices, artefacts, technologies and objects that Münsterberg invented, working closely with an engineer to populate the laboratory with interested and interesting non-human actors. [1] However, the particular experiments that Solomons and Stein develop borrow a device popular within psychic experimentation of the time, associated with the phenomena and practice of automatic writing. This device was known as a planchette, a small wooden board on a rolling ball or coasters, fitted with a vertical aperture that could hold a pencil. Within psychic research this device was used to communicate with spirits, who were seen to communicate (write) through the mediator (the person holding the pencil) enacting a form of conjoined mediumship. Perhaps Stein's interest in this apparatus was carried by her developing interest in writing and the experience of absorption that often accompanies reading and writing, but whatever the motivation Stein decided she would be the ideal experimental subject to undertake the experiment. This would involve periods of training, discipline and choreography. Through attending to and transforming specific thresholds of sound, labour and attention, Stein was able to experience her arm moving and writing as an extra-personal entity as not-me. These forms of motor automatisms were equated by Stein to a process of becoming unconscious and reveal the more transitive and processual approach to what was designated psychological at the time. Stein's subjectivity was central to the experimental apparatus and her capacity to affect and be affected by the apparatus was crucial to its efficacy and the effects that were produced.

An Analytics of Experimentation

The analytics discussed here represents an important difference to the kinds of analytics of experimentation which were to later take form within psychology. The American anthropologist, Emily Martin, has returned to an archive of nineteenth century psychological experimentation where psychologists, for example, also foregrounded their own subjectivity as an important part of the experimental apparatus. Martin takes the Cambridge Anthropological expedition to the Torres Strait Islands in 1898 as her focus, and explores how the method of introspection (associated with the psychologist Wilhelm Wundt, for example) was reworked within an anthropological approach. Introspection was a key technique for Wundt who was interested in the measurement of time and argued that psychologists would need to train themselves so that they could standardise and eliminate variation; to become what Martin terms the machine capable of introspection. Although introspection was to be supplanted with other techniques for measuring reaction-time, which I will go on to explore later, introspection as a particular modality of attending was developed within this expedition as part of an early ethnographic method.

Martin explores how the scientists W. H. R. Rivers, C. S. Myers and Charles Seligman were all interested in how the milieu shaped what we might designate as mind and believed that in order to understand what Martin terms "psychology in its context" they would need to become anthropologically trained and sensitized embodied instruments. In order to understand "mind" within the Torres Strait Islanders, the researchers would need to attend to all aspects of the environment, and this included the mapping of the minute detail of the Islanders' lives. This amounted to six detailed volumes of records, which included ethnographic films, sound recordings, details of all sensory modalities, drawings and other information which articulated a form of mediated perception; the conjoining of different actors, agencies, objects, and devices, which might allow the researchers to "see" from an Islander's perception. As Martin argues, the researchers acknowledged the lack of accuracy and it might be argued were more interested in staging their own experiences of transformation that characterised the expedition than challenging notions of the "generalized mind."

Martin suggests that this sensitivity to mind or psychology in context is what has increasingly become lost within contemporary experimental psychology, which has banished subjectivity and supplanted mind with matter, where as she argues, the "psychological subject becomes a particular kind of stripped down entity, a data-emitting being whose subjective experience is outside the frame of the experiment" (155). It is this stripped down entity, which Martin argues affect theory has inherited (also see Ruth Leys and similar arguments made in *Immaterial Bodies*). Martin introduces this stripped down entity by taking her own experiences of participating within a particular psychological experiment, which was designed to measure her responses to a series of photographs. As she argues,

because it was so difficult to gain ethnographic access to any of the many psychology labs I approached – run by colleagues, neighbors, and even friends – I resorted to participating as a volunteer subject in various currently ongoing experiments accessible through the websites of all major psychology departments. I was struck by how irrelevant my experience as a subject was to the experimenters. In one experiment, for example, I was hooked up to electrodes used to measure small facial movements of which I was unaware that would indicate my emotional responses to photographs presented on the computer screen in front of me. I pressed keys on the keyboard to register my conscious responses to these images. A software program tallied the results. My responses were produced, I was told, by specific parts of my brain. What the researchers sought were data about how my brain reacted to the photographs. But there were confounding elements all over the place in this experimental setting. For example, although the monitor I was to attend to and make my responses to was right in front of me, just on my left was another monitor that showed the varying electrical impulses from my electrodes. I noted to the experimenter that I could easily see the readout of my own responses, and she said, "That's fine; it doesn't matter." But it mattered to me. I could not help trying to catch a glance of the varying signal, and I wondered how this distraction might affect my responses.(149)

The banishment of subjectivity from experimental psychology has become a fairly routinized and normalized part of the apparatus, where even when the interest of the experimental subject is acknowledged, perhaps by measuring boredom levels (see Bem), the subject is primarily viewed as either an unwitting participant to be deceived by the experimenter, or as contributing confounding variables, which ideally should be managed and eliminated from the scene. Subjectivity is often and usually replaced and translated into particular kinds of data by a range of inscription devices, measuring tools, imaging technologies, and psychometric tests, for example, which translate and reduce subjectivity to particular physiological and neurological marks or traces. I want to extend Martin's critique by exploring this banishment of subjectivity in relation to the history of experiments of reaction-time as they took form within physiology, one of psychology's close partners.

This history, following Schmidgen, might be considered a history of "machines," of what he calls "those spatially circumscribed and temporarily limited installations that connect a vast number of heterogeneous components: partial objects derived from the experimenter and the experimental subject (eyes, hands, voices, etc), more or less isolated organs (hearts, lungs, muscles, nerves, etc), energy sources, styli, sooted paper, tables, notes and publications" (211). In this context Schmidgen analyses the Donders Machine, a specific material-semiotic apparatus which physiologists used in the nineteenth century to measure the speed of excitation within nerves, producing all kinds of "epistemic" and even aesthetic effects. Schmidgen develops the concept of the experiment as a machinic apparatus via the work of Gilles Deleuze and Felix Guattari and particularly the assumption that subjectivity is transversal; that is that technologies and bodies are "always component parts of each other" (216 – a view that he also credits to the work of Donna Haraway).

What is striking about these early forms of physiological experimentation on reaction-time is the rather materialist body that is recruited and articulated by the experimental apparatus. Schmidgen recognises that the human body, as it was articulated by the apparatus, offered "itself for an almost infinite number of experimental variations" (221), but that the body was very much conceived as a rather flat organic body, connected and restricted by neurophysiological measures (galvanic skin response, heart-rate, temperature and so forth). This created a separation and distinction between the physiological and the psychological (viewed as an autonomous realm), engendered he suggests by the machinic practices of the experimental apparatus "based on its own practice of intensities" (231). Thus the body was produced and enacted as an anatomical and physiological entity, helping to engender a split between the physiological and psychological, which endures to this day. It is this split which I argue is largely unexamined within new materialism with its increasing turn towards the neurosciences, and which can usefully be foregrounded by a critical examination of what might be carried by the concept of immaterialities. I suggest that this taken for granted split between the physiological and the psychological is part of a history of how mind-matter relationships were enacted within and across psychology, and was one of the conditions which led to subjectivity being banished from the scene (see an article forthcoming in Subjectivity for an extension of this argument).

This split has prevented psychology from opening up the problem of immateriality in ways that re-activate the more performative approaches to threshold phenomena that were there at the beginning of psychology (also see LaChapelle). It also closes down radical engagement with threshold phenomena and immaterial processes, where for the most part such experiences are consigned to pathology or viewed as irrational perceptions. At best they represent puzzling

challenges and anomalies that exceed and exhaust psychology's capacity to know. Importantly these histories of the banishment of subjectivity from the psychological, cognitive and later the neurosciences are an important reminder for what might be at stake when arts and humanities scholars develop alliances with science and engage science to authenticate and validate their claims (also see Papoulias and Callard). The concept of immateriality for me opens up these questions and adds an important rejoinder to the turn to materiality, which obscures and overlooks the continuing importance of mind-matter relations in our theorising. In the next section I want to develop these arguments by considering the phenomena of voice hearing within the context of these arguments. I hope to further open up what I think is at stake in enacting different conceptions of immateriality for shaping collaborative work across the science, arts and humanities.

Gaps, Silences, Anomalies, Surprises: Towards a Future-Psychology of Immateriality

Voice hearing itself is a phenomenon that suggests that we can be moved by pasts, both known and unknown, which are experienced often as non-subjective or extra-personal, and which operate in registers which might be considered non-cognitive, and which challenge distinctions between the material and immaterial. The definition of voice-hearing or what psychiatry tends to term hallucinations is interesting in this respect. Psychiatry defines voice hearing, or what are usually described as auditory hallucinations as being a "sensory perception without external stimulation of the relevant sense organ" (DSM III: 498). The perception has what is considered the reality of a "true perception" and can be acted upon in the way one might act upon so-called normal perceptions. Voice hearing therefore shares characteristics with other phenomena that might also be considered immaterial, according to this definition. This might include experiences of phantom limbs, for example, where a person experiences sensation that is phenomenologically "real" for them and yet cannot be seen in the conventional methodological sense (see Sobchack).

In this section I will give some examples of radical practices and forms of experimentation with voices that are based on the practices of the Hearing Voices Network. In previous work, specifically *Hearing Voices: Embodiment and Experiment* I have discussed how the Hearing Voices Network has a long history of challenging and re-working the psychiatric definition of voice hearing and introducing issues which confound and disrupt the version of immateriality that psychiatry has helped to instantiate. The examples I will develop are based on fictional and non-fictional elements, which are assembled from over twenty years of working with and collaborating with voice hearers. Imagine, for example, a voice hearer who hears persistent voices, which might be accusatory, persecutory, abusive, humiliating, not wanted and certainly not to be listened to. They may already have engaged in certain techniques of distraction (such as listening to music, for example), in order to lessen the experience of automaticity they might have in this context. They may or may not take psychotropic drugs, but importantly if they do the drugs do not lessen the frequency or amplitude of the voices. They feel overwhelmed and unable to continue in such a relationship and cannot reduce or overcome the voices through their own voluntarist actions.

Imagine if the voices that the voice hearer hears could be profiled and even given their own Facebook profile, blog or twitter account so that third parties can interact with the voices. This might sound outlandish or farfetched, but points to the importance of approaching, understanding and intervening in voice hearing experiences as trans-subjective phenomena that can and perhaps need to be shared, experienced and transformed within co-constitutive relations with others; human and non-human. Indeed, the example of voice-profiling and even the use of social media to transform voices is one that comes from the pioneering work of the radical British clinical psychologist and voice hearer, Rufus May. This is just one example of work that is transforming voice hearing to emerge from the Hearing Voices Network, which is documenting and staging a range of voice hearing experiences which challenge our conceptions of voices and how we might approach, analyse and experiment with automaticities.

In a recent symposium on voice hearing supported by the Wellcome institute in the UK, May recounts his experience of working with voice-dialoguing and using social media to extend this experience. Voice-dialoguing is a technique that has been developed to allow a third person or party to listen and interact with voices that somebody else hears, and although many want to claim this as related to cognitive behavioural therapy (CBT) there are important and complex ways in which such an approach resists such appropriation. This is perhaps best illustrated by the use of social media in this context and how this transforms the experience of what it means to listen with, to, and through another's voice/voices. The complex relations between social media, affect and mediation are a pertinent topic within media and cultural theory, and it is not my intent to discuss these debates here. What is of interest is the way in which telepathic conceptions of power have been used by some to describe the logic of social media; the concept of teleasthesia for example – perception across space and time – has been used in a recent book to describe capital flow and information within advanced capitalism (Wark).

This moves beyond an idea of doubling often invoked to describe the experiential dimensions of social media (the idea that we can now be in multiple places at once), or to time being intensified or speeded up such as in the work of Paul Virilio, to a focus on the different temporalities articulated by social media, which might include a blurring of distinctions between past and present, for example. The focus on the historicity of time and temporality is of interest in relation to voice hearing, as voice hearing is itself an experience which suggests that pasts can be communicated in the present, and particularly pasts which have or indeed cannot be articulated by conversantly self-present subjects. These pasts might be "unrepresentable," unsaid or foreclosed (Davoine and Guadilliere) and require what Grace Cho, following John Johnstone calls machinic or distributed perception; a "new form of collective psychic apparatus" (174). This commitment to an "assemblaged body" takes psychological processes out of a distinctly human and closed psychological apparatus.

This trans-subjective and distributive way of approaching immaterial processes assumes that pasts can be carried in the present and that attending to the non-conscious requires creative techniques of experimentation. This might be related to what Bracha Ettinger, in the context of art-work or art-working (thus avoiding a static, representational logic), calls the matrixial. The matrixial relates to the concept of "subjectivity-as-encounter" (64), where several partners work "conjointly but differently" sharing traces, fragments, fantasies, pictograms, traumas, etc, in order to produce what she terms "non-conscious readjustments" and "reattunements of transsubjectivity" (65). Although Ettinger is primarily using art-working as a method of encounter, social media also provides an interesting creative method for working with the matrixial. I think this provides an important way of understanding Rufus May's interventions with voices using social media, which allow him and others to listen to and speak with voices. In many cases this process changes the experience of the voice/s for the voice hearer who becomes an intermediary but not necessarily a mediator; i.e., not necessarily being the *agent* of change and transformation.

May describes the process of experimenting with voices through talking to a voice hearer's voices; where the voices are verbalized by the voice hearer and shared with the listener. He decides to construct a Facebook profile for one particular voice, known as Topdog, [2] assembling the fragments of the voice's distinctly emerging personalities. This allows him to interact with the voice, to sometimes enlist different voices as consultants and ask for their help, and to build up a typology of some of the different strategies the voice uses to get the voice hearer and others to listen. This allows both voice hearer and listener to begin to build up a shared and co-created characterisation of the voices, which are taken out of the singular, closed psychological subject, and shared in a process of co-enaction and co-constitution. The Facebook profile also allows for multiple listeners to work "conjointly but differently" (Ettinger 64), allowing for fragments to be shared, put together, heard and adjusted during the processes of

listening and hearing, within an environment which creates a collective sense of (virtual) presence. This communalism is further extended in the present as Top Dog now also has a blog and can be followed on Twitter. As May attests, these practices, although controversial, do work for many voice hearers. They help to change the phenomenological experience of the voices for both hearer and listener(s), leading to less abusive voices, or to an experience that the voices are shared interlocuters within the person's trans-subjectivity and offer important advice, wisdom, knowledge and information and ideally can be lived-with. This might allow a change in what Vivian Sobchack has termed the person's "morphological imagination"; that is a radical change in their sense of embodiment, which extends the person's sense of embodied self and cannot be grafted onto an atomized and individualized subjectivity.

May aligns his role as a trusted listener to that of a technical medium, channelling the voices and allowing them to take form through a particular apparatus of experimentation. Much like the experiments carried out by Stein and Solomons that I opened the article with, these experimental laboratories displace distinctions between the intentional and non-intentional, the material and immaterial and self and other, and rather work with and through specific threshold conditions; that is, meeting points of intensities, practices, forms of training, discipline and choreography, which allow for a change or transformation in how an entity takes form and is experienced. These practices, which I explore under the designation of immateriality, allow imaginative work on psyche, the non-conscious and automaticity to be enacted and transformed. The focus on immateriality, or immaterial processes and their ambiguous status within the sciences, might also open up our own research to more creative experimentation with method, attuning to what it might be possible to produce, perform and enact in our own research, developing a more performative and post-psychological approach to what haunts contemporary psychology.

Martin explores this proposition in relation to the kinds of psychology that are being imported into affect theories (and particularly the neurosciences), which underpin some of the wellrehearsed mantras that have taken form. This includes the statement that affect does not require a subject to register and that there is a half second delay between thought and action (Thrift). These are complex debates, which oscillate between providing a materialist grounding within the neurosciences linked to what Nicholas Rose and Joelle Abi-Rached term Libetism, [3] through to what Brian Massumi has termed the "autonomy of affect." The autonomy of affect does not reduce to brain lag or gap, but rather invests this apparent temporal dissociation with potentiality, overlaid by a Deleuzian reading of the virtual/actual. However, the performative force of these statements has partially contributed to the "material" and increasingly the nonhuman and object-oriented turns, which are often taken to diminish the need for work on subjectivity and relegate such concerns to a minor literature. These turns are in danger of setting up what Ruth Leys has termed a false dichotomy between mind and matter. As I argue in my book, the relationship between mind and matter formulated in this way is a central problematic and one often overlooked in the affective and new materialist turns. The immaterial includes the material and in the approach that I am taking always already implies mediation to take form. In other words I do not wish to simply replace or supplant mind with matter as is the manner within many approaches that come under the umbrella of new materialism. As Barad herself has cautioned, sociology should not be reduced to biology and people should not be reduced to atoms. The liveliness of matter and the entanglement of matter and meaning do not preclude discussions of immateriality, which as I show raise interesting questions for who and what we take ourselves to be. These questions are also central to quantum mechanics and physics (Radin), and enter into the frame of some contemporary forms of psychological experimentation that are currently courting controversy (see Bem).

Conclusion

The concept of immateriality framed through the phenomena of threshold experiences raises important questions concerning how we approach and analyse mind-matter relationships. One

should not replace mind with matter and assume that the problem is over or dealt with. Within this context I take seriously Barad's lesser repeated statement and caution that people are not particles and that drawing such analogies is not her business (24). However, I also take seriously the argument that we need a "posthumanist performative understanding of the materialisation of bodies" (34) and what has come to be framed as the "more-than-other-andhuman-world" (Hughes and Lury). The concept of new materialities when placed within the genealogy of psychological experimentation that is the subject of this paper does not adequately, satisfactorily or sensitively carry what might be at stake when examining and approaching experiences and phenomena that have been historically designated under the sign of the psychic or the psychological. I hope that the partial approach to this question and problematic I outline in this paper goes some way to opening up the enduring significance of this issue.

My argument to conclude this paper is that the more-than-other-and-human ontology carried by the turn to new materialities has an interesting precursor in the approaches to the psychic and psychological as threshold phenomena that can be found in this early psychological archive. These archives of experimentation and the analytics they shaped and developed were populated by human, non-human and sometimes other-worldly actors and agents, and a posthuman performativity was central to how the experiments were conceived and carried out. The subjectivity of the experimenter was also an important part of the apparatus later to be banished by a more positivist experimental practice and the reduction of subjectivity at best to physiological traces and measures. We inherit this problem in our own potential engagements with contemporary science, which is increasingly characteristic of the new rapprochements being made between science, arts and the humanities. The concept of new immaterialities, the subject of this special issue, opens up these issues and is a welcome rejoinder. The concept of future-psychology coined in this paper goes some way I hope to mining the potential of a psychology-yet-to-come by returning to an early psychological archive that has much to offer us in the present. This archive is largely written out of contemporary historiographies of psychology, cognitive science and the neurosciences. It returns in the form of displaced and submerged narratives, concepts, actors and agencies that are being reactivated by a number of contemporary science controversies. But that is another story!

Lisa Blackman is a Professor in the Department of Media and Communications, Goldsmiths, University of London, UK. She works at the intersection of body studies and media and cultural theory. She is the editor of the journal *Body & Society* (Sage) and coeditor of Subjectivity (with Valerie Walkerdine, Palgrave). She has published four books: *Immaterial Bodies: Affect, Embodiment, Mediation* (2012, Sage/TCS); *The Body: The Key Concepts* (2008, Berg);*Hearing Voices: Embodiment and Experience* (2001, Free Association Books); *Mass Hysteria: Critical Psychology and Media Studies* (with Valerie Walkerdine, 2001, Palgrave). She teaches courses which span critical media psychology, affect studies, embodiment and body studies, and experimentation in the context of art/science. She is particularly interested in phenomena which have puzzled scientists, artists, literary writers and the popular imagination for centuries, including automaticity, voice hearing, suggestion and telepathy. She is currently working on a new project, *Haunted Data: Social Media, Queer Science and Archives of the Future.*

Endnotes

1. Schmidgen, Henning. 2008. Münsterberg's Photoplays: Instruments and Models in his

Laboratories at Freiburg and Harvard (1891-1893). The Virtual Laboratory (ISSN 1866-4784),

<vlp.mpiwg-berlin.mpg.de/references?id=art71>

- Topdog also has his own blog and Twitter account. See <www.madinamerica.com/2013/04/the-world-according-to-top-dog/>
- 3. Libetism is a term that Rose and Abi-Rached use to refer to the way experiments on "readiness potential," carried out by the neuroscientist Benjamin Libet and colleagues in the 1980s, have become the oft-cited experiment (particularly those experiments that were written up in the journal *Brain* in 1983), used to authenticate the assumption that the brain acts before conscious initiation of an act (of thought). As they argue, despite the fact that contemporary understandings are more complex, nuanced and contested, Libetism is "alive and well," not only within the contemporary neurosciences, but increasingly across the humanities (and particularly within some stands of affect theory). I have written about the problems with Libetism in relation to contemporary automaticity research and the phenomenology of will in a forthcoming article in *Subjectivity*, which might be of interest to some readers.

Works Cited

- Ahmed, Sara. "Open Forum Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the 'New Materialisms'." *European Journal of Women's Studies* 15.23 (2008): 23-39.
- Barad, Karen. *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press: Durham, NC and London, 2007.
- ---. "Quantum Entanglements and Hauntological Relations of Inheritance: Discontinuities, Space/Time Enfoldings, and Justice-to-Come." *Derrida Today* 3.2 (2010): 240-68.
- Barry, Andrew. "Tarde's Method: Between Statistics and Experimentation." *The Social After Gabriel Tarde: Debates and Assessments.* Ed. M. Candea. London and New York: Routledge, 2010. 177-89.
- Bem, Daryl, J. "Feeling the Future: Experimental Evidence for Anomalous Retroactive Influences on Cognition and Affect." *Journal of Personality and Social Psychology* 100.3 (2011): 407-25.
- Blackman, Lisa. "Affect and Automaticity: Towards an Analytics of Experimentation." *Subjectivity* (in press).
- ---. Immaterial Bodies: Affect, Embodiment, Mediation. London and New York: Sage, 2012.
- Blackman, Lisa and Venn, Couze. "Affect." *Body & Society*, Spec. issue on Affect 16.1 2010: 1-6.

Cho, Grace. *Haunting the Korean Diaspora: Shame, Secrecy, Silence and the Forgotten Korean War.* University of Minnesota Press: Minneapolis, 2008.

- Davoine and J. M. Guadilliere, *History Beyond Trauma*. New York: Susan Fairfield Books, 2004.
- Despret, Vincianne. *Our Emotional Make-Up: Ethnopsychology and Selfhood*. Other Press: New York, 2004.

- Ettinger, Bracha. *The Matrixial Borderspace*. Theory Out of Bounds Volume 28. University of Minnesota Press: Minneapolis, 2006.
- Hughes, Christina and Lury, Celia. "Re-turning Feminist Methodologies: From a Social to an Ecological Epistemology." *Gender and Education* 25.6 (2013): 786-99.
- Kember, Sarah. "Notes Towards a Feminist Futurist Manifesto." *Ada: Journal of New Media and Technology* November, 2012. <<u>http://ada.fembotcollective.org/2012/11/issue1-</u> kember>
- LaChapelle, Sophie. *Investigating the Supernatural: From Spiritism and Occultism to Psychical Research and Metapsychics in France*, 1853-1931. Johns Hopkins University Press: Baltimore, 2011.
- Leys, Ruth. "The Turn to Affect: A Critique." Critical Inquiry 37.3 (2011): 434-72.
- Martin, Emily. "The Potentiality of Ethnography and the Limits of Affect Theory." *Current Anthropology* 54.S7 (2013): 149-58.
- Massumi, Brian. *Parables for the Virtual: Movement, Affect, Sensation.* Durham, NC: Duke University Press, 2002.
- Papoulias, Constantina and Callard, Felicity. "Biology's Gift: Interrogating the Turn to Affect." *Body & Society* 16.1 (2010): 29-56.
- Radin, Daniel. *Entangled Minds: Extrasensory Experiences in a Quantum Reality*. New York: Pocket Books, 2006.
- Schmidgen, Henning. "The Donders Machine: Matter, Signs and Time in a Physiological Experiment, 1865." *Configurations* 13.2 (2005): 211-56.
- Rose, Nikolas and Abi-Rached, Joelle. *Neuro: The New Brain Sciences and the Management of Mind.* Princeton University Press: Princeton, 2013
- Sobchack, Vivien. "Living a Phantom Limb: On the Phenomenology of Bodily Integrity." Body & Society, Spec. issue on Bodily Integrity 16.3 (2010): 51-68.
- Solomons, Leo and Stein, Gertrude. "Normal Motor Automatism." *Psychological Review* 3 (1896): 492-512.
- Stengers, Isabelle. *Power and Invention: Situating Science*. Minneapolis and London: University of Minnesota Press, 1997.
- Thrift, Nigel. *Non-Representational Theory: Space/Politics/Affect.* London and New York: Routledge, 2007.
- Wark, Mackensie. Telesthesia: Communiation, Culture and Class. Polity: Cambridge, 2012.
- Wetherell, Margaret. "Affect and Discourse What's the Problem? From Affect as Excess to Affective-Discursive Practice." *Subjectivity* 6 (2013): 349-68.
- Wilson, Elizabeth. "Neurological Entanglements: SSRI's and Suicidal Ideation." *Subjectivity* 14.3 (2011): 277-97.