# **Thought Insertion Clarified**

## Matthew Ratcliffe and Sam Wilkinson

Abstract: 'Thought insertion' in schizophrenia involves somehow experiencing one's own thoughts as someone else's. Some philosophers try to make sense of this by distinguishing between ownership and agency: one still experiences oneself as the owner of an inserted thought but attributes it to another agency. In this paper, we propose that thought insertion involves experiencing thought contents as alien, rather than episodes of thinking. To make our case, we compare thought insertion to certain experiences of 'verbal hallucination' and show that they amount to different descriptions of the same phenomenon: a quasi-perceptual experience of thought content. We add that the agency/ownership distinction is unhelpful here. What requires explanation is not why a person experiences a type of intentional state without the usual sense of agency, but why she experiences herself as the agent of one type of intentional state rather than another. We conclude by sketching an account of how this might happen.

#### Introduction

First-person reports of 'thought insertion' in schizophrenia (hereafter TI) suggest that it is possible to experience one's own thoughts as emanating from someone else. On one interpretation, TI involves an error of identification: you recognise the thought but fail to recognise it as your own. If this is right, it overturns the assumption that you can be "wrong about which psychological state you are in" but not about "whose psychological state it is" (Campbell, 1999, p.609). In phenomenological terms, it challenges the view that, if you experience psychological state *x*, then you experience *x* as yours. A comprehensive explanation of TI needs to include an account of (a) what a TI experience consists of and (b) how TI is generated, where (a) is concerned solely with clarifying the relevant phenomenology, while (b) also addresses nonconscious or 'subpersonal' mechanisms. In this paper, we focus upon (a), but there are also implications for (b). Suppose TI is taken to be an experience of type *x* when it is in fact an experience of type *y*, and that an account is then offered of *x*-generating mechanisms, where x-generating mechanisms are not involved in generating *y*. Such

an account would not merely be false but also irrelevant. Hence it is crucial to get the phenomenology broadly right, and that is what we seek to do here.

One way to make sense of TI without accepting that it involves a radical error of identification is to distinguish between our experiences of 'subjectivity' and 'agency' (Stephens and Graham, 2000) or 'ownership' and 'agency' (Gallagher, 2005). We experience ourselves as the owners of our thoughts; they arise within the boundaries of our subjectivity. We also experience ourselves as the agents of our thoughts; we think them. The 'inserted thought' is experienced as produced by another agency, one that uses one's own mind as a medium to think. So one owns the thought but is not the agent behind it. In what follows, we will argue that this distinction does not illuminate the nature of TI (although we do not seek to reject the distinction outright; it may well be informative in other contexts), and we will offer an account of the phenomenology of TI that does not appeal to retention of ownership and loss of agency.

We begin by suggesting that the standard illustrations of TI are ambiguous, in failing to distinguish alien thought contents from alien acts or episodes of thinking. This ambiguity is then carried through to philosophical accounts of TI. We then argue that TI involves experiencing thought contents as somehow alien, rather than episodes of thinking. Our approach is to show that TI experiences are no different from certain 'verbal hallucinations'. Both involve an unfamiliar way of experiencing content p that lies somewhere between 'having the thought that p' and 'perceiving that p'. One's experience of p is perception-like, in that p appears non-self-produced. But it also remains thought-like, in that p continues to resemble thought content more so than sensory perceptual content. Hence it might be described in terms of a perception with an unusual content or a thought that one has not produced.

We go on to argue that the agency/ownership distinction fails to illuminate the nature of TI. It is not a matter of experiencing 'state y without agency' rather than 'state y with agency'. What requires explanation is why p is experienced as the content of an

<sup>1</sup> This move defuses an apparent contradiction: 'it is my thought, but it is not my thought'. The first 'my' is the 'my' of ownership (the thought occurs within my psychological boundaries) and the second

'my' is the 'my' of agency (the thought is not of my doing).

unfamiliar type of intentional state, x, rather than a familiar type of intentional state, y. Then we offer a tentative phenomenological account of how this could happen in at least some cases: anxious anticipation of one's own thought contents as they form leads to an experience of them as alien and strange. We conclude by noting that TI therefore involves a profound change in one's experience of self and world. The sense of being a coherent locus of experience and agency, distinct from one's surroundings, is inseparable from the capacity to experience perceiving that p and thinking that p as distinct. That capacity is, to varying degrees, compromised in TI.

### **Verbal Hallucinations and Inserted Thoughts**

The philosophical literature on TI is over-reliant on a few choice examples, which frequently serve as the principal or sole basis for discussion. Here are the two most popular ones:

I look out of the window and I think that the garden looks nice and the grass looks cool, but the thoughts of Eamonn Andrews come into my mind. There are no other thoughts there, only his....He treats my mind like a screen and flashes his thoughts into it like you flash a picture. (Mellor, 1970, p.17)

Thoughts are put into my mind like 'Kill God.' It's just like my mind working, but it isn't. They come from this chap, Chris. They are his thoughts. (Frith, 1992, p.66)

Both are ambiguous in failing to distinguish encountering the *content* of a thought as alien from encountering an *act of thinking* as alien. Of course, the phenomenology of 'thinking' is heterogeneous. For instance, thinking is active and effortful to varying degrees. However, although it is unclear what exactly the various experiences of thinking consist of, we suggest that a general distinction can be drawn between acts or episodes of thinking and the thought contents that are generated through them. Hence it can be asked: Is Chris's *thinking* experienced as going on in one's own 'mind' or, alternatively, the *thought contents* that his thinking produces? Is Eamonn Andrews 'flashing' his *thought processes* onto a screen or just the contents of his thoughts? This lack of clarity remains in many philosophical accounts of TI. For example, Stephens and Graham (2000, p.4) state that "[in TI] the experience of thinking is not 'I think' but 'Someone else is putting their thoughts in my head'. Does one

experience the thoughts as having been put in one's head, and thus as originating elsewhere? Alternatively does one experience the act of their being 'put there', which would be more akin to experiencing someone else's thinking?<sup>2</sup>

We propose that TI involves experiencing thought contents as alien, rather than thinking. B is not mistaken about whether she is the owner and/or the agent of her thinking. What happens is that she experiences p as the content of an unfamiliar, quasi-perceptual experience, rather than one of thinking that p. The experience is perception-like, insofar as B experiences something as present (rather than as remembered, anticipated, or imagined) and as emanating from elsewhere. However, it remains thought-like, insofar as the content of the experience continues to resemble that of an act of thinking. This interpretation has the advantage of rendering the phenomenon more tractable, given that such mistakes are perhaps not so unfamiliar. On one interpretation of dreaming, we take ourselves to perceive or believe that p when we actually dream or imagine that p. And we often lack insight into the nature of our emotions: we take ourselves to be happy for someone when we resent their achievements, or we fail to recognise how upset we are about something. Occasionally, we might take ourselves to remember something when we actually imagine it, or feel uncertain about whether we are remembering or imagining it. Nevertheless, our account of TI does not render it mundane or detract from its philosophical interest. As will be made clear in the concluding section, TI - as we have characterized it - involves a profound disruption of self-experience, of a kind that is not limited to the sense of agency.

Why adopt the content-interpretation? There is no evidence in the TI literature for the view that it concerns thinking rather than thought contents; stock examples are compatible with both interpretations. Furthermore, there is a positive case to be made for our view. To make that case, we turn to verbal hallucinations (hereafter, VHs). According to orthodox conceptions, a hallucination is a perceptual experience that arises in the absence of appropriate external stimuli (e.g. Frith, 1992, p.68). Thus, if

\_

<sup>&</sup>lt;sup>2</sup> However, Graham (2004, p.96) states more clearly that TI concerns the "phenomenology of thinking". See also Roessler (2013, p.661) for the observation that discussions of TI often fail to differentiate the content of an "episode of thinking" from the thought produced.

<sup>&</sup>lt;sup>3</sup> The more usual term is 'auditory verbal hallucination' (AVH). We use the term 'verbal hallucination' (VH) instead, as not all 'voice hearing' experiences are genuinely auditory, and it is the non-auditory ones that we focus upon here.

the 'act of thinking' interpretation of TI is adopted, VH turn out to be very different from TI: VH involves experiencing p in the absence of p, while TI involves thinking that p but experiencing one's thinking as someone else's. In one case, there is an anomalous experiential content. In the other, one's own intentionality is misattributed to someone else. So, while VH involves a familiar kind of experience (albeit a non-veridical one), TI involves an experience that is intrinsically anomalous and strange – a thought process that one does not think. Given this difference, it is puzzling that many authors attempt to account for them both in the same way, often by appealing to the agency/ownership distinction (e.g. Stephens and Graham, 2000; Gallagher, 2005).

The content view has the virtue of dissolving this tension. It is sometimes suggested that VH and TI are actually different descriptions of the same phenomenon (e.g. Langland-Hassan, 2008, p.373). The content view makes clear how this could be so. If TI involves experiencing thought contents as (a) present, and (b) emanating from elsewhere, then it shares these characteristics with perceptual experiences. Hence it might equally be described in terms of a perception with an unfamiliar content. Conversely, if VH content is not perceived to originate in a localised external source and does not have the full range of auditory characteristics, it could equally be described in terms of experiencing an alien thought.

So far, this is rather speculative. We have argued that (a) TI could involve thought content rather than episodes of thinking; (b) this would bring it closer to various familiar phenomena and thus make it easier to understand; and (c) the content view also accommodates the alleged similarity or even identity between VH and TI. But is there any evidence for the view? In order to address that question, we first need to constrain the scope of our enquiry to certain kinds of VH. VHs are heterogeneous; variables include number of voices, degree of personification, the content of what is said, mode of address (second- or third-person) and presence or absence of auditory qualities (Nayani and David, 1996; Larøi, 2006, McCarthy-Jones et al., 2014). Sometimes, VHs are said to be auditory and external. For example, Leudar et al. (1997, p.888) describe them as "verbal and with phenomenal properties like hearing another person speaking, but in the absence of anyone who could have produced it"; Garrett and Silva (2003, p.445) similarly state that "the subjective quality of sensation is a near-universal feature of auditory hallucinations"; and Wu (2012, p.90) premises

his model on the fact that VHs "sound like voices". However, others describe them as predominantly internal and lacking in auditory properties. Stephens and Graham (2000) argue at length that most 'voice-hearers' do not actually hear voices at all; Frith (1992, p.73) maintains that a VH can involve something more abstract than hearing a voice, "an experience of receiving a communication without any sensory component"; and Moritz and Larøi (2008. p.104) suggest that the term 'voice-hearing' may well be a "misnomer", an "inaccurate term to express that their cognitions are not their own".

In fact, it seems clear that VHs come in both guises. David (1994) states that most but not all subjects experience voices as arising "inside the head", while Nayani and David (1996) report that 49% of their subjects heard voices through their ears, 38% internally and 12% in both ways. Leudar et al. (1997, p.889) state that 71% of their subjects heard only internal voices, 18% heard voices "through their ears", and 11% heard both. Some or all external VHs might well have properties much like those of veridical auditory perceptions, but internal VHs do not. Although they are not always described as *wholly* bereft of auditory properties, first-person accounts suggest that they are quite different from those VHs that are experienced as audition-like and as originating in externally located events. This is readily apparent when we scrutinise the testimonies of individuals who experience both kinds, where the two are explicitly contrasted:

"I feel like I have other people's thoughts in my head and also hear other people having conversations outside my head." (#3)

"They are inside my head. I do sometimes hear voices that are indistinguishable, but it's shorter and much less frequent." (#15)

"There are two kinds – one indistinguishable from actual voices or noises (I hear them like physical noises, and only the point of origin (for voices) or checking with other people who are present (for sounds) lets me know when they aren't actually real. The second is like hearing someone else's voice in my head, generally saying something that doesn't 'sound' like my own thoughts or interior monologue." (#17)

"The voice is inside my head at times, appears to come from within my brain. But at other times, specifically when my name is called it seems that it comes from outside, almost like someone is trying to catch my attention." (#27)

Neither 'internal' nor 'external' VHs are exclusive to schizophrenia diagnoses. The above quotations (and all other numbered quotations in this paper) were obtained via a questionnaire study on 'voices and voice-like experiences', and respondents listed several different diagnoses. So, while we aim to say something about the nature of TI and VH experiences, we remain noncommittal about (a) the reliability of diagnostic categories such as 'schizophrenia' and (b) whether certain kinds of experience are specific to certain diagnostic categories.<sup>4</sup>

Some internal VHs are described as having no auditory qualities at all.<sup>5</sup> Hence we might wonder whether their sensory qualities differ in any way from those of some or all thought contents. If they do not, then what we would have is a perception-like experience of thought content, an unfamiliar kind of experience that could equally be communicated in either of two ways:

I experience content p as a thought content that I did not think.

I experience content p as a perceptual content, but one that is anomalous in lacking certain properties.

And this, we suggest, is exactly what happens. Internal VHs are not experiences of a familiar kind that are regarded as strange only because they are non-veridical. Like TI, they are intrinsically strange. They involve an unfamiliar kind of 'perception-like' intentional state, a view that is supported by the observation that people frequently struggle to convey them. They are often said to be 'almost like' something - it is 'as though' something were the case. For instance, they are sometimes described as 'like' telepathy:

<sup>-</sup>

<sup>&</sup>lt;sup>4</sup> Quotations were obtained via a 2013 Internet questionnaire study, which we conducted with several colleagues as part of the Wellcome Trust funded project 'Hearing the Voice'. The study received ethical approval from the Durham University Philosophy Department Research Committee. Participants were asked to provide free text responses to several questions about voices and voice-like experiences. Study design was closely based on earlier work addressing the phenomenology of depression (for details, see Ratcliffe, 2015). All respondents quoted in this paper had psychiatric diagnoses: schizophrenia (#8, #32); schizoaffective disorder (#33); borderline personality disorder (#1, #3, #4); dissociative identity disorder (#2, #5); post-traumatic stress disorder (#22); psychosis (unspecified) (#7, #15); bipolar disorder (#17); major depression (#18, #27).

<sup>&</sup>lt;sup>5</sup> This is consistent with reports of 'voices' in congenitally deaf subjects (e.g. Aleman and Larøi, 2008, pp.48-9).

<sup>&</sup>lt;sup>6</sup> See also Langland-Hassan (2008, p.373) for the view that VHs are difficult to describe, given that they do not fit into familiar psychological categories.

"The commentary and the violent voices I heard as though someone was talking to me inside my brain, but not my own thoughts. Almost like how telepathy would sound if it were real. I don't know how else to explain it." (#4)

"...there are things I 'hear' that aren't as much like truly hearing a voice or voices. [....] Instead, these are more like telepathy or hearing without hearing exactly, but knowing that content has been exchanged and feeling that happen." (#7)

"Telepathic conversations between me and most other people." (#8)

"The best way to describe it is telepathy, in different grades of vividness, from bearable to intrusive." (#33)

It might be objected that what we have said conflicts with the observation that even internal VHs are usually reported in terms of audition, rather than other kinds of perceptual experience. However, information of the relevant kind is usually received via auditory channels, at least in the absence of visual stimuli such as reading materials. So, even when it is bereft of the usual sensory qualities, it lends itself to description in those terms. Furthermore, talk of hearing and sounds is often qualified, and auditory terms may appear in scare quotes (as in quotation #7 above). In fact, an internal VH that lacked auditory properties could equally be compared to an experience of reading, but in the absence of any perceived text. As one questionnaire respondent remarks: "When you read a book, you hear it in the voice of the author or the narrator, but you know that voice isn't yours. It's a lot like that" (#5). Importantly, internal VHs can also be described in terms of TI. That this is the case is made clear by first-person reports that straddle TI and VH, referring to the same phenomenon both as a voice and as an alien thought:

"The voice inside my head sounds nothing like a real person talking to me, but rather like another person's thoughts in my head. (#1)

"The voices inside my head are like thoughts, only they are not my own..." (#2)

"...it definitely sounds like it is from inside my head. It's at some kind of border between thinking and hearing." (#18)

Of course, phenomenology cannot simply be read off first-person reports. Such reports are often vague and amenable to a range of interpretations. So we have not offered a conclusive case. Nevertheless, the interchangeability of TI and VH descriptions constitutes evidence in support of the thought content view; people *do* 

describe the same experience in terms of perceiving that *p* and experiencing the thought that *p* as alien. Furthermore, our account makes sense of such reports, by postulating an unfamiliar kind of experience that falls somewhere in between thinking and perceiving. Hence, in the absence of conflicting evidence in support of the thought process view, the content view is to be preferred.

It is plausible to suggest that some internal VHs do have auditory or audition-like properties, and thus further lend themselves to description in terms of 'hearing voices'. However, this need not conflict with our claim that they are TI under another description. The view that thought is sometimes or always wholly bereft of auditory properties is far from uncontroversial. Most approaches to VHs take them to involve misattributed 'inner speech' rather than simply 'thought', where inner speech is only one form that our thoughts can take. And Hoffman (1986), amongst others, maintains that inner speech incorporates "auditory imagery". We should add that, in suggesting that internal VHs resemble perceptions, we do not wish to imply an exclusive resemblance to sensory perceptions of the external environment. They are experienced as falling within one's bodily boundaries and - in this respect - more closely resemble interoception or proprioception. However, as meaningful communications are ordinarily received through external sensory channels, internal VHs differ from bodily experiences as well. This further emphasises the point that TI/VH involves an unusual kind of experience, something that is not quite like thinking, externally directed perception, or perception of one's bodily states.

The more general phenomenon sometimes referred to as 'double bookkeeping' serves as further evidence for our view that TI/VH involves an unfamiliar kind of intentional state. Many who express delusional beliefs and describe hallucinatory experiences also speak and act in ways that distinguish their delusions from other beliefs, and their 'hallucinations' from veridical perceptions (Sass, 1994, p.3). Consider this passage from *Autobiography of a Schizophrenic Girl*, where the author, 'Renee', describes the cries in her head:

<sup>&</sup>lt;sup>7</sup> See, for example, Prinz (2011) for the stronger claim that conscious cognitive episodes never lack sensory qualities. This is one of various views adopted in the context of the current 'Cognitive Phenomenology Debate'. See Bayne and Montague eds. (2011) for a good anthology on this.

I did not hear them as I heard real cries uttered by real people. The noises, localized on the right side, drove me to stop up my ears. But I readily distinguished them from the noises of reality. I heard them without hearing them, and recognized that they arose within me. (Sechehaye, 1970, p.59)

Descriptions like this again suggest a kind of experience that does not fit neatly into established intentional state categories. Indeed, J. H. van den Berg (1982, p.105) observes how "voices" are often given a "special name" to set them apart from perceptual experiences, due to their having a "recognizable character of their own which distinguishes them from *perception* and also from *imagination*". This would also explain why the majority of clinical and non-clinical 'voice-hearers' are readily able to distinguish their 'voices' from veridical auditory perceptions (Moritz and Larøi, 2008).

### **Distinguishing Types of Intentional State**

The position we have defended complements an approach to delusions proposed by Currie (2000) and Currie and Jureidini (2001), according to which a delusion is not a recalcitrant false belief but an imagining that is mistaken for a belief. In the case of VH/TI, there is similarly confusion between two kinds of intentional state: perceiving and thinking. Currie and Jureidini (2001) construe this as an epistemic problem: one actually imagines that p but mistakes one's imagining that p for the belief that p. However, they later reject a categorical distinction between imagination and belief, allowing for the possibility of intentional states that fall between the two (Currie and Jureidini, 2004).

Whether our account is to be construed in epistemic or constitutive terms depends on which definitions of 'perception' and 'thought' are adopted. It could be maintained that perception - by definition – involves receipt of information from an external source, whereas thinking does not. Perception is to be defined in terms of its success conditions: one perceives that *p* only where the experience of *p* is produced by an external source in an appropriate way. So a hallucination - in the orthodox sense of the term – is not a perception but an experience that resembles a perception. And the same applies to TI/VH. Alternatively, we could appeal to perception-specific neurobiological processes. A hallucination would qualify as a perception if those

same processes were involved in its production. But TI/VH would not, assuming it involved processes associated with thinking rather than perceiving. If it involved a combination of the two, there might be no fact of the matter. Another option is to adopt a wholly phenomenological conception of perception and thought: if one is in a phenomenological state that is like believing or perceiving, then one is *ipso facto* in a state of that kind (e.g. Horgan and Tienson, 2002). Hence TI/VH would not involve mistaken identity but a blurring of the distinction between thinking and perceiving, a type of intentionality that is neither one nor the other.

For current purposes, we do not wish to insist on any particular definition of perception. Our claim is that, whether or not 'perceiving or thinking that p' is to be identified with 'experiencing oneself as perceiving or thinking that p', what we have in the case of TI/VH is 'an experience of being in a certain kind of intentional state', which differs in character from mundane experiences of thinking that p or perceiving that p. Hence, regardless of how perception is defined, it is clear that TI/VH departs from the orthodox conception of hallucination. In phenomenological terms, orthodox hallucination involves a perceptual experience of p (or an experience that closely resembles one of perception in a given sensory modality), but in the absence of p. Although certain VH experiences may take this form, those that are also describable in TI terms involve an intrinsically strange, quasi-perceptual experience of something that otherwise resembles thought content.

One might also wonder how our account relates to the widespread view that TI is a 'delusion'. It cannot simply be the case that VH is a 'hallucination' and TI a 'delusion', given that they can amount to different descriptions of a common phenomenon. The 'voice hearer' may or may not take her experience of VH/TI to be veridical. It feels *as if* the content comes from elsewhere, and whether or not this either constitutes or gives rise to a delusion depends on whether or not the subject

\_

<sup>&</sup>lt;sup>8</sup> As Horgan and Tienson (2002, pp.522-523) put it: "In addition [to the phenomenology of intentional content], there is also a specific what-it's-likeness that goes with the attitude type as such. There is a phenomenological *difference* between wondering whether rabbits have tails on one hand and thinking that rabbits have tails on the other. This aspect is *the phenomenology of attitude type*."

<sup>&</sup>lt;sup>9</sup> Garrett and Silva (2003, p.453) also suggest that VHs involve "a new category of experience that blends elements of perception and thought but remains distinct from both". However, they emphasise the sensory qualities of VHs in a way that we do not.

accepts that it comes from elsewhere. It is debatable whether a sense of the content's coming from a personal source is intrinsic to the experience or whether it involves the embellishment of a core experience. However, the latter is plausible, given that VHs are personified to varying degrees (Bell, 2013). And, as noted by Hoerl (2001, p.189), patients "seem much more unequivocal that the thoughts in question do not belong to them than they are about possible ways in which others might be implicated in their occurrence". A high degree of personification may also be linked to delusionformation, insofar as it involves an increasingly elaborate attempt to make sense of the experience in terms of another agent, who may have specific characteristics and intentions. In addition, it is likely that the description 'TI' lends itself to a delusional interpretation more so than that of 'hearing a voice'. Saying that one 'hears a voice' serves to express an anomalous experience but does not operate as an explanation of it (unless one further insists that the experience is a veridical one). However, TI includes more specific reference to causes. Hence it is less likely to be used as a noncommittal description of an experience, and also more likely to operate as an explanation: I have the anomalous experience because B is inserting thoughts in my head. That said, the same delusion could equally be construed in terms of other people 'really speaking in my head', and a TI description does not imply endorsement of a TI explanation. So the distinction between an internal VH and a 'delusion of TI' is not a clear one, and the underlying experience can be the same in both cases.

### **Agency and Ownership Revisited**

Given the account we have sketched, we do not find the agency/ownership distinction helpful in this context. That distinction could be applied to an intentional state, its content, or both: I am the agent and/or owner of intentional state x and/or its content p. In one sense, experienced ownership of an intentional state implies ownership of its content. In short, if I experience myself as perceiving, then I experience myself as having a perception of something. And, if I experience myself as thinking, I experience myself as having a thought with some content. Even in the case of TI, one takes oneself to be having an experience with some content. What is anomalous is not that the content 'fails to belong to me' but that it is experienced as non-self-generated, when contents of that kind usually are self-generated. However, there is another sense in which one does not experience oneself as the 'owner' of p. As Bortolotti and Broome (2009, p.208) ask, do you really 'own' something that you feel so "radically

alienated" from? The answer to this question is that you do not experience yourself as owning the inserted *thought* any more than you experience yourself as owning a chair as you look at it (where 'ownership' is understood in terms of something's falling within one's psychological boundaries). What you *do* own, though, is an experience of that thought content, an experience of its originating from elsewhere. By analogy, when you hear someone say 'I hate you', you have an experience that includes the content 'I hate you', a content that you might be said to 'own'. But, just as the experience of a chair can be distinguished from the chair itself, experience of the utterance can be distinguished from the utterance. In both cases, there is a sense that what one experiences is non-self-produced. This is all that talk of continued ownership expresses: one has an experience of p, but an experience of p's originating in an external source. 'I still own p' is just another way of saying 'I am not the agent that produced p'. It therefore adds nothing to the view that TI involves lack of experienced agency. <sup>10</sup>

Should we say, then, that TI involves experiencing content *p* with no associated sense of agency, resulting in a perception-like experience? That's not really helpful either. It can be maintained that perception, like thought, involves a sense of agency. Perception is not a wholly passive process. We actively look, we listen, we interact with our surroundings, and we physically manipulate objects in order to reveal their hidden features. As various enactivist approaches to perception have emphasised, perception is a matter of exploratory activity rather than the passive receipt of information (e.g. Noë, 2004). And one need not endorse one or another enactivist position in order to accept the less committal view that perceptual experience involves varying degree of agency, rather than passive receipt of sensory information. It should of course be added that we do not experience ourselves as wholly responsible for the *contents* of our perceptions. Whatever theory of perception one might adopt, it seems

-

<sup>&</sup>lt;sup>10</sup> See also Sousa and Swiney (2013, p.644) for a 'deflationary' account of 'ownership' along these same lines. Talk of 'ownership', they note, can have all sorts of different connotations. In the context of TI, it is just another way of saying that one is not the agent of the thought. "The patient is simply emphasizing via the language of thought ownership that she does not have the sense of being the producer ('source') of the thoughts". See Gallagher (in press) for a response to several criticisms of the agency/ownership distinction and for further clarification of his own view. His various responses and refinements do not – so far as we can see – pose a challenge to our own concerns about the agency/ownership distinction as applied to TI, although they do amount to a plausible case for its more general applicability.

fair to say that we experience the contents of our perceptions *as* largely determined by things that are external to ourselves. So perceptual experience might involve some sense of agency, but we don't attribute our perceptual contents to our own agency. Whether or not one sees a table or a window depends on where one turns one's head, but it is the presence of a table that determines whether one sees a table when one does turn one's head in a given direction. Thought contents, unlike perceptual contents, are not experienced as environmentally dependent in this way.

However, it is unclear what the relevant experience of agency is supposed to consist of. One might struggle to think through a philosophical problem and, in so doing, experience a coherent stream of thought as self-generated and effortful. However, the song that suddenly, unexpectedly, and effortlessly pops into one's head is quite different, as are occasional and uncomfortable thoughts that do not cohere with one's own values, such as 'why not punch him on the nose to see how he reacts?' Such thoughts can arise unannounced and even be surprising, but this does not prevent their being experienced unproblematically as episodes of thought. So the experience of 'having the thought that *p*' is not a singular one, and encompasses various cases that seem to involve little or no awareness of agency. Hence it is not clear that the *phenomenological* difference between having the thought that *p* and having an experience of *p* as non-self-produced can be attributed to the presence or absence of a sense of agency. All we have so far is the following:

When one experiences oneself as the agent of mental state type x, the content of x is experienced as self-produced.

When one experiences oneself as the agent of mental state y, the content of y is experienced as non-self-produced.

Why, then, is the content of thought ordinarily experienced as self-produced while the content of perception is not? The answer might seem simple enough: non-self-produced contents have certain properties that distinguish them from self-produced contents. For example, a voice that emanates from somewhere else has a perceived location and various distinctively auditory characteristics. But one of the most interesting things about TI/VH is that it challenges such a view. The phenomenological difference between thinking that *p* and perceiving that *p* cannot be

wholly attributed to different contents, given that TI involves something that retains the properties of thought content but at the same time seems to come from elsewhere. So what we need to account for is this:

One experiences a content of the kind ordinarily associated with a state of type *x*, but in such a way that it is experienced as non-self-produced. In virtue of the content's seeming to be non-self-produced, the experience resembles a state of type *y*, even though its content differs from those ordinarily associated with *y*.

We will now sketch a tentative account of how such an experience might arise, an account that does not appeal to the sense of agency.

## **Reformulating the Question**

We have suggested that the question to ask is not 'why is there a sense of ownership but no sense of agency for an intentional state of a given type?' but, rather, 'why is there an erosion of the phenomenological distinction between two intentional state types?' As already noted, we doubt that appeals to conscious agency will assist in distinguishing quasi-perceptual experiences of thought content from seemingly passive but quite unproblematic 'episodes' of thought. But one could instead appeal to a breakdown of non-conscious processes. Even when a thought seems to come unannounced, that thought (and – to some degree – its content) might still be anticipated in a non-conscious way. It is when such anticipatory processes breaks down that the thought is experienced in an anomalous way.

That said, we should not be too hasty in ruling out a role for conscious *anticipation*. Even if we do not experience a sense of effort, agency, or intention in relation to all thought contents, perhaps they are at least *anticipated*. So it could be that the phenomenological difference between TI and thinking is that the content of TI arises without any conscious anticipation and is therefore more like perceptual content. However, there are two problems with that view. First of all, perceptual contents are not always unanticipated. Indeed, it has been argued that perceptual experience is riddled with anticipation, as exemplified by moments of surprise when things do not appear as anticipated but where anticipation did not involve consciously entertaining a propositional attitude with the content 'x is behind the door' or 'y has property p and

not property *q*' (Husserl, 1948/1973; Noë, 2004; Ratcliffe, 2008, 2015; Madary, 2013). Furthermore, what we perceive is often partly attributable to our own activities, which we expect to have certain, often quite specific effects. If I hurl a glass at a wall, it comes as no surprise to me when it makes a loud crash and shatters into pieces. The second problem is that many 'voice hearers' *do anticipate* when they will 'hear' a voice and they also anticipate, to varying degrees, *what* they will 'hear'. Some report being able to communicate with their 'voices' (e.g. Garrett and Silva, 2003, p.449), and 38% of the subjects who participated in a study by Nayani and David (1996, p.183) reported being able to initiate a voice. This also poses problems for the view that VH/TI is to be accounted for in terms of non-conscious prediction mechanisms. It could well be that some such mechanism fails. Even so, where there is conscious anticipation, some kind of non-conscious prediction mechanism is surely at work too.

Another consideration to keep in mind is the content-specificity of many TI/VH experiences. Where a non-conscious mechanism breaks down, it might do so only sporadically, but this does not account for the fact that many TI/VH experiences have consistent thematic contents. More often than not, the contents of 'voices' are insults and simple terms of abuse, an observation that applies to several different psychiatric diagnoses and also to some of the VH experiences reported in non-clinical populations (Nayani and David, 1996; Leudar et al. 1997; Aleman and Larøi, 2008). Given this, it is unsurprising that VHs are often associated with heightened anxiety (Allen et al., 2005; Kuipers et al., 2006; Paulik, Badcock and Maybery, 2006). What is of particular interest to us, though, is the observation that generalised social anxiety often *precedes* the onset of VHs and that anxiety may be especially pronounced immediately before the onset of a voice. It has therefore been suggested that anxiety acts as a trigger (Freeman and Garety, 2003, p.923).

We will now briefly sketch an account of how anxiety might generate the kind of experience described here. (A more detailed account is offered in Ratcliffe and Wilkinson, forthcoming). We do not wish to insist that this account applies to every case of TI/VH; such experiences could well arise in a number of different ways. Rather, our claim is that on the basis of (a) our account of VH/TI, and (b) available empirical evidence, there is a plausible hypothesis that applies to at least a subset of

cases. Our proposal is that VH/TI is not a matter of lacking anticipation, conscious or otherwise, but of anticipating the arrival of thought contents in a distinctive way. It is about how one anticipates. Anxiety, we suggest, alienates a person from the object of anxiety: when one is anxious about p, one experiences p as something that impedes one's agency - something that one may seek to avoid but feel helpless in the face of. By implication, p is experienced as distinct from oneself. It need not be experienced as physically external. Serious illness can involve losing an implicit 'trust' in the body's ability to perform its various functions and, along with this, a curious sense of estrangement from one's body (Carel, 2013). With this, bodily experiences may themselves be objects of anxiety; they are experienced as impinging upon the self, threatening the self. We can also feel anxious about our own abilities to perform various tasks. However, we are seldom anxious about our own thought contents. When we are anxious about the prospect of messing up something important, we are anxious about a state of affairs that may or may not arise, not about 'the thought that a state of affairs might arise'.

But suppose that you became anxious about the arrival of thoughts with contents such as 'you are a worthless piece of filth and everyone is laughing at you'. It might be objected that you cannot feel anxious about a thought with the content *p* before you have that thought; the thought must have formed already. However, thought contents do not always form instantaneously. Often, there is a short period during which they coalesce and their content becomes more determinate. Take the experience of realising that you have forgotten something important. It can start with an inchoate sense of anxiety which might be expressed by the indeterminate content 'something is wrong', followed by 'I've forgotten something' and, finally, 'I've not brought my passport to the airport', after which the repercussions of this omission increasingly sink in.

That thoughts take shape in some such way is also consistent with the commonplace assumption that VHs involves misidentified 'inner speech', as distinct from thought more generally, where inner speech is a form that only some thoughts take on. As Stephens and Graham (2000, p.82) remark, talking to oneself is one "way of thinking". This suggests a process whereby thought contents become inner speech contents (Hoffman, 1986; Fernyhough, 2004). We can add that, when a thought takes

on an explicitly linguistic form (which is not to imply that thought more generally is bereft of linguistic structure), its content gains greater determinacy. This view gains further plausibility from the observation that many VH/TI contents are emotionally charged. In fact, they might be regarded as more determinate linguistic expressions of emotional attitudes towards oneself, involving feelings of shame, worthlessness, and social estrangement. The person might resist such emotional states, try to avoid them, and thus feel a sense of dread as they coalesce into a more determinate linguistic judgement. <sup>11</sup>

So, one way in which a VH/TI experience could occur is that the person anxiously anticipates the arrival of thought content *p* as it coalesces. Given that anxiety alienates, *p* is then experienced as something she confronts, something that threatens, which she feels helpless in the face of. This sense of alienation from *p* amounts to a perception-like experience of it: *p* is the object of an emotional experience that is not ordinarily associated with thought contents, an experience that is more usually associated with what we encounter through external sensory perception or through interoception. By analogy, consider the experience of reading a letter with a consistently abusive and insulting content. What would such an experience be like if the text were absent and if one could not avoid the content by averting one's gaze? One would dread what is coming next, feel increasingly alienated from it, and yet continue to anticipate it. <sup>12</sup> Certain first-person reports indicate something much like this:

It's very difficult to describe the experience. Words seem to come into my mind from another source than through my own conscious effort. I find myself straining sometimes to make out the word or words, and my own anxiety about what I hear or

.

<sup>&</sup>lt;sup>11</sup> Colombetti (2009) suggests that expression and, more specifically, linguistic expression serves to individuate or even partly constitute certain emotions, a point that may apply to inner speech as much as to overt linguistic expression.

<sup>&</sup>lt;sup>12</sup> Billon (2013, p.16) similarly offers an analogy between TI and being perceptually presented with a sentence, but offers an account according to which inserted thoughts, unlike thoughts more generally, are not "phenomenally conscious". Hence TI involves having a conscious experience of something that is not itself part of one's consciousness and thus appears alien to it. We similarly maintain that TI involves experiencing one's thoughts in a perception-like way, but we do not attribute this to a lack of 'first-order phenomenology'. Rather, it is a matter of taking oneself to be intentional state *x*, rather than *y*, something that can be accounted for without appealing to the distinction between phenomenally conscious and unconscious thoughts.

many have heard makes it a fearful experience. I seem pulled into the experience and fear itself may shape some of the words I hear. (#32)

If something along these lines is right, then the difference between TI and more mundane experiences of thinking is not that TI involves a *lack* of something (for example, a sense of agency). Rather, a certain affectively charged way of anticipating is *present* in TI. Hence it may not be that some positive characteristic is required in order to identify thought content as self-generated. Perhaps it does not require any anticipation at all, conscious or otherwise. Many thoughts could well be just what they seem to be, unanticipated and quite mundane - the song that starts in one's head, the irrelevant thought that disrupts one's concentration while writing. Self-attribution could be the default way of experiencing thought contents. It takes an anomalous mode of anticipation, such as anxious anticipation, to transform an episode of thought into a quasi-perceptual encounter with something.<sup>13</sup>

What we are proposing is, in one respect, consistent with accounts that appeal to lack of endorsement; a thought appears alien when – for whatever reason - one fails to endorse its content (Stephens and Graham, 2000; Bortolotti and Broome, 2009). The difference is that, according to our account, lack of endorsement does not follow formation of thought content. Rather, one seeks to avoid the content as it arises but feels helpless before it. One might say that the experience is one of ineffectively resisting the arrival of a negative emotional judgement regarding oneself:

....it's mocking me, I hate that one [...] I am left in a state of fear [...] They don't sound like me. They are angry most of the time. I don't like to think of mean things, I try hard not to, but the more I try not to think the more the voices get nasty. (#22).

It can be added that this generally occurs in the context of a more general susceptibility to blurring of the phenomenological boundaries between intentional state types. Subjects with a range of different psychiatric diagnoses report pervasive feelings of anxiety and estrangement, which would render one more vulnerable to TI

-

<sup>&</sup>lt;sup>13</sup> Our account thus differs from that of Gallagher (2005), who suggests that anxiety may explain why thoughts appear alien but suggests that anxiety disrupts anticipation such that thoughts arrive unannounced and fully formed, rather than coalescing in a way that is consistent with what was anticipated.

in those cases where thought contents are especially troubling. There may also be more specific phenomenological changes associated with the prodromal stages of schizophrenia, which can involve thoughts in general being experienced as more perception-like, thus weakening the phenomenological boundaries between intentional state types in a way that increases vulnerability to more pronounced, content-specific disturbances (e.g. Raballo and Largi, 2011).

This type of account could be extended from the thinking/perceiving distinction to intentional states more generally. For instance, the alienating role of anxiety could apply equally to the anticipation of distressing memories and imaginings, both of which may have more pronounced auditory qualities. Indeed, Michie, Badcock, Waters and Maybery (2005) propose that VHs involve memory intrusions, rather than misplaced inner speech, although McCarthy-Jones et al. (2014) report that only 39% of their subjects acknowledged VH contents resembling memories and even fewer said that their VH contents were memories. It could well be that internal VHs are heterogeneous, involving experiences of inner speech, memories, and imaginings, as well as some contents that blend memories with imaginings. And the predominance of one form or another may reflect individual differences, different life histories, and different diagnostic categories. To speculate, we might find a predominance of alienated memory contents in cases where there is past trauma. However, inner speech VHs with less pronounced auditory phenomenology may be more often associated with schizophrenia diagnoses, thus accounting for more frequent reports of TI in schizophrenia. 14

#### Conclusion

 $<sup>^{14}</sup>$  As noted earlier, other 'subtypes' of VH are not captured by our account, including many that more closely resemble veridical auditory experiences in character. However, certain kinds of 'external VH' can also be understood in terms of social anxiety, thus accounting for why internal and external VHs often occur together. Dodgson and Gordon (2009, p.326) observe that anxiety and hyper-vigilance generate false positives, especially in 'noisy' environments where stimuli are susceptible to multiple interpretations. This, they suggest, accounts for a "substantial subset of externally located voices". This is also consistent with the "neural diathesis – stress" model of schizophrenia (Walker and Diforio, 1997), especially a more recent version of it that places the emphasis on responses to situations involving an "uncontrollable, social-evaluative threat" (Jones and Fernyhough, 2007, p.1174). If something along these lines is right, the phenomenology and underlying mechanisms in the internal and external cases would be quite different, but they could be attributable to a common underlying cause – pronounced and pervasive social anxiety.

It might seem that we have offered a rather deflationary view of TI. One does not experience an episode of thinking while failing to identify oneself as the agent. Rather, one experiences p as the content of an unfamiliar type of intentional state. Although still puzzling, this is closer to more familiar experiences where we take ourselves to be in state x in relation to p when we are actually in state y. However, what we in fact end up with is a version of the view that TI involves an erosion of ego boundaries, an experienced blurring of the distinction between self and non-self (see e.g. Hoerl, 2001, for a discussion of that view). It is not that one fails to distinguish self from non-self by experiencing a state of type x while failing to self-attribute it. Rather, one lacks an ability to distinguish type x from type y, where the distinction between them is partly constitutive of the self / non-self distinction.

Suppose one were completely unable to distinguish perceiving that p from entertaining the thought that p or remembering that p, and that this applied to all cases of p. One would lack any sense of the distinction between one's own consciousness and things external to it. More specifically, if the distinction between thinking that p and receiving the communication that p from someone else were lacking, one would not be able to distinguish one's own thought contents from those of others. The 'I think' would be gone from experience. Now, TI does not involve anything quite so extreme. Even so, to have frequent experiences that do not respect the phenomenological distinctions between types of intentional state (distinctions that the self/other/world distinction depends upon for its intelligibility) would challenge — to varying degrees - the sense of being a singular subject of experience, distinct from the surrounding world and from other subjects. This would be exacerbated by a less extreme but more pervasive erosion of the experienced distinctions between intentional state types. Consider the following first-person account, by someone with a schizophrenia diagnosis:

...the real 'me' is not here any more. I am disconnected, disintegrated, diminished. Everything I experience is through a dense fog, created by my own mind, yet it also resides outside my mind. I feel that my real self has left me, seeping through the fog toward a separate reality, which engulfs and dissolves this self. (Kean, 2009, p.1034)<sup>15</sup>

\_

<sup>&</sup>lt;sup>15</sup> Sass (e.g. 1992, 1994) describes such experiences in great detail, in a way that is consistent with much of what we have proposed.

Talk of disintegration and diminishment, and of things being experienced as self-created and at the same time 'outside', can be plausibly interpreted in terms of the erosion of phenomenological differences between familiar intentional state categories. Without those distinctions, one is no longer a 'real self', situated in a world that is not of one's own making. The sense of being a coherent locus of experience and agency, distinct from what it experiences, is thus compromised and the self is 'diminished'. Hence TI does, after all, point to a profound disturbance of first-person experience.

**Acknowledgements**: We are grateful to the Wellcome Trust for funding the research that led to this paper (grant number WT098455). We would also like to thank Shaun Gallagher, audiences at the Universities of Durham and Warwick, and two anonymous referees for their helpful comments and suggestions.

#### References

Aleman, A. and Larøi, F. 2008. *Hallucinations: the Science of Idiosyncratic Perception*. Washington D.C.: American Psychological Association.

Allen, P., Freeman, D, McGuire, P., Garety, P, Kuipers, E., Fowler, D, Bebbington, P., Green, C., Dunn, G. and Ray, K. 2005. The Prediction of Hallucinatory Predisposition in Non-Clinical Individuals: Examining the Contribution of Emotion and Reasoning. *British Journal of Clinical Psychology* 44: 127-132.

Bayne, T. & Montague, M. eds. 2011. *Cognitive Phenomenology*. Oxford: Oxford University Press.

Bell, V. 2013. A Community of One: Social Cognition and Auditory Verbal Hallucinations. *PLOS Biology* 11 (12): 1-4

Berg, J.H. van den. 1982. On Hallucinating: Critical-historical Overview and Guidelines for Further Study. In de Koning, A.J.J. and Jenner, F.A. eds. 1982. *Phenomenology and Psychiatry*. London: Academic Press: 97-110.

Billon, A. 2013. Does Consciousness entail Subjectivity? The Puzzle of Thought Insertion. *Philosophical Psychology* 26: 291-314.

Bortolotti, L. and Broome, M. 2009. A Role for Ownership and Authorship in the Analysis of Thought Insertion. *Phenomenology and the Cognitive Sciences* 8: 205-224.

Campbell, J. 1999. Schizophrenia, the Space of Reasons, and Thinking as a Motor Process. *The Monist* 82: 609-625.

Carel, H. 2013. Bodily Doubt. Journal of Consciousness Studies 20(7-8): 178-197.

Colombetti, G. 2009. What Language does to Feelings. *Journal of Consciousness Studies* 16: 4-26.

Copolov, D.L., Mackinnon, A. and Trauer, T. 2004. Correlates of the Affective Impact of Auditory Hallucinations in Psychotic Disorders. *Schizophrenia Bulletin* 30: 163-171.

Currie, G. 2000. Imagination, Delusion and Hallucinations. In Coltheart, M. and Davies, M. *Pathologies of Belief*. Oxford: Blackwell: 167-182.

Currie, G. and Jureidini, J. 2001. Delusion, Rationality, Empathy: Commentary on Davies et al. *Philosophy, Psychiatry & Psychology* 8: 159-162.

Currie, G. and Jureidini, J. 2004. Narrative and Coherence. *Mind & Language* 19: 409-427. David, A.S. 1994. The Neuropsychological Origin of Auditory Hallucinations. In David, A.S. and Cutting. J.C. eds. *The Neuropsychology of Schizophrenia*. Hove: Psychology Press: 269-313.

Delespaul, P., de Vries, M. and van Os, J. 2002. Determinants of Occurrence and Recovery from Hallucinations in Daily Life. *Social Psychiatry and Psychiatric Epidemiology* 37: 97-104.

Dodgson, G. and Gordon, S. 2009. Avoiding False Negatives: Are Some Auditory Hallucinations an Evolved Design Flaw? *Behavoural and Cognitive Psychotherapy* 37: 325-334.

Fernyhough, C. 2004. Alien Voices and Inner Dialogue: Towards a Developmental Account of Auditory Verbal Hallucinations. *New Ideas in Psychology* 22: 49-68.

Freeman, D. and Garety, A. 2003. Connecting Neurosis and Psychosis: the Direct Influence of Emotion on Delusions and Hallucinations. *Behaviour Research and Therapy* 41: 923-947.

Frith, C. 1992. The Cognitive Neuropsychology of Schizophrenia. Hove: Psychology Press.

Gallagher, S. 2005. How the Body Shapes the Mind. Oxford: Oxford University Press.

Gallagher, S. in press. Relations between Agency and Ownership in the Case of Schizophrenic Thought Insertion and Delusions of Control. *Review of Philosophy and Psychology*.

Garrett, M. and Silva, R. 2003. Auditory Hallucinations, Source Monitoring, and the Belief that 'Voices' are Real. *Schizophrenia Bulletin* 29: 445-457.

Graham, G. 2004. Self-ascription: Thought Insertion. In Radden, J. ed. *The Philosophy of Psychiatry: a Companion*. Oxford: Oxford University Press: 89-105.

Hoffman, R.E. 1986. Verbal Hallucinations and Language Production Processes in Schizophrenia. *Behavioral and Brain Sciences* 9: 503-548.

Husserl, E. 1948/1973. *Experience and Judgment*. Trans. Churchill, J. S. and Ameriks, K. London: Routledge.

Jones, S.R. and Fernyhough, C. 2007. A New Look at the Neural Diathesis-Stress Model of Schizophrenia: the Primacy of Social-Evaluative and Uncontrollable Situations. *Schizophrenia Bulletin* 33: 1171-1177.

Hoerl, C. 2001. On Thought Insertion. *Philosophy, Psychiatry & Psychology* 8: 189-200.

Horgan, T. and Tienson, J. 2002. The Intentionality of Phenomenology and the

Phenomenology of Intentionality. In Chalmers, D.J. ed. *Philosophy of Mind: Classical and Contemporary Readings*. Oxford: Oxford University Press: 520-533.

Kean, C. 2009. Silencing the Self: Schizophrenia as a Self-disturbance. *Schizophrenia Bulletin* 35: 1034-1036.

Kuipers, E., Garety, P., Fowler, D., Freeman, D., Dunn, G. and Bebbington, P. 2006.

Cognitive, Emotional, and Social Processes in Psychosis: Refining Cognitive Behavioral Therapy for Persistent Positive Symptoms. *Schizophrenia Bulletin* 32 (S1): 24-31.

Langland-Hassan, P. 2008. Fractured Phenomenologies: Thought Insertion, Inner Speech, and the Puzzle of Extraneity. *Mind & Language* 23: 369-401.

Larøi, F. 2006. The Phenomenological Diversity of Hallucinations: Some Theoretical and Clinical Implications. *Psychologia Belgica* 46: 163-183.

Leudar, I, Thomas, P, McNally, D. and Glinski, A. 1997. What Voices can do with Words: Pragmatics of Verbal Hallucinations. *Psychological Medicine* 27: 885-898.

Madary, M. 2013. Anticipation and Variation in Visual Content. *Philosophical Studies* 165: 335-347.

McCarthy-Jones, S., Trauer, T., Mackinnin, A., Sims, E., Thomas, N. and Copolov, D.L. 2014. A New Phenomenological Survey of Auditory Hallucinations: Evidence for Subtypes and Implications for Theory and Practice. *Schizophrenia Bulletin* 40: 231-235.

Mellor, C.H. 1970. First Rank Symptoms of Schizophrenia. *British Journal of Psychiatry* 117: 15-23.

Michie, P.T., Badcock, J.C., Waters, F.A.V. and Maybery, M.T. 2005. Auditory Hallucinations: Failure to Inhibit Irrelevant Memories. *Cognitive Neuropsychiatry* 10: 125-136.

Moritz, S. and Larøi, F. 2008. Differences and Similarities in the Sensory and Cognitive Signatures of Voice-hearing, Intrusions and Thoughts. *Schizophrenia Research* 102: 96-107.

Nayani, T.H. and David, A.S. 1996. The Auditory Hallucination: a Phenomenological Survey. *Psychological Medicine* 26: 177-189.

Noë, A. 2004. Action in Perception. Cambridge MA: MIT Press.

Paulik, G., Badcock, J.C. and Maybery, M.T. 2006. The Multifactorial Structure if the Predisposition to Hallucinate and Associations with Anxiety, Depression and Stress. *Personality and Individual Differences* 41: 1067-1076.

Prinz, J. 2011. The Sensory Basis of Cognitive Phenomenology. In Bayne, T. and Montague,

M. eds., Cognitive Phenomenology. Oxford: Oxford University Press: 174--196.

Raballo, A. and Larøi, F. 2011. Murmurs of Thought: Phenomenology of Hallucinating Consciousness in Impending Psychosis. *Psychosis* 3: 163-166.

Ratcliffe, M. 2008. *Feelings of Being: Phenomenology, Psychiatry and the Sense of Reality*. Oxford: Oxford University Press.

Ratcliffe, M. 2015. *Experiences of Depression: a Study in Phenomenology*. Oxford: Oxford University Press.

Ratcliffe, M. and Wilkinson, S. forthcoming. How Anxiety Induces Verbal Hallucinations.

Roessler, J. 2013. Thought Insertion, Self-Awareness, and Rationality. In Fulford, K.W.M.,

Davies, M., Gipps, R.G.T., Graham, G., Sadler, J.Z., Stanghellini, G. and Thornton, T. eds.

*The Oxford Handbook of Philosophy and Psychiatry*. Oxford: Oxford University Press: 658-672.

Sass, L. A. 1992. Madness and Modernism: Insanity in the Light of Modern Art, Literature and Thought. New York: Basic Books.

Sass, L. A. 1994. *The Paradoxes of Delusion: Wittgenstein, Schreber, and the Schizophrenic Mind.* Ithaca: Cornell University Press.

Sechehaye, M. 1970. Autobiography of a Schizophrenic Girl. New York: Signet.

Sousa, P. and Swiney, L. 2013. Thought Insertion: Abnormal Sense of Thought Agency or Thought Endorsement? *Phenomenology and the Cognitive Sciences* 12: 637-654.

Stephens, G.L. and Graham, G. 2000. When Self-consciousness Breaks: Alien Voices and Inserted Thoughts. Cambridge MA: MIT Press.

Wu, W. 2012. Explaining Schizophrenia: Auditory Verbal Hallucination and Self-Monitoring. *Mind & Language* 27: 86-107.