**The Challenges of new Bio*psycho*socialities:**

**Hearing Voices, Trauma, Epigenetics and Mediated Perception.**

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**Biography**

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**Abstract**

This chapter considers the promise of epigenetics in the context of what it means to hear voices and attempts to shape a biopsychosocial approach, which can account for the links between voice hearing, trauma and abuse. The chapter explores the epistemic spaces and controversies which surround the calls for a more psychosocial approach to be incorporated into the more molecular focus of epigenetics. This includes the vexed question of how to invent and work with models of psychological processes, which are processual, indeterminate and contiguous with the biological, social, technical, material and immaterial. These challenges are posed for sociologists, psychosocial researchers and molecular biologists who in different ways are often trapped by an individual/social dualism or model of interaction effects when theorising the psychological. The chapter explores evidence from the Hearing Voices Network to draw out the issues at stake for addressing biosocial matters.

**Keywords**

voice hearing; abuse; trauma; embodiment; epigenetics; mediation; the Hearing Voices Network

**Introduction: New Bio*psycho*socialities**

This chapter will comprise of a series of reflections on the challenges of researching the phenomena of voice hearing in the context of a conjuncture where it is now more acceptable to argue that voice hearing is neither distinctly biological or social and that this recognition requires new models, methods and forms of collaborative inquiry[[1]](#endnote-1). This conjuncture has been shaped by a number of actors and agents (human and non-human) that are amplifying, modulating and extending an approach to voice hearing that originates within a user movement, formally known as the *Hearing Voices Network*, but now more commonly known as the *Hearing Voices Movement* (see McCarthy-Jones, 2012)[[2]](#endnote-2). This movement has argued, since at least the 1980's, that voice hearing is not simply a first rank symptom of a discrete disease entity, schizophrenia; what Mary Boyle has described as a scientific delusion (Boyle, 1990). Rather than medicalise, medicate and reduce voice hearing to the brain and biochemical/neurological processes, it has rather been argued that voices carry meaning and should be focused upon and shared with others (who are willing to listen) through the adoption and development of particular technologies of listening (see Blackman, 2001, 2014; Romme and Escher, 2000; Thomas and Leuder, 2000). The success and efficacy of the movement has created some of the thought-spaces or 'epistemic space' (Muller-Wille and Rheinberger, 2012), within which it has become possible for new alliances to be forged across the sciences and humanities and for biosocial matters to be radically reconfigured and re-imagined (see Woods et al, 2015; Fernyhough and Waters, 2014; Woods, 2013; Corstens et al, 2014).

The *Hearing Voices Movement* has helped to challenge some of the long-standing border-wars between neuroscientists and humanities scholars (particularly sociologists, social and clinical psychologists, cultural theorists and philosophers), clinicians (psychiatrists, nurses, social workers), and voice hearers (or experts by experience). It has brought the humanities more centrally into the frame whilst at the same time inviting neuroscientists (particularly cognitive neuroscientists) to open to more interdisciplinary ways of working and importantly of re-imagining what it might mean to hear voices. This includes taking more seriously some of the critical work produced in sociology and related disciplines, as well as those issues, practices and debates developed within the long history of activism within the network. All of these shifts are profoundly challenging the biomedical model. The experiences shared within the network over many years challenge biosocial matters and the assumption that biological and social processes are separate and yet somehow interact; usually referred to as a problematic model of 'interaction effects' (see Riley, 1983). This model of interaction effects has become increasingly difficult to sustain and provides openings to ontologies that work with the assumption that what we might designate as psychological objects and entities are a complex entanglement of biological, social, material, immaterial, technical, historical, symbolic and psychic processes that in complex ways produce the possibility of experience (see Blackman, 2012; Brown, 2012; Brown and Stenner, 2009).

The archives of experience that have been shared and documented by the network, and that are increasingly amplified and mediated by digital and social media, connect to some of *the* most vexed questions and problematics shaping contemporary sociology. This includes how to approach and analyse embodiment, the materiality *and* immateriality of bodies, and indeed what counts as a body across different perspectives. The challenges also include how to approach the affectivity of voice hearing, particularly when it is recognised that voice hearing is distributed across the senses and encompasses modalities of sense-making that exceed narrow conceptions of cognition and thinking (see Woods et al, 2015). Other approaches, which already draw from sociology, cultural theory, body studies and writing indebted to the Hearing Voices Network, suggest that voices are sometimes transmutations of disavowed, disqualified or foreclosed historical traumas (see Cho, 2008; Blackman, 2012; McCarthy et al, forthcoming). These more trans-subjective conceptions of what it means to hear voices exceed individualistic notions of the clearly bounded and separate psychological subject and de-stabilize dichotomous thinking. They invite more mediated and distributed forms of perception, which can attend to the signalling of what we might call 'environments', which extend across space and time, and are experienced in registers which exceed conscious perception. It is argued that we need to develop the means to 'see' what cannot be easily spoken, shared or articulated and yet are carried in embodied experiences that often signify as abnormal perceptions, signs of psychopathology, or at best as curious puzzles and anomalies[[3]](#endnote-3) . Grace Cho (2008:) describes this as the need for many eyes and ears, human and non-human, that might provide the means to assemble such a 'collective psychic apparatus'.

One of the most pressing contemporary issues which connects these different areas is the question of how to approach and analyse the relationship between trauma, abuse and voice hearing? This connection has been documented by many (and indeed goes back to the founding origins of the network[[4]](#endnote-4)), and has the potential to finally de-stabilize the biomedical model from its privileged seat and to allow new models of the biopsychosocial to take form[[5]](#endnote-5). The question of what shared ontologies and forms of collaborative inquiry might allow such models to emerge is an urgent question. This question is one that crosses the sciences and the humanities and *epigenetics* is currently one area that is attracting much attention and is the source of considered hope and optimism (see Cooke, 2014; Read et al, 2009, for example). For example, Cooke (ibid) identifies epigenetics as a field of study, which challenges the separation of nature from nurture and therefore refigures how conceptions of 'genetic risk' (and the assumption of 'causal genes') in the context of mental ill-health might be framed, analysed and investigated. Read et al (ibid) frame this more explicitly as potentially shifting orientation to analyses of the social contexts within which genes and brains are situated and shaped[[6]](#endnote-6). The diffraction of epigenetics through some of the issues raised by psychologists researching voice hearing and who are open to the potentials of this area are instructive and will be an important focus of this chapter. As Read et al (ibid: 299) argue, 'the hypothesis that there is a single genetic predisposition for schizophrenia may be one of the costliest blind alleys in the history of medical research'.

Epigenetics is therefore potentially seen to open up new models for framing biopsychosocialities and is one that is recognised as challenging the primacy of what are seen to be biological over environmental models (see McCarthy-Jones, 2012; Cooke, 2014; Read et al, 2009). However the models produced are often still wedded to dichotomous thinking, and to models of the body and embodiment, which are too minaturized and molecularized[[7]](#endnote-7) obscuring the challenges of approaching the psychological as entangled and contiguous with economic, symbolic, material, somatic, immaterial, technical, historical, political, cultural and social processes (also see Lock, 2015). What haunts conceptions of the biosocial, which challenge the separation of nature and nurture, is how to re-theorise the psychological within this context as contiguous, indeterminate and processual relationships . As I will go on to argue, the more psychologically oriented approaches are not simply unproblematic alternatives to biomedical models and in order for innovation to emerge psychology itself also needs to confront some of its own ontologies and histories of emergence as I will go on to outline. I will argue that one of the issues raised by the intersections shaping the parameters of psychosocial research and epigenetics within these debates relate to the challenge and difficulties of how to theorise 'the psychological' as processes that are extensive *and* intensive, and that cannot be contained by atomized conceptions of the autonomous, bounded psychological subject. This observation connects to broader debates raised by anthropologists, such as Margaret Lock (2015) who has cogently argued that one of the central issues for epigenetics and the field of epigenomics more generally is how to avoid the neobiological reductionism shaping approaches to embodiment, which she argues are characteristic of the field.

Although Lock (ibid) grounds the need for critique within anthropological research, these issues can also be mapped onto wider discussions about 'bodily integrity' within body-studies, and to more relational ways of imagining bodies. Body studies has distinct trajectories within sociology of the body and feminist approaches to embodiment. Both fields have explored what it means to be human, a citizen, a person, an organism and above all embodied when we encounter the incarnation of bioscientific imaginaries, which challenge atomized conceptions (see Cohen, 2009). These questions have been located within discussions of biological processes, which challenge strict borders and boundaries between the self and other. This includes the phenomena of microchimerism (see Martin, 2010), transplant medicine and immunology (see Shildrick, 2010; 2015), the microbiome (Landecker, 2015), obesity (Warin et al, 2015), pandemics such as MRSA and influenza (Davis et al, 2015), as well as more phenomenological reflections on the complex psychic incorporations, which mark the lived experience of organ transplantation and prostheses.

What is of particular interest in the context of challenging distinct nature/nurture dichotomies are those accounts which challenge distinct self-other relations (see Nancy, 2000; Varela, 2001; Sobchack, 2010). This latter work, which highlight the need for new forms of 'morphological imagination' (Sobchack, ibid) point towards the close and intimate contiguity between the psychic and the biological, the symbolic and the technical and the affective and the material in the production of embodied experience. It is also work that demonstrates how important it is for sociologists to engage with the 'psycho' or what in other contexts has been called the problematic of subjectivity (see Blackman et al, 2008; Henriques et al, 1984), otherwise we risk reducing mind to matter and replacing the complexities of subjectivity with a neuro-physiological body, quantum approaches to matter, or in other contexts forms of panpsychism. This chapter will therefore be part call and provocation to sociologists to reflect on these issues and their urgency precisely at a time when sociology is potentially 'becoming more open to biological suggestions, (just) at a time when biology is becoming more social (Meloni, 2014: 594)'. It is also a reflection on the need for new ontologies of the psychological both within psychosocial research and sociology in order to make good on any emergent shared ontologies[[8]](#endnote-8).

**Common Ontologies**

To what extent are the sciences becoming more social and how are the social dimensions of science being reconfigured? One of the arguments being explored in this collection relates to the identification of common ontologies emerging across the sciences and humanities, which emphasise the complex, processual, indeterminate, contingent, non-linear, relational nature of phenomena constantly open to effects from contiguous processes. These arguments are being advanced in relation to the fields of genetics and the biological sciences (including epigenetics and the microbiome), mathematics, quantum physics and the physics of small particles, the neurosciences (particularly the social and critical neurosciences), affect theories across media and cultural theory (see Gregg and Seigworth, 2010), new materialisms (Coole and Frost, 2010), as well as the neurosciences of affect and emotion (see Wetherell, 2012). These common ontologies are grounded in concepts such as biosocialities (Rabinow, 1996), naturecultures (Haraway, 2003), entanglement (Barad, 2007), assemblage, flow, turbulence, emergence, becoming, relationality, intra-action, co-evolution, co-emergence, the machinic, to name just some of the heuristics and new biosocial languages being deployed. In their wake, relationships between the social and the natural, the mind and body, the cognitive and the affective, the human and the technical and biology and identity are being reformed.

The apparent newness of these emerging ontologies sometimes overshadows the histories of attempts to examine the mutual imbrications of the social and the biological that are part of specific histories of engagement. This includes the well -developed field of feminist science studies and the transdisciplinary field of body-studies, with its partial genealogy in the sociology of the body; a distinct sub-discipline of sociology that invites sociologists to consider how the body is an 'absent-presence' that haunts sociology (see Turner, 1984). Feminist science studies has produced a rich archive of research, heuristics and methods for exploring biosocial matters, which includes innovations in the areas of reproductive medicine (see Franklin, 2013), genetics and embryology (Keller, 1995), sex and gender (Birke, 1999; Hird, 2004), translational medicine (see Davis, 2012), regenerative medicine (Cooper, 2008), genetics and cloning (Haraway, 2007), health and illness (Mol, 2002), transplant medicine (Nancy Scheper-Hughes, 2011), immunology (Shildrick, 2010; Landecker, 2015) and endocrinology (Franklin and Roberts, 2006; Roberts, 2014).

This work has shaped what has come to be known as the biomedicalization thesis (Clarke et al, 2010), as well as departing from it in significant ways. This includes various attempts to engage with and revise what counts as a body and what it might mean to offer a *social*, *cultural* or *historical* analysis of biological processes understood as always already entangled with material, semiotic, technical, political and experimental processes, practices and forms of life. This rich and diverse field of inquiry has examined the mutual crossings, borrowings and looping between and across cultural discourses and scientific disciplines starting from mutual imbrications rather than separation (of disciplines, objects and forms of know-how).

**The Bio-Psycho-Social and Biosocial Matters**

Psychology is an interesting subject for exploring biosocial matters as it is characterised by mutual overlapping and topological looping within and between the biological and life sciences, the computational sciences, the cognitive and neurosciences, sociology and the social sciences, history, philosophy and related disciplines. The phenomena of voice hearing is indicative in this respect as a researcher will find a variety of theories of voice hearing which come out of all these different traditions with their own specific histories of emergence, debate, contestation and practices of verification, legitimation and authorization. This includes theories which draw from social psychology (role theory, labelling theory and attitude theory), anthropology, cognitive science, neurosciences, psychoanalysis, consciousness studies, studies of sensory deprivation, studies of inner speech, behaviorism, mental imagery, hypnosis, sociology and anti-psychiatry (Goffman, Sasz etc), transcultural psychiatry, phenomenology etc[[9]](#endnote-9). The predominant theory that has held sway and informed biopolitical strategies of governance and regulation since at least the mid to late nineteenth century has been a distinctly biomedical model, which presumes that voice hearing is an aberrant phenomena linked to brain disorder, disease or deficit (see Blackman, 2001). In this respect voice hearing, or AVH (auditory verbal hallucinations) has been considered a key diagnostic symptom for identifying schizophrenia and has primarily been approached as a meaningless epi-phenomena of a disease process.

Unlike the so-called 'new biologies' or new social biologies shaped by an ontology of biological processes as being contiguous, contingent, nonlinear and characterised by distributed forms of agency, approaches to phenomena considered distinctly psychological or psychiatric, such as voice hearing are usually framed through a particular model of bio-psycho-social *interaction effects.* It is my argument that this framing is one that closes down on the promises of epigenetics to refigure what it means to hear voices as it is being understood by psychologists working in this area. The concept of interaction effects reflects the different traditions, forms of expertise and know-how that have shaped how voice hearing has been analysed and theorised, and which specifically disclose the variety of perspectives, practices and traditions which take voice hearing as an object of investigation. These relate to historical distinctions made between the psychiatric and the psychological, where as Miller (1986) has argued, psychiatry is made up of a loosely assembled set of practices, which range from so-called *hard* biological techniques and explanations, through to so-called *softer* psychological oriented practices. In the early nineties these ranged from genomic techniques to identify genetic and molecular markers through to the use of psychological techniques, particularly CBT (cognitive behavioural techniques) exploring the psychosocial factors, which might play a role in the facilitation and progression of disease. This included a place for psychological therapies in the treatment of non-compliance and treatment resistant symptoms (those which do not go away with pharmacological treatment); 'emotional processes', which might affect the dynamics of psychosis; and the importance of listening and attempting to make sense of the voice hearer's experiences in the context of their own lives. This separation between the psychiatric (aligned to more biomedical and biophysical approaches) and the psychological was overlaid by distinctions drawn between the brain and mind and is part of what is constituted as the bio-psychological-social *jigsaw.*

The concept of a *jigsaw* captures the way in which the brain and mind, mind and matter, the individual and the social, and the biological and the cognitive, are primarily considered separate categories or spheres of influence that somehow interact. The appeal to an 'interaction effect' presumes that the biological and the social (or mind and brain, or inside and outside, for example) are two separate categories, which somehow interact. The problem is, 'where does this interaction happen?' (Riley; 1983: 30). This problem remains for contemporary researchers interested in biosocial matters who often find themselves constrained by the entrenchment of dichotomous thinking with the assumption of separate spheres of influence, often distributed across different areas of expertise - the biological, neurological, social, psychic etc. This problem is difficult to think against as these histories of separation have become rather black-boxed and form the historical *apriori* of disciplinary boundaries and borders. When attempts are made to work across such spheres there is usually an assumption that one needs to use a method of triangulation to 'add in' different pieces to the overall picture. This leads to the assumption that one is working with a bio-psychological-social *jigsaw*, and this assumption still primarily structures research projects and agendas. As an example of this is a recent article published in the journal *Schizophrenia Bulletin* where the authors call for a *synthesis* of biological, psychological and social knowledge in order to assess, evaluate, judge and provide empirical evidence of various of the claims made by the Hearing Voices Network, for example (see Corstens et al, 2014).

In a co-authored document edited by Ann Cooke (2014), which I have already cited [[10]](#endnote-10), the problem of psychosis is similarly framed as a 'complex *jigsaw* of factors' (page, 39; my emphasis), which include the biological, psychological and social. The emphasis given in the document, (which also functions as an important and significant policy statement), is to stress the importance of psychological and psychosocial approaches in the framing and treatment of distressing experiences. This is a very different language to those heuristics which start from entanglement (with the emphasis on contingency, process, indeterminacy and mediation), rather than spheres of separate yet interacting influences. The document includes contributions from some of the leading professionals and experts by experience who have helped counter the status of the biomedical model of voice hearing associated with psychiatry.

It includes the voices of radical clinical psychologists, including Mary Boyle, John Read and David Harper, as well as experts by experience who also now write, research, publish and practice within clinical psychology as well as engaging in training, facilitation and activism. These include Rufus May, Jacqui Dillon and Eleanor Longden. The latter have all also been associated with the Hearing Voices Network in different ways (Jacqui Dillon is the current chair of the network), and have forged alliances and collaborations with clinical psychologists open to the vision and aims of the network. The report also includes contributions from cognitive psychologists, such as Richard Bentall, who has been working since the late eighties pioneering CBT as an efficacious treatment for voice hearers who are disturbed and distressed by their voices. This report updates an earlier report published by the BPS in 2000, which argued that service users are the experts on their own experience, and that professionals should listen and learn.

Some fifteen years later it is clear from this report that many professionals have indeed listened and learned from voice hearers. There is what might be described as a tipping point or at least critical mass where the evidence of the success of the network would now be difficult to refute. Therein also lie some of the tensions circumscribing how voice hearers and their experiences have been recruited into various (neuro)-psychological studies. Simon McCarthy-Jones' (2012) overview of the now somewhat voluminous research within psychology on voice hearing is instructive. The book is an impressive account and overview of biological, social and psychological research in relation to voice hearing and seeks to integrate this in a 'biopsychosocial way' (p. 160). The book provides both a broad historical sweep, whilst drawing on cross-cultural research and transcultural psychiatry, contemporary neuroscientific and biopsychological approaches, including considering the significance and challenges of epigenetics, phenomenology, more clinically based psychosocial models and Vygotskian influenced cognitive psychology (to name just some of the areas). At the same time there is careful consideration of the voices of experts by experience and the issues that they raise (see Dillon and May, 2002).

It is presented as a work of integration, or what he also terms a 'joined-up' approach, where the reader is invited to evaluate, assess, judge and adjudicate various claims made within an empiricist analytics of experimentation (ie, judging different theories, models and experiments through the lens of truth and validity primarily using statistical methods of analysis). As the reader might expect what is encountered are fields of contestation, anomalies, gaps, contradictions, limitations, puzzles, qualifications and disqualifications, and at the end of the book a final section outlining the need for new models. it is argued that investment in the brain and biopsychological research and treatments (including pharmaceuticals) are at the expense of supporting the important work the HVN and Intervoice have done over the last thirty plus years.

There is a however a notable and recognised tension in this work and one that hovers at the margins of biopsychosocial approaches to voice hearing and the field of epigenetics; this relates to the status of experts by experience within the field of biopsychosocial research, and what we might learn about the processual and indeterminate nature of biopsychosocial processes. This is particularly if we move beyond the empiricist and positivist analytics that so often besets biopsychological research within psychology and the neurosciences. These concerns have been raised by ‘experts by experience’ who have asked critical questions about the vision and aims of much biopsychological research in this area. These concerns are recognised by researchers within a contemporary interdisciplinary and collaborative research project, *Hearing the Voice[[11]](#endnote-11)*, who are sensitive and sympathetic to the issues raised*.* This includes the kinds of terminology used by researchers to refer to voice hearing (AVH or Auditory Verbal Hallucinations is one of the key terms used), and the problem with what is considered the evidence-base for evaluating the claims and efficacy of the network ,including the role of peer support and voice hearer's stories of their own transformation (see Dillon and Hornstein, 2013)[[12]](#endnote-12).

These are often positioned in opposition to forms of experimentation shaped through the scientific method, including what is seen as the 'gold-standard' of experimental forms of life-; random control trials or RCT's (see Corstens et al, 2014). The framing of this tension is revealed in different ways, including McCarthy-Jones' positioning of the Hearing Voices Network as one that takes a postmodern philosophical stance, or in other contexts the warning that the HVN might be considered ideological if its claims are not judged, evaluated and adjudicated by and through a positivist analytics of experimentation (McCarthy-Jones, 2012). The potential pejorative judgement of such a will-to-prove are presented as some of the challenges that the HVN might pose to itself, where it is argued that its own 'principles and practice'(s) might be subjected to scientific scrutiny 'to avoid simply idealizing its own ideas' (Corstens et al, 2014: 291).

These of course are important issues where the aim of such scrutiny and adjudication is to challenge the prominence of the biomedical model in terms of the understanding, treatment and funding of voice hearing, when primarily understood as signs of disease and illness. It is to open up a space for the kinds of funding needed to support collaborative research *with* voice hearers, and which can set new research agendas and treatment priorities (see Corstens, et al, 2014). In other contexts, it is also to challenge the primacy of cognitive psychology and the neurosciences, which for many experts by experience (who are also writing and researching inside the discipline of psychology) does not satisfactorily allow the now well established links between voice hearing and trauma/abuse to be analysed and explored (see Read et al, 2009). This vision is also shared by many clinical and health psychologists who have sought out collaborative links with experts by experience to make such claims. It is argued that the dominant psychological tradition of cognitive psychology and cognitive approaches such as CBT are those arguably least well-equipped to explore the links between trauma, abuse and voice hearing as they work with reductionist models of mind and psyche (see Longden et al, 2012).

All of these complex issues resonate with the sociologist Sarah Franklin's (2014) recent suggestion that it is not just that there are common ontologies emerging across the human and life sciences, but that in order to situate oneself and engage in interdisciplinary research (as well as what it might mean to be *open* to the sciences) it is important to acquire what she terms *inter-literacy*. It is not an easy task to develop analyses faithful to the entanglement of biological and social processes and the kinds of know-how, labour, attention and expertise required is often most convincingly produced by scientists or cultural theorists who have already crossed disciplines[[13]](#endnote-13). As she argues, if she knew that some thirty years later she would still be working in the area of reproductive medicine as a sociologist she would not have believed it! With all of this in mind I want to explore the challenges of voice hearing to contemporary debates on biosocial matters and the problems, possibilities and the potential for new models, new ontologies and new methods to emerge out of the productive intersections between the common areas of alliance and interest I have outlined.

I will discuss these arguments in relation to a case-study of a particular voice hearer who I met and interviewed in 1991 as part of an ethnography of voice hearing. Sharon's story is indicative of many other stories shared through the network, which are now becoming linked up, amplified, extended and modulated via social media, allowing for the emergence and shaping of a power collective authorial voice. These voices have always been at the margins of science, existing as outliers, puzzles and anomalies, challenging biomedical models and largely existing in the form of displaced and submerged actors and agencies. The conditions under which they are now starting to re-shape scientific agendas is partially explained by the emergence of the field of epigenetics and the promise it holds for the shaping of new biopsychosocial imaginaries and its challenge of strict separations between nature and nurture, the psychological and the biological and the individual and the social. I will argue that this will only be possible with the development of less conservative and neo-reductionist psychological ontologies that allow and are more open to processual models and conceptualisations of voice hearing. As I have argued elsewhere, psychological issues are often poorly understood within sociology and the humanities and even those who stake a claim for radical thinking and reject reductionist models of mind often draw on problematic psychological concepts, with little awareness of the critical work that has been shaped in relation to psychology for many decades[[14]](#endnote-14) . These issues are also the subject of important critiques of the field of affect theory made by anthropologists, historians of psychology and critical psychologists who are concerned with the reduction of mind to matter that are authorised by problematic neuro-psychological concepts (see Leys, 2011; Blackman, 2012; Wetherell, 2012; Martin, 2013). The issues that this raises for sociology and the sciences and biopsychosocial matters will be the subject of the rest of the chapter.

**Scenes of Entanglement[[15]](#endnote-15)**

*Excursion:*

I met Sharon on a cold grey rainy day in 1991 when I was interviewing voice hearers associated with the *Hearing Voices Network* in Manchester as part of my doctoral research. Sharon was ambivalent about her capacity to effect change and transformation. She was invested in psychiatry as a hope-technology (see Blackman, 2007) and showed me the cupboard of anti-psychotic drugs she was taking that had failed to lessen or remove her distressing voices. She had begun to attend meetings as part of the *HVN* although she was unconvinced that sharing her voices with others would help. These voices abused her with racist taunts, undermined her, persecuted her, and became carriers of a personal and collective history of institutionalised racism and sexism that had largely, at least in the 1990's, remained disavowed, disqualified and foreclosed. She told me fragments of what was a profoundly moving story of marginalization, inequality and oppression and concomitant abuse and trauma. It was clear that there was something more to be said and that psychiatry and science-based approaches were unable to respond other than through medication. The medication had not and did not work. Sharon persevered with her attendance at Hearing Voices group meetings and in issue 17 of the HVN newsletter in the summer of 1996 she shared her story, *Blackmind*. In 2003 she published an academic article in the *International Journal of Narrative Therapy and Community Work, '*Glimpses of Peace'. In this article Sharon foregrounds trauma and the capacity of racism and sexism to shape voice hearing experiences[[16]](#endnote-16). I reproduce some of Sharon's story below:

* ‘I first began to hear voices at the age of about 13. I endured much racial abuse at school. As I lived in a white area people stared and I grew up paranoid and lonely. I had no friends to mix with. Other children’s parents told them to keep away from me. I became withdrawn, confused, sad and suicidal. The first time I can recall hearing voices was when they ordered me to kill myself; they were so persistent. They called me ‘nigger’, ‘coon’, ‘wog’. I was so depressed with all this going on that I finally couldn’t take anymore. I took an overdose of 40 painkillers and was discovered and rushed to hospital for a stomach pump. I did it to escape the voices. I wanted to die to make it all end. I’d had enough trauma. I had to leave the children’s home at the age of 16. I enrolled at Harrogate college and found a tiny bedsit. I was hearing voices all the time and could not study well. I had no friends. They thought I was a bit ‘crazy’.
* I do have a theory about my voices. I believe that they are memories and recollections that return right back to my early childhood. Being the only black child at school I think I suffered much racial abuse blame and abuse. But it is worse than that. This pattern has remained in my mind, and I am destined to hear constant reminders of terrible emotional trauma. What is the cure? There is no cure because I do not have a biological illness. I am bruised and hurt by earlier experiences, and this is part of my roots.
* I met my husband, Mickey, in a drop-in some years ago. I feel wanted and loved at last. We have been married since 1987. I spend a lot of time helping out at the Hearing Voices Network. I have made many good friends at the group and at last feel accepted. Not as a mad, crazy nutter; but as a valid human being who has had a lot of SHIT in the past’.

Sharon's story of institutionalized racism connects the lived experience of her voices with histories of racism and sexism linked to colonialism and historical traumas. In many cases these connections are only now being publically told, documented, recognised and acknowledged. The concept of 'historical trauma' and the potential for (disavowed, displaced and submerged) historical traumas to become transmuted and embodied as voices is an area of study which poses problems to atomized conceptions of the psychological subject. It is inviting more inventive, distributed, mediated and trans-subjective models of mind and matter, which might allow a purchase on possible mechanisms of social, psychological and biological transmission. This includes debates on the intergenerational transmission of trauma, which challenge strict boundaries and separations between the historical and the personal, the psychological and the social and the material and immaterial. These debates are shaping a trans-disciplinary field of study which works with more embodied, embedded and distributed models of processes seen to confound distinctions between the material and immaterial. These debates draw from cultural theory, philosophy, the practices and lived experience of voice hearers, psychoanalysis, affect theories, body studies, geography and sociological re-imaginings of what it means to enter into suggestive relations with another, human and non-human[[17]](#endnote-17). What is at stake is the vexed problematic of subjectivity and how the sciences and sociology can incorporate more relational models of subjectivity. This is necessary if we are to address the mechanisms through which the signalling of environments across time and space, which are primarily experienced in registers that exceed conscious perception occurs occur.

These issues have also been recognised by anthropologists as being an important and key area of study across epigenetics and the humanities. Work on historical trauma and the intergenerational transmission of trauma challenges the more molecularized conceptions of the body and embodiment which underpin how environment is being conceptualized, understood and acted upon within the field of epigenetics. This is raised as an important *psychosocial* issue, which is missed by reducing mind to molecularized notions of matter (see Lock, 2015). It is also missed by those mechanisms of transmission which are framed as biogenetic rather than dissociative (see Longden et al, 2012). Epigenetics is therefore one area or attractor which holds the promise to challenge these issues, but only if the psychological and importantly more relational and transsubjective models of embodied subjectivity are modelled. These erasures and their disqualification return in the controversies surrounding voice hearing and qualify and re-qualify what is at stake in theorising mind-matter relations and specifically of how to analyse the distributed and collective nature of voice hearing, which exceeds the individually bounded psychological subject

**Conclusion: Epigenetics and the Psychosocial - An attractor**

The potential of epigenetics to accord bio-value to psychosocial processes in the production of particular experiences, such as hearing voices, is crucially of concern. Psychosocial researchers and those whose research refuses the assumption of 'context-less brain research' (Read et al, 2009: 306) are seizing upon epigenetics as a field of research, which has the potential to offer a more integrative model. Many of the advocates of epigenetics see this field as having the potential to transform and produce a desired paradigm shift towards more psychosocial approaches, thereby also directing funding away from 'useless genetic research' (Read et al, 2009). These same researchers are those who have also often collaborated with, and listened and learnt from experts by experience. At stake of course is what counts as an epigenetic process, what counts as a psychosocial process, and how phenomenological work on voice hearing can be integrated into and transform conceptions of the body and embodiment within epigenetics.

The phenomenology of voice hearing is instructive in this respect. One of the key issues that has been documented and arisen from the Hearing Voices Network is that not only can voices be experienced differently across time and space, but the practices developed by the HVN have allowed voice hearers to experience their own voices differently. This might include the processes through which a person comes to experience themselves as a voice hearer, rather than a person experiencing a psychiatric disorder, for example. This raises the important question of how biological processes are entangled and mediated such that one is forced to abandon static models of the biological, psychological or social in favour of more complex, processsual models. This interdisciplinary challenge is recognised by Angela Woods[[18]](#endnote-18) (2013: 264) in her account of 'The Voice Hearer', where she usefully recognises the tension between work which explores 'techniques of the hallucinatory self' (exploring the processes through which a person hearing voices is able to take themselves and their experiences as the object and subject of reflection and narration[[19]](#endnote-19)), and many scientific approaches which reduce voice hearing to the phenomenological and other perceived psychological, cognitive and neurological qualities of the voice(s), enacted by a primary focus on the *internal* mechanisms taken to generate the experiences. The latter is characteristic of many psychological and biological approaches to AVH (auditory verbal hallucinations) and reveal the divergent ontologies still at play. If the phenomenological experience of voice hearing can be changed and transformed within and across particular settings, (which might include the hearing voices group, as well as other forms of mediated perception), then to what extent might these processes of remaking subjectivity be investigated as epigenetic processes?

This research would need to take seriously the accounts of experts by experience who attest to the profound transformation of subjectivity as they encounter the arduous and difficult process of listening with and through their own and other's voices. I still do not think we have the measure of precisely how these processes (which are simultaneously technical, symbolic, biological, psychological, political, cultural) take form. I think it is here that sociologists and those working across the social sciences and humanities have the potential to make a difference, and to work in the gaps, silences, interstices, contradictions and controversies, which currently surround how epigenetics is taking form as a series of multiple, competing boundary concepts (see Meloni and Testa, 2014: 343). Voice hearing is a phenomenon, or epistemic object (Rheinberger, 1994) surrounded by controversies. These are particularly revealed when viewed across time, or what Rheinberger, (ibid) calls historiality; or the historical movement of a trace (also see Rheinberger, 2010). These controversies have the potential to open the psychological, biological and neurosciences, as well as sociology and cultural studies, to new research directions and the production of the genuinely new and unexpected.

These issues are resurfacing anew within a contemporary interdisciplinary project, *Hearing the Voice[[20]](#endnote-20),* which brings together scientists, philosophers, literary scholars, service users, professionals and other interested stake-holders. I will argue that as a new archive is being assembled and shaped drawing the parameters of what the 'proper object' of such an archive might be; - including the contested question of what it means to hear voices as it is constructed, enacted and evidenced between service users, researchers and professionals -; the tensions, traces and fragments that circulate between various psychological, neuroscientific and epigenetic theories open up some interesting opportunities for reframing biopsychosocialities. As Read et al (ibid: 307) also argue, 'We must work, across disciplinary boundaries, to build on these beginnings of a truly integrated bio-psycho-social model. My conclusion is however that this will only be possible if the body, embodiment and subjectivity are foregrounded as important epistemic concepts around which critique, innovation and scientific evolution might be possible. I am also in sympathy with others who remain circumspect about the potential of epigenetics to make good on this hope, and who argue that 'the demonstration of epigenetic changes are not required to verify the extent and depth' of the relationships between abuse, trauma and voice hearing, for example (see Lock, 2015: 162 in relation to historical trauma). These stories are part of living archives shared by voice hearers and in those voices that tell of what often has become foreclosed or disqualified, the traces of which are available for re-telling and challenging what it means to hear voices, both now and in the future.

**Bibliography**

Abraham, N and Torok, M (1994) *The Shell and the Kernel: Renewals of Psychoanalysis.* Volume 1. Chicago: Chicago University Press.

Ahmed, S (2008) 'Open Forum Imaginary Prohibitions: Some Preliminary Remarks on the Founding Gestures of the ‘New Materialisms’.' *European Journal of Women’s Studies* 15.23: 23-39.

Alford, C.F (2015) 'Subjectivity and the Intergenerational Transmission of Historical Trauma'. *Subjectivity,* Volume 8 (3): 261-282.

Birke, L (1999) *Feminism and the Biological Body.* Edinburgh University Press: Edinburgh.

Blackman, L (2001) *Hearing Voices: Embodiment and Experience.* Free Association Books: London and New York.

Blackman, L (2007) 'Psychiatric Cultures and Bodies of Resistance'. *Body & Society,* 13(2): 1-24.

Blackman, L (2012) *Immaterial Bodies: Affect, Embodiment, Mediation.* Sage: London and New York.

Blackman, L., Cromby J., Hook, D., Papadopoulos, D., and Walkerdine, V (2008) 'Creating Subjectivities'. *Subjectivity,* 22: 1-27.

Boyle, M (1990) *Schizophrenia: A Scientific Delusion?*  Routledge: London and New York.

Brown, S (2012) 'Abstract experimentalism'. In: C. Lury and N. Wakeford (eds*.) Inventive Methods:*

*The Happening of the Social.* London and New York: Routledge.

Brown, S and Stenner, P (2009) *Psychology without Foundations: History, Philosophy and Psychosocial Theory.* London: Sage.

Chow, R (2012) *Entanglements. Or Transmedial Thinking about Capture?* Durham and London: Duke University Press.

Cohen, Ed (2009) *A Body Worth Defending: “Immunity,” Biopolitics, and the Apotheosis of the Modern Body.* Durham and London: Duke University Press.

Cooke, A (2014) (ed) *Understanding Psychosis and Schizophrenia: Why People Sometimes Hear Voices, Believe Things that Others Find Strange, or Appear Out of Touch with Reality, and What Can Help.* Published by the British Psychological Society.

Coole, D and Frost, S (2010) *New Materialisms: Ontology, Agency and Politics.* Duke University Press: Durham and London.

Cooper, M (2008) *Life as Surplus. Biotechnology and Capitalism in the Neoliberal Era.* University of Washington Press: Washington.

Corstens, D., Longden, E., McCarthy-Jones, S., Waddingham, R, and Thomas, N (2014) 'Emerging Perspectives from the Hearing Voices Movement: Implications for Research and Practice'. *Schizophrenia Bulletin,* 40(4): 285-294.

Csordas, T (1995) (ed) *Embodiment and Experience: The Existential Ground of Culture and Self.* Cambridge University Press: Cambridge.

Davis, G (2012) What is a humanized mouse? Remaking the species and spaces of translational medicine. Body & Society, 18 (3-4): 126-155.

Davis, M., Flowers, P., Lohm, D., Waller, E., and Stephenson, N (2015) 'Immunity, Biopolitics and Pandemics: Public and Individual Responses to the Threat to Life'. *Body & Society, 1357034X14556155, first published on March 13, 2015 as doi:10.1177/1357034X14556155*

Davoine, F. and Gaudilliere, J., M (2004) *History Beyond Trauma.* New York: Other Press.

Despret, V (2004) 'The body we care for: Figures of anthropo-zoo-genesis'. *Body & Society,* 10(2-3): 111-134.

Dillon, J and Hornstein, G (2013) 'Hearing Voices Peer Support Groups: a powerful alternative for people in distress'. *Psychosis,* 5(3): 286-295.

Dillon, J., & May, R. (2002). Reclaiming experience. Clinical Psychology, 17, 25–27.

Fernyhough, C., and Waters, F. (2014). [Special supplement introduction: Hallucinations](http://schizophreniabulletin.oxfordjournals.org/content/40/Suppl_4/S195.full.pdf+html). Schizophrenia Bulletin, 40, S195-S197.

Franklin, S (2013) *Biological Relatives. IVF, Stem Cells, and the Future of Kinship.* Duke University Press: Durham and London.

Franklin, S (2014) *After IVF: the reproductive turn in social thought.* Inaugural lecture of Sarah Franklin, Sociology Professor. University of Cambridge.

Franklin, S and Roberts, C (2006) *Born and Made: An Ethnography of Preimplantation Genetic Diagnosis.* Princeton University Press: Princeton.

Gregg, M and Seigworth, G (2010) (eds) *The Affect Theory Reader.* Duke University Press: Durham and London.

Haraway, D (2003) *The Companion Species Manifesto: Dogs, People and Significant Otherness.* Chicago University Press: Chicago.

Haraway, D (2007) *When Species Meet.* Minnesota Press: Minneapolis.

Henriques, J., Hollway, W., Urwin, C., Venn, C., and Walkerdine, V (1984) *Changing the Subject: Psychology, Social Regulation and Subjectivity.* Methuen: London.

Hird, Myra, J (2004) *Sex, Gender and Science.* Palgrave: London and New York.

Keller, Evelyn Fox (1995) *Refiguring Life. Metaphors of Twentieth Century Biology.* Columbia University Press: New York.

Landecker, H (2015) 'Antiobiotic Resistance and the Biology of History'. *Body & Society, 1357034X14561341, first published on March 13, 2015 as doi:10.1177/1357034X14561341*.

Leys, R (2011) 'The Turn to Affect: A Critique'. *Critical Inquiry,* 37(3): 434-472.

Lock, M (2015) 'Comprehending the Body in the Era of the Epigenome'. *Current Anthropology,* Volume 56 (2): 151-177.

Longden, E., Madill, A., and Waterman, M. G (2012) 'Dissociation, Trauma and the Role of Lived Experience: Toward a New Conceptualisation of Voice Hearing'. *Psychological Bulletin,* 138(1): 28-76.

McCarthy-Jones, S (2012) Hearing voices: The histories, causes and meanings of auditory verbal hallucinations. Cambridge University Press: Cambridge.

McCarthy-Jones, S., Castro Romero, M., McCarthy-Jones, R., Dillon, J., Cooper-Rompato, C., Kieran, K., Kaufman, M., Blackman, L (forthcoming), 'Hearing the Unheard: An Interdisciplinary, mixed-methodology study of women's experiences of hearing voices (auditory verbal hallucinations)'. *Frontiers in Psychiatry (*in press).

Martin, A (2010) 'Microchimerism in the Mother(land): Blurring the borders of body and nation'. *Body & Society,* 16(3): 23-50.

Martin, E (2013) The potentiality of Ethnography and the limits of affect theory. Current

Anthropology 54(S7): S149–S158.

Meloni, M (2014a) 'How biology became social and what it means for social theory?' *Sociological Review,* 62: 593-614.

Meloni, M., and Testa, G (2014) 'Scrutinising the Epigenetics Revolution'. *Biosocieties,* 9: 431-456.

Miller, P (1986) 'Critiques of Psychiatry and Critical Sociologies of Madness' in P. Miller and N. Rose (eds) *The Power of Psychiatry.* Polity Press: Cambridge.

Mol, A (2002) *The Body Multiple: Ontology in Medical Practice.* Duke University Press: Durham and London.

Muller-Wille, S., and Rheinberger, H. J (2012) *A Cultural History of Heredity.* Chicago: University of Chicago Press.

Nancy, J. L (2000) *L'Intrus,* trans S. Hansen. Lansing, MI: Michigan State University Press.

Rabinow, P. (1996) “Artificiality and enlightenment: from sociobiology to biosociality” in Essays on the Anthropology of Reason. Princeton University Press: Princeton

Read J., Haslam N., Sayce L. & Davies E. (2006). Prejudice and schizophrenia: a review of the ‘mental illness is an illness like any other’ approach. *Acta Psychiatrica Scandinavica* 114, 303-318.

Read, J., Bentall, R., and Fosse, R (2009) 'Time to Abandon the Bio-Bio-Bio model of Psychosis: Exploring the Epigenetic and Psychological Mechanisms by which Adverse Life Events lead to psychotic symptoms'. *Epidemiologia e Psichiatria Sociale,* 18, 4: 299-310.

Rheinberger, H.-J. (1994) Experimental systems: Historiality, narration and deconstruction.

*Science in Context* 7(1): 65–81.

Rheinberger, H-J (2010) *An Epistemology of the Concrete: Twentieth-Century Histories of Life.* Duke University Press: Durham and London.

Riley, D (1983) *War in the Nursery.* Virago Press: London.

## Roberts, C (2014) 'The entanglement of sexed bodies and pharmaceuticals: A feminist analysis of early onset puberty and puberty-blocking medications'. *Subjectivity,* 7: 321-341.

## Romme, M and Escher, S (2000) *Making Sense of Voices.* London: Mind Publications.

Rose, N. and Abi-Rached, J.M. (2013) *Neuro: The New Brain Sciences and the Management*

*of Mind*. Princeton University Press: Princeton and Oxford.

Scheper-Hughes, N (2011) 'Mr Tati’s Holiday and João’s Safari - Seeing the World through Transplant Tourism'. *Body & Society, Special issue Medical Migrations,* 17(2-3): 55-92.

Shildrick, M (2010) ‘Some reflections on the socio-cultural and bioscientific limits of bodily integrity’, *Body & Society*, 16.3:

Shildrick, M (2015) 'Staying Alive: Affect, Identity and Anxiety in Organ Transplantation'. *Body & Society, Body & Society 1357034X15585886, first published on June 29, 2015 as doi:10.1177/1357034X15585886*

Sobchack, V (2010) 'Living a "Phantom Limb"'. *Body & Society, 16(3): 51-67.*

Solomons, L. and Stein, G. (1896) 'Normal motor automatism'. *Psychological Review*, (3): 492–512.

Thomas, P and Leuder, I (2000) *Voices of Reason, Voices of Insanity: Studies of Verbal Hallucinations.* London and New York: Routledge.

To, N and Trivelli, E (2015) (eds) 'Affect, Memory, Trauma'*,* special issue, *Subjectivity,* 8: 305-314.

Turner, B (1984) *The Body and Society: Explorations in Social Theory.* Oxford and New York:

Varela, F (2001) 'Intimate Distances: Fragments for a Phenomenology of Organ Transplantation'. *Journal of Consciousness Studies* 8(5-7): 259-71.

Walkerdine, V., Olsvold, A., and Rudberg, M (2013) 'Researching embodiment and intergenerational trauma using the work of Davoine and Gaudilliere: History Walked in the Door'. *Subjectivity* 6(3): 272-297.

Warin, M., Moore, V., Davies, M., and Ulijaszek, S (2015) ' Epigenetics and Obesity: The Reproduction of *Habitus* through Intracellular and Social Environments *Body & Society 1357034X15590485, first published on June 29, 2015 as doi:10.1177/1357034X15590485*

Wetherell, M (2012) *Affect and Emotion: A New Social Science Understanding.* Sage: London and New York.

Wilson, Elizabeth, A (2015) *Gut Feminism.* Durham and London: Duke University Press.

Woods, A, (2013) 'The Voice Hearer'. *Journal of Mental Health,* 22(3): 263-270.

Woods, A., Jones, N., Alderson-Day, B., Callard, F., and Fernyhough, C (2015) ‘Experiences of Hearing Voices: Analysis of a Novel Phenomenological Survey’. www.thelancet.com/psychiatry Published online March 11, 2015 http://dx.doi.org/10.1016/S2215-0366(15)00006-1

1. http://hearingthevoice.org/2015/08/18/hearing-the-voice-funded-for-another-five-years/ [↑](#endnote-ref-1)
2. I prefer the term HVN rather than the term HVM (Hearing Voices Movement) as it reflects the specific historical context within which I was collaborating with the network. HVN was used to refer to the campaigns, activism and hearing voices support groups, which were part of the network's practices. The HV*M* (Hearing Voices Movement) has a specific genealogy; a term now used to refer to people who are supportive of and advocate what is now increasingly referred to as a 'hearing voices approach' (see McCarthy-Jones, 2012). [↑](#endnote-ref-2)
3. A good example of this is an article that was published in the *British Medical Journal* in 1997 by Azuonye, called 'A Difficult Case: A Diagnosis made by Hallucinatory Voices'. This article recounts a story of a woman who began to hear voices telling her she had a brain tumour. She promptly received a diagnosis of paranoid schizophrenia and after much insistence by the woman concerned was offered a brain scan by her psychiatrist to reassure her of her diagnosis. This led to the discovery of a brain tumour, which was removed. After this the voices thanked her for listening and she did not hear them again. The suggestion that voices might be supportive, prophetic and reassuring is one that has baffled psychiatry and this article is often shared as one which confounds biomedical understandings. [↑](#endnote-ref-3)
4. The link between voice hearing, trauma and abuse goes back to the first voice hearer Patsy Hague, who challenged her psychiatrist, Marius Romme, to take her voices seriously. (see http://www.intervoiceonline.org/about-intervoice/patsy-hague-co-founder). [↑](#endnote-ref-4)
5. The Hearing the Voice project has received significant media attention (see https://www.facebook.com/HVMMediaWatch) as well as drawing science's attention to the work of the HVN. See an important article by Charles Fernyhough (2014), 'The Art of Medicine: Hearing the Voice' in *The Lancet*. Also see the voice hearer, Eleanor Longden's Ted lecture, which has been viewed nearly 3 and half million times to date: http://tedcom.talks/eleanor\_longden\_the\_voices\_in\_my\_head.html [↑](#endnote-ref-5)
6. As Read et al (ibid: 299) argue; 'Most genetic and brain researchers, however, have either ignored the psychosocial causes of psychosis or relegated them to the role of triggers or exacerbators of a vulnerability which they assumed to be genetic. Meanwhile brain researchers identified abnormalities in ‘schizophrenics’ without considering what might have happened in their lives to have caused them'. [↑](#endnote-ref-6)
7. with talk of HPA axis dysregulation and other molecular mechanisms and processes (see Read et al, ibid). The issue is how these molecular mechanisms can be integrated with broader psychosocial understandings and particularly more processual models of psychological processes, which cannot be contained by atomized conceptions of the psychological subject. [↑](#endnote-ref-7)
8. see the work of Elizabeth Wilson and particularly *Gut Feminism* (Duke, 2015) for an innovative and instructive approach to theorising biology and mind. [↑](#endnote-ref-8)
9. For an overview of the range of theories of voice hearing, which cross the sciences and humanities see Blackman, 2001, *Hearing Voices: Embodiment and Experience,* Free Association Books. For a contemporary overview of theories within and across psychology and the neurosciences see Simon McCarthy-Jones's (2012) book, *Hearing Voices:* The histories, causes and meanings of auditory verbal hallucinations. [↑](#endnote-ref-9)
10. '*Understanding Psychosis and Schizophrenia: Why People Sometimes Hear Voices, Believe Things that Others Find Strange, or Appear Out of Touch with Reality, and What Can Help'.* [↑](#endnote-ref-10)
11. https://www.dur.ac.uk/hearingthe voice/ [↑](#endnote-ref-11)
12. what has been framed as the 'anecdotal claims of benefits' (see Corstens et al, 2014: 289). [↑](#endnote-ref-12)
13. I am thinking particularly of the research and writing of Donna Haraway, Karen Barad, Eve Fox Keller, Margrit Shildrick and Hans-Jorg Rheinberger, for example. [↑](#endnote-ref-13)
14. This includes the critical thinking developed by psychologists who have left the discipline to work in neighbouring disciplines (including sociology, cultural studies and philosophy). I include the important book, *Changing the Subject: Psychology, Power and Social Regulation* written by Henriques et al in 1984, as well as the field of critical and discursive psychology and more genealogical approaches to perception, attention, suggestion. The book *Mass Hysteria: Critical Psychology and Media Studies* (Blackman and Walkerdine, 2001) was an attempt to stage some of this critical thinking in the context of media psychology.

    [↑](#endnote-ref-14)
15. I use the term 'scenes of entanglement' to describe controversies where the past and future criss-cross, intervene, intrude and open up the potential for something new to emerge (see Blackman, 2015); (also see the work of Rey Chow (2012). [↑](#endnote-ref-15)
16. http://search.informit.com.au/documentSummary;dn=633956248921893;res=IELHEA [↑](#endnote-ref-16)
17. This includes the seminal work of Grace Cho (2008) and a variety of approaches which draw from the work of Abraham and Torok (1984) and Davoine and Gaudilliere (2004) as well as imaginative work on attachment theory (see Alford, 2015 for example). Readers are directed to a special issue with a variety of innovative articles exploring affect, trauma and memory, including within the context of the Argentinian disappearance; Chinese-Canadian historical trauma; Gorizia and the remembering crisis in Italy. These articles are published as part of a special issue in the journal, *Subjectivity* (see To and Trivelli, 2015); also see work by Walkerdine et al, (2013), which draws on Davoine and Gaudilliere; and Blackman's (2012) book, *Immaterial Bodies: Affect, Embodiment, Mediation,* which contextualises these theories within the context of affect theories and body studies. [↑](#endnote-ref-17)
18. Angela Woods is a Principal investigator on the Hearing the Voice project. [↑](#endnote-ref-18)
19. what she calls the 'figure of the voice hearer' (ibid: 264). [↑](#endnote-ref-19)
20. see https://www.dur.ac.uk/hearingthe voice/ [↑](#endnote-ref-20)