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Schizophrenia and the Place of Egodystonic States in the Aetiology of Thought Insertion

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Abstract Despite the diagnostic relevance of thought insertion for disorders such as schizophrenia, the debates about its aetiology are far from resolved. This paper claims that in paying exclusive attention to the perceptual and cognitive impairments leading to delusional experiences in general, current *deficit* approaches overlook the role that affective disturbances might play in giving rise to cases of thought insertion. In the context of psychosis, affective impairments are often characterized as a consequence of the stress and anxiety caused by delusional episodes. However, here I explore some of the conceptual and empirical reasons to think that affective problems might in fact play a crucial doxastic role in the aetiology of thought insertion. Finally, I conclude by proposing a way of integrating the main insights of my analysis with the current 'two-factor' deficit approach to thought insertion and I explore the potential adaptive role that some delusions might have within this framework.

> Reason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them.
>
> David Hume

1 Introduction

Thought insertion is regarded as one of the most severe—yet not exclusive - symptoms of schizophrenia (Mullins and Spence 2003). From a first-person perspective, patients

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report that certain *thoughts* or *ideas* are placed into their minds by external agents (Frith 1992). Based on the main patients' reports available in the literature, a plausible account for the phenomenon should be able to make sense of the following set of features:

(i) **Lack of sense of ownership:** Normally, thinking is experienced as an activity that is being carried out by oneself. There is a quality of 'ownership' or 'mineness' attached to cognitive activity. However, as Fish (1962: 48) suggests: 'in schizophrenia this sense of the possession of one's thoughts may be impaired and the patient may suffer from alienation of thought […] [the patient] is certain that alien thoughts have been inserted in his mind'.

(ii) **External Attribution:** Patients identify the agent that is claimed to be inserting the alien thought into their minds. A patient claims that Eammon Andrews' thoughts were flashed into her mind (Mellor 1970: 17). The contents of the inserted thoughts are as diverse as the type of external agents identified by patients in their reports. For example, a patient reports that a set of *specific rules* was inserted into her mind by aliens (Payne 2013: 152), while another has referred to artefacts such as the television and radio as responsible for electrically inserting thoughts into her mind (Spence et al. 1997).

(iii) **Selectivity of alien thoughts:** In experiencing an alien thought, there are other simultaneous or subsequent mental states that are not experienced as inserted (Gallagher 2004). For example, patients experience a sense of realization that a certain thought is inserted and this sense is not itself inserted.

(iv) **Specificity of alien thoughts:** Gallagher (2004) claims that only a certain specific kind of thought-content is experienced as alien by patients. Alien thoughts are, most of the time, associated with significant others or with themes that are affectively relevant to the patients.

(v) **Sense of permeability of ego-boundaries:** Our mental life is characterized by a phenomenological demarcation between 'me' and 'not-me' (Parnas and Handest 2003). This sense of ego-boundaries creates a robust sense of private access to our own experiences. However, the sense of ego-boundaries is blurred in cases of thought insertion, as patients experience an external agent placing thoughts into their stream of consciousness. As Freud (1961: 13) noted: 'There are cases in which part of a person's own body, even portions of his mental life—his perceptions, thoughts, and feelings- appear alien to him and as not belonging to his own ego'.

(vi) **Absence of a Sense of Causal Coherence:** A feeling of causal coherence emerges when information concerning the triggering aspects of a certain thought is integrated into the occurrence of the thought (Martin and Pacherie 2013). Causally integrated thoughts are experienced as 'coherent and unified episodes of thinking' (115), and have a specific 'phenomenology of coherence' (116). In contrast, inserted thoughts are first-personally experienced as 'decontextualized' or coming 'out of nowhere'.

Despite the phenomenon's diagnostic relevance to a number of psychiatric conditions—such as schizophrenia, schizophreniform disorder, schizoaffective disorders, and many others - debates about the aetiology of thought insertion are far from resolved. In

this paper, I claim first that in paying exclusive attention to the examination of perceptual and cognitive impairments leading to delusional experiences in general, current *deficit* approaches overlook the role that affective disturbances might play in the aetiology of thought insertion. Often, affective impairments in the context of psychosis have been understood as a consequence of the stress and anxiety caused by delusional episodes. In contrast, here I explore some of the conceptual and empirical reasons to think that affective problems might in fact play a crucial doxastic role in the process of formation of thought insertion. In other words, I propose that affective impairments might contribute to *causing* certain delusions. Secondly, I propose that the inclusion of this issue into the general aetiological picture of thought insertion might help us to grasp the potential adaptive role that some delusions might have within a *deficit* framework.[1] Finally, I conclude by proposing a way of integrating the main insights of my analysis with the current 'two-factor' deficit approach to thought insertion. As the reader will note, our analysis will not lead to a full account of the phenomenon but rather, it will constitute a clarification of the place that affective states have in making sense of it.

2 Affectivity and the Formation of Delusions

2.1 Two Stories About the Formation of Delusions

There are different approaches to explaining delusions. On the one hand, dominant deficit approaches conceptualize delusions as the result of different perceptual and cognitive impairments in patients and therefore, as intrinsically pathological (see Campbell 1999; Maher 2003; Coltheart 2005; Coltheart et al. 2007 among many others). On the other hand, *motivational approaches* understand delusion formation as *motivated* by the psychological benefits conferred to the deluded (see Bentall and Kaney 1996, among many others). These two explanatory models have developed separately over the years and they are seen as incompatible by several authors (Ramachandran 1995; Stone and Young 1997; Ramachandran and Blakeslee 1998).[2] In this context, the question of whether delusions are psychologically adaptive to the patients becomes especially relevant to grasping the merits and differences between these two models. Understanding delusions as adaptive seems plausible the more we grasp the role they play in the patients' psychological life, i.e., how they serve to *maintain* or *unbalance* the mind's homeostasis. Roberts (1992), for example, claims that delusions allow patients to incorporate highly negative experiences within their personal conceptual framework; they are ways of dealing with highly problematic episodes or as Jaspers (1963) suggests, delusions provide a merciful way out from unbearable aspects of the patients' life. Similarly, Butler (2000) claims that delusions might emerge as a meaning-giving strategy, i.e., as an attempt to make sense of a catastrophic loss or feeling of emptiness. Butler suggests that some delusions might

[1] In this context, by 'adaptive' I simply mean 'beneficial' in any way for the patient's life. For a further discussion of this issue, see: McKay and Dennett (2009); Bortolotti (2014)).

[2] As we will see in the last section, I do not consider these approaches as completely incompatible.

protect patients from intolerable feelings of depression after traumatic episodes.[3] Martens (2002) suggests that delusional systems constitute routes to remission; they allow the temporary avoidance of an unbearable aspect of the patient's reality and after the patients' circumstances become favourable, they are ready for healthy development and remission (503). All these different versions of motivational accounts conceptualize delusions as different ways of dealing with certain unbearable stimuli and therefore, in contrast with deficit accounts, have an *adaptive* role.

Arguably, we can grasp the reasons *why* certain delusions enjoy an adaptive role by understanding their affective significance to the patient. The idea is that the affective aspects of delusions might reveal some of the most profound links between their phenomenological manifestation and the patients' background psychology. In turn, this would reveal the benefit they provide for the patients' life. So, it is only by making sense of this link that we can understand how certain delusions become adaptive. One proposal along these lines is Bentall and colleagues' model of persecutory delusions (Bentall and Kaney 1996; Kinderman and Bentall 1996, 1997). On this view, persecutory delusions are the result of psychological mechanisms that are aimed to maintain the patient's self-esteem when certain events highlight radical discrepancies between negative self- perceptions and self-ideals. Persecutory delusions on this account have an adaptive role given that they re-establish the patient's psychological homeostasis, which has previously been diminished by problematic episodes. Another account that relies on the idea of delusions being adaptive is Butler's (2000) model of 'Reverse Othello Syndrome'. Butler describes the case of a patient who a year after surviving a severe car crash, became convinced that he and his former partner—who had left him at that time—were, at that moment, happily married. The patient repeatedly tried to persuade people that his ex-partner was still sexually involved with him. Butler (2000) suggests that the delusion was not explicable by any organic pathology—not even by the patient's head injury—so the delusion likely emerged as a way of dealing with 'the stark reality of annihilating loss' (89). The delusional belief provided the patient a deliverance from an affectively intolerable episode in his life.

One of the many advantages of motivational accounts is that they can plausibly link the manifestation of certain delusions to some of the patients' most significant affectively relevant themes over time. By establishing a necessary link between delusions and the patients' background psychology, these models have a number of consequences for the treatment of delusions. For example, this link allows therapists to make sense of delusions from a diachronic point of view and therefore, to elaborate more specific and efficient interventions, based on the patients' own psychological resources and biography (see Kinderman and Bentall 1996).[4] Indeed, models such as Bentall's and Butler's allow psychotherapists to grasp the possible *affective significance* that a certain delusive experience might have for the patients and therefore, to elucidate their potential adaptive role.

Contrasting with the aforementioned approach, one of the most prominent versions of the *deficit approach* to thought insertion is the two-factors view (TFV henceforth).

[3] One of the weaknesses of Butler's position is that its primary interest is with a very specific and rare delusion. Therefore, it is not entirely clear if his conclusions can be extrapolated to the analysis of other delusions.

[4] It is widely granted among psychotherapists that a good quality psychotherapeutic intervention should use the patient's own psychological resources and biographically relevant elements for the intervention to be meaningful (see Guidano 1991; Arciero and Bondolfi 2010).

The TFV claims that delusions are generally rooted in abnormal experiences resulting from different neuropsychological impairments (factor 1). For two-factor advocates, delusions of thought insertion are formed to *explain* a highly anomalous thought. However, on this view the presence of the anomalous thought is not itself sufficient for the formation of the delusion (Davies et al. 2001). Contrasting with one-factor views—another popular deficit approach—where delusions are reasonable hypotheses given the strange character of the abnormal first-order thought (Maher 1974), the TFV proposes a deficit in the system of belief evaluation (factor 2), to explain the routes from abnormal cognitive experiences to delusions of thought insertion. Thus, by the introduction of a second factor in the formation of delusions of thought insertion, the TFV overcomes the difficulty that one-factor views have in explaining why there are people with perceptual impairments that do not develop delusional beliefs (Langdon and Coltheart 2000). However, here I shall claim that the exclusive focus that deficit approaches put on the description of perceptual and cognitive impairments has led to neglect the exploration of the role that affective disturbances and affectivity-laden states might play in the aetiology of thought insertion. In turn, this has led deficit approaches to offer an incomplete picture of the phenomenon. Finally, given the inability of deficit approaches to grasp the affective significance of delusions, they have become unable to examine the potential adaptive role of delusions and to incorporate the practical advantages of this issue into their theoretical framework.

2.2 Affective Impairments and Formation of Delusions

In this context, I shall call 'affectivity-laden' states any states that involve a certain - positive or negative—valence for a subject that makes her act in a certain way. The nature of these acts can be behavioural (e.g., crying) or cognitive (e.g., seeking explanations). In addition, I understand 'valence' as the attractiveness (positive valence) or aversiveness (negative valence) that a certain situation, event, physical object, or person has for the individual in that state (Frijda 1986). Affectivity-laden states can be *egosyntonic* or *egodystonic*. The former class refers to states that are in agreement with the needs, self-image, expectations, and goals of a subject. In contrast, the latter class refers to those states that are not in harmony with the subject's background psychology. They are beliefs, thoughts, desires, perceptions, and so on that are experienced as conflicting, aversive, and unpleasant. Importantly, the relationship between affectivity-laden states and the process of thought formation in the context of delusions of thought insertion has remained mostly unexplored. This is because deficit accounts normally consider affectivity-laden states as secondary in importance in the process of delusions' formation (Skodlar et al. 2012; Maiese 2014). Deficit approaches have usually understood affective impairments as a consequence of the stress and anxiety derived from experiencing delusional episodes. However, there seem to be good reasons to think of these states as crucial doxastic forces that are importantly involved in the process of formation of inserted thoughts and therefore, good reasons to suggest that deficit approaches have overlooked a key element in their characterization of the phenomenon.

Affectivity in schizophrenia has been shown to be impaired in a number of dimensions such as mood instability, enhanced negative reactivity, emotion regulation strategies, and baseline affective negativity (Henry et al. 2008; Marwaha et al. 2013; Kramer et al. 2013; Strauss et al. 2013). All of these disturbed dimensions might play

a role in triggering and constraining the formation of abnormal thoughts in pathological conditions (see O'Driscoll et al. 2014). For instance, Strauss et al. (2013) suggest that pre-psychotic affective instability may shape the occurrence of psychotic symptoms. Buckley et al. (2009) and Van Rossum et al. (2011) report that schizophrenic delusions often arise in a general context of negative affectivity and, along these lines, it is reported that patients that later go to develop psychotic symptoms also present a high susceptibility to mood instability in pre-psychotic stages. Arguably, by neglecting the exploration of these morbid conditions and their relevance for the process of formation of inserted thoughts, deficit accounts have arrived at incomplete and inadequate explanation for the phenomenon.

Broome et al. (2005) and Broome et al. (2012) report that people at risk of psychosis and those with established diagnoses of psychosis both present high rates of anxiety and depressive states. The vulnerability to psychosis seems to involve an increased hypothalamic pituitary axis response to stress (Aiello et al. 2012), which increases the patients' general reactivity to stressful stimuli such as, I hypothesize, egodystonic states. Importantly, this reactivity may produce a general state of affective instability in the patient and this may, in turn, be the cause of certain psychotic symptoms, such as delusions of thought insertion (Kramer et al. 2013). The strongest support for our case is provided by Marwaha et al.'s (2013) analysis of two British national surveys of psychiatric morbidity. The authors report a strong and consistent link between mood instability and psychotic symptoms, suggesting that mood instability may predict the emergence and maintenance over time of certain delusions (6). More specifically, Marwaha et al. (2013: 6) claim that 'the sense that emotional experiences are out of one's personal control may prompt a search for meaning that may find explanations in terms of external influence', which would be consistent with the standard characterization of thought insertion (section 1). All this evidence demonstrates the necessity of re-considering the role that certain affective impairments might have in the aetiology of delusions in general, and specifically in thought insertion for the interest of our discussion. This would certainly contribute to offering a more complete understanding of our target phenomenon.

Current deficit approaches seem to have neglected the potential role that affectivity-laden states might play in the formation of delusions of thought insertion by their exclusive focus on the examination of perceptual and cognitive impairment leading to delusions. I have shown that there are good reasons to think of affectivity-laden states as important doxastic forces and therefore, that alternative or complementary approaches are needed. In the following section, I will analyse the problems and merits of one of the alternative accounts that integrates affectivity- laden states into the task of explaining thought insertion. This analysis will leave the door open for the clarification of the role of these states in the aetiology of thought insertion, and the analysis of some of the theoretical implications of this idea.

3 Affective Routes to Delusions: Thought Insertion as Thought Aversion

It is usually granted that there can be affectivity-laden routes to certain beliefs (see Davies 2008; Pacherie 2008). As Bayne and Pacherie (2004: 7) suggest: '[in some cases] beliefs can be generated and maintained by the emotional functions they serve'.

This issue becomes clear in cases of self-deceptive beliefs, for instance (see Bayne and Fernández 2009). Problematically, as I have claimed, the link between affectivity-laden states and delusion formation is less clear and, apparently, it has not been sufficiently investigated in the context of delusions of thought insertion. As pointed out by McKay et al. (2008), one of the insights neglected by deficit approaches is that affectivity-laden states might have access to the process of thought production and therefore, they might play an important causal role in the aetiology of certain delusions. In other words, affectivity-laden states might constitute a relevant causal *doxastic* force in the formation of delusions. One of the models that brings this idea into the discussion about the examination of the aetiology of inserted thoughts is the so-called *thought-aversion hypothesis* (TAH henceforth).[5] The TAH is a motivational account that explains the dissociation that characterizes the delusion by appealing to an underlying affective conflict which causes the subject to externalize a thought. The hypothesis can be stated as follows:

TAH A subject fails to acknowledge a certain thought as her own and attributes it to an external agent due to her negative evaluative attitude to the thought's content (Graham and Stephens 1994: 103; cf. Gibbs 2000).

The TAH explains the occurrence of inserted thoughts in two stages: (i) First, patients evaluate negatively a thought leading to feelings of aversion towards that thought. It is not clear whether this process is completely *unconscious* or part of the conscious experience of inserted thoughts itself. (ii) Second, these negative feelings motivate the subject to dissociate and explain the occurrence of the thought in terms of external agency. This allows the patient to deny responsibility for this 'unbearable mental state' (Snyder 1974: 121). According to Gibbs (2000), on this view:

> If a thought to which one attaches negative attitudes appears in one's stream of consciousness, one option for the subject is to attribute the thought to someone else. For instance, if the thought "I want to kill my daughter" runs willy-nilly through a loving mother's mind, she might be so disgusted by the thought that she is compelled to disown it (198).

The assumption here is that what is aversive about the thought is its content. This aversive content then triggers *explanations* in terms of alien agency which leads to the conscious experience of thought insertion. As one can see, the TAH offers an *explanationist* model of thought insertion. These models suggest that delusional beliefs reflect an attempt to explain highly unusual experiences via rationalization or abductive inference (see Ellis and Young 1990; Coltheart 2005; Synofzik et al. 2008). On the TAH, patients infer from the initial aversive content of the thought that it is someone else's and therefore, the external attribution arises as a second order explanatory move, based on the subject's need to give meaning to the abnormal first order affectively relevant experience.

One way of assessing the TAH's plausibility is by examining if it is able to explain the features of thought insertion (see section 1). It seems that on the TAH, the aversive

[5] This hypothesis is attributed to Snyder (1974).

feelings produced by the negative evaluation of the thought, leads the patient to deny its ownership. Now, the patient still experiences the thought as agential and, because of this, she explains its occurrence as the product of *someone* or *something* else's agency. The role of the external attribution is to find a responsible agent for the occurrence of the intrusive thought. This aspect is crucial to understanding the *adaptive* role of the delusion in the patient's psychic life. In line with what is suggested by most motivational accounts, thought insertion on this view constitutes a way of recontextualizing and incorporating a highly disruptive thought (as a case of cognitive experience) within the patient's conceptual framework and therefore a way of restoring the patient's psychological homeostasis.

With some reservations of course, the TAH seems to offer a sensible explanation for the specificity and selectivity of inserted thoughts. Under the TAH, contents that are externalized are always those that are *dystonic* with the patient's background psychology. In fact, *aversion* seems to be a sufficient condition for a thought to be externalized on this view. Here, it is crucial to note that aversion always depends on the patient's set of personal meanings about reality and herself. What is aversive for one person is not necessarily aversive for another. Therefore, aversion always reflects some of the patient's affectively relevant themes (Gibbs 2000). The TAH also claims that the thought with aversive character is that which is experienced as alien. The aversive character of the thought is what distinguishes itself from non-externalized mental states that are simultaneously occurring in the patient's stream of consciousness. This suggestion is consistent with Pickard's (2010) claim about the selective nature of inserted mental states, namely, that they represent a manifestation of the patients' background psychology.

Although the TAH does not explicitly discuss these features, I can hypothesize that the lack of sense of causal coherence in experiences of thought insertion can be understood as an experiential consequence of the first-order lack of sense of ownership that patients feel toward the aversive thought. Finally, the sense of permeability of the patient's ego-boundaries can be understood as an experiential consequence of the external attribution that patients make in order to recontextualize and integrate the aversive thought. At this point, it is clearly noted that the TAH attributes to thought insertion a psychologically adaptive role; through the *motivated* externalization of the aversive thought, patients are able to overcome an originally unbearable stimulus and therefore, the delusion seems to be understood as somehow adaptive. In addition, just as Bentall's and Butler's model does, the TAH is able to link the phenomenological manifestation of thought insertion to the patient's background psychology in a plausible way. This is because the unbearability of a certain stimulus always depends on the patient's affectively relevant themes. By recognising this, the TAH seems able to grasp the *meaning* that thought insertion might have for the patient and consequently, the endorsement of the TAH would constitute a step forward for the development of specific and more efficient psychotherapeutic interventions in the treatment of delusions of thought insertion.

4 The *TAH* Under Examination

In developing their own deficit account, Graham and Stephens (1994: 104; see also Stephens & Graham 2000) claim that the TAH is not supported by clinical data.

Assuming that the aversive character of the delusion is only instantiated by its content, the authors claim that the first-order stimulus that underlies the formation of inserted thoughts does not always have a negative character. The authors conclude that the delusion is not necessarily the result of thought aversion and that one should rule out this type of explanation. Graham & Stephens appeal to related symptoms of schizophrenia to support their view; they suggest that studies of auditory verbal hallucinations in schizophrenia show that, while comments made by 'voices' often are persecutory or demeaning, they sometimes encourage or console the subject. They also emphasize the fact that voices can be innocuous and that, often, they offer neutral comments or advice (Graham and Stephens 1994: 104). In addition, the authors describe the case of a young woman who persistently heard the voices of her dead father and her paternal grandmother advising her on different decisions (such as whether to buy a car). The authors note that the patient experienced these voices as well-intentioned and as actually helpful to her (104). Finally, they take this type of case as clinical evidence against the TAH and conclude that a subject that believes that a thought is not her own has made an honest mistake, based on perceptual impairments.

However, there are good reasons to think that these objections are not compelling. Graham & Stephens, in their main criticisms of the TAH, appeal to the type of delusive content manifested in auditory verbal hallucinations. Although comparisons between similar phenomena are usually helpful in psychopathology, it is not entirely clear that the authors can rule out the TAH on this basis. Despite some commonalities (inserted thoughts and auditory verbal hallucinations can sometimes manifest themselves as a part of the same psychotic episode), they seem to be phenomenologically distinguishable from each other. As Gibbs (2000: 196) rightly points out:

> The [phenomenological] peculiarity of thought insertion is that the thoughts are readily admitted to occur within the psychological boundaries of the subject, yet she denies that the thoughts belong to her; they are literally perceived as being inserted into the subject's stream of consciousness, not simply heard from an external source like an auditory hallucination.

For their objection to work, Graham & Stephens assume that experiences of inserted thoughts and alien voices have a similar phenomenological quality. However, one should not conflate these two phenomena. Nayani and David (1996: 186) claim that some patients suffering from thought insertion report alien thoughts as 'bad impulses', and Caponi (2010) reports a case as a 'voice without sound', nothing like 'hearing voices'. A different patient also reports that: 'I didn't hear these words as literal sounds, as though the houses were talking and I was hearing them; instead, the words just came into my head – they were ideas I was having' (Saks 2007: 27). These descriptions are considerably different from the ones characterizing auditory verbal hallucinations. One of the main differences between auditory verbal hallucinations and inserted thoughts seems to be represented by the non- sensory nature of the latter in contrast to the sensory—but not veridical—nature of the former. In consequence, these two symptoms seem to constitute two different phenomena and it is not clear if the authors can use cases of one to rule out a hypothesis meant to explain the other.

In this context, it seems plausible to hypothesize that the type of content manifested in thought insertion is not necessarily the same that is manifested in auditory verbal

hallucination. The type of delusive content might result from a particular aetiological route to a particular type of pathological experience. In other words, different pathological *phenomenologies* might have different aetiology, and different aetiology might express different types of delusional contents. In light of this, it becomes clear that the comparison posited by Graham & Stephens conflates two different phenomena without justifying a link between them. So, unless the authors establish a better—phenomenologically and methodologically—justified link between these two phenomena, one should not take cases of alien voices as entailing evidence against the TAH.

Now, Graham and Stephens (1994: 104) claim that 'the clinical literature does not support the notion that the subject's failure to acknowledge her alien thought as her own is necessarily motivated by her disapproval of the intentional states they [the thoughts] seem to express'. However, this claim is problematic in a number of ways and it seems to rely on an unfair treatment of the TAH. The authors have certainly not presented any case of 'encouraging' or 'supportive' thoughts. However, even if there were such cases, they would represent the minority. Strauss et al. (2013) explain that delusions are usually characterized by stress and negative affective significance (see also Sass 1992: 231; Smith 1982: 30; Hamilton 1984; Saks 2007). Along the same line, Gibbs (2000: 200) claims that: 'most commonly', [inserted thoughts] take the form of commands, mocking or criticizing thoughts. So, even if the authors insist in saying that thought insertion is not *necessarily* a result of thought aversion and that, therefore, alternative explanations are needed, an alternative explanation that cannot make sense of the common negative nature of inserted thoughts would deal just with the minority of cases. It seems clinically well grounded to propose that cases of thought insertion are characterized by a negative character and therefore, that an account of it should recognise this, for the account to have greater explanatory power.

As a conclusion to this section, it is possible to say that although they raise a number of interesting issues, Graham & Stephens' objections to the TAH do not offer plausible reasons to rule out the idea that affectivity-laden states are importantly involved in the aetiology of thought insertion. In the next section, I take seriously the suggestion that these states are an important part of this process, and develop a tentative proposal that integrates affectivity-laden states into the understanding of inserted thoughts through the role they have in the general process of thought formation.

5 The Place of Egodystonic States in the Aetiology of Delusions: A Brief Proposal

Although Graham & Stephens' criticisms are not particularly damaging, the TAH faces another problem. After addressing this issue, in this section I clarify the role that affectivity-laden states might have in the formation of inserted thoughts, while retaining the intuitive core of the TAH. In doing so, I will consider a more comprehensive understanding of the process of thought formation i.e., Martin and Pacherie's (2013) model.

One of the remaining problems that the TAH faces is that it cannot clarify the pathological route from aversion to external attribution. The TAH understands aversion as a *sufficient condition* for a person to externalize a thought. In line with one-factor theories of delusions, the TAH seems to conceptualize the external attribution of

inserted thoughts as a rational explanatory strategy, given the highly unusual nature of the first-order aversive thought. Problematically, this does not explain the fact that subjects can experience different types of aversive thoughts without developing delusional beliefs about them. This is what makes subjective moral conflicts intelligible for example; everyone deals with immoral thoughts in everyday life and it is clear that one can experience a highly aversive immoral thought without explaining its occurrence in terms of external agency. In fact, it seems that one of the main features of immoral thoughts is their aversive nature. In the same way, the TAH seems not able to distinguish between pathological obsessive thoughts – that, most of the time, are egodystonic and aversive—and inserted thoughts. The TAH cannot explain why obsessive thoughts in *Obsessive Compulsive Disorder* – OCD henceforth—are indeed aversive but no attributed to an external agent.[6]

Taking all of this into consideration let me now explore an alternative view that overcomes these issues while retaining the intuitive core of the TAH. The TAH is found implausible by Graham & Stephens for they take themselves to have shown that not all cases of thought insertion are necessarily the result of aversive feelings attached to a certain thought-content. By appealing to the case of a woman hearing her father and grandmother's voices giving advice, the authors conclude that cases of thought insertion cannot be explained as the result of thought aversion, for in this case no aversive element is identified. As already suggested, this is a case of auditory verbal hallucination and it is not clear if it constitutes a valid counterexample against the TAH (see section 4). However, for the sake of the discussion, let me treat it as if it were a case of thought insertion. Suppose that the woman in question experiences a sudden thought that says '*buy this car! Buy this car! Buy the beautiful one!'* which is finally attributed to her deceased father. My claim here is that the TAH and the current *deficit* approach to thought insertion cannot grasp the role of affectivity-laden states in the aetiology of the phenomenon, for they rely on an oversimplified understanding of the process of thought formation and its relationship to affectivity. As a consequence of this, the discussion about the potential adaptive character of certain delusions is a denied territory within the deficit approach.

According to Gibbs (2000: 199), although the thoughts of the young woman are not threatening or egodystonic in this case, certain mental *baggage* leading up to them might be. The idea is that while the thought '*buy this car! Buy this car! Buy the beautiful one!'* has no negative character, other surrounding factors related to the occurrence of the thought may have such character. Gibbs (2000: 199) proposes that: 'it may be that she has an aversion to making her own decisions' and in consequence, the character of the thought inserted by her father is explicable as the result of a woman's aversion to a certain situational factor (decision-making). The problem in this context is that both the TAH and Graham & Stephens' comments assume that the aversive character of inserted thoughts is exclusively instantiated by the delusive thought-content that is phenomenologically expressed. However, this suggestion seems too limited and, in fact, misleading, for it is not clear how artefacts such as radios or televisions can be affectively significant for the patients (see section 1). It seems that the TAH and Graham & Stephens' view endorse an oversimplified, and incomplete view of the role that affectivity-laden states can play in the process of thought formation.

[6] I thank one of the anonymous referees for pointing out this issue

In this context, a broader understanding of the process of thought formation is needed to grasp the role that affectivity-laden states might play in the aetiology of thought insertion. Egodystonic states might be important doxastic forces in the process of formation of delusion of thought insertion. Thinking is a complex phenomenon and the conscious manifestation of a thought-content is just one part of a complicated process. Martin and Pacherie (2013: 115) have recently suggested that a number of internal and external factors can trigger or constrain the phenomenological manifestation of a thought-content. When one experiences a thought, one does not only have access to its content, but also to surrounding triggering information, 'although this information may sometimes be difficult or even impossible to retrieve' (115). The authors identify a number of factors that modulate and constrain the process of thinking at different stages: *External factors* (events or objects in the world); *internal factors* (such as thought-association, internal goals, problem solving, action planning, etc.); *perceptual factors* (to look at an object through a dirty window); *situational factors* (a certain situation can trigger a certain type of mental content); *doxastic background* (our thoughts are generated within a personal background of beliefs); *immediate internal factors* ('a particular thought can also depend on the thought(s) that just precede it'); *memory factor* ('a thought about a specific stimulus or an internal event can depend on a particular memory context'); *volitional factor* (the subject has the possibility to reject the thought(s) she currently has based on a process of thought evaluation). Finally, Martin and Pacherie (2013) also propose that '*emotional factors'* are involved in the process of thought formation. They suggest that 'your current affective state can also influence the content of your thought' (116). For example, I can feel anger and this state can trigger or constrain certain thought-contents.

The key problem with the TAH and Graham & Stephens's view is that they do not consider these factors in their understanding of thought formation. The idea is that egodystonic states might directly influence not only the content of a thought, but also early stages of its formation. Therefore, although the delusive content of inserted thoughts sometimes itself has no egodystonic character, surrounding factors may have it. By including triggering and constraining factors into the picture of how a thought comes about, Martin & Pacherie offer a broader understanding of the nature of thinking and make plausible the idea that certain affectivity-laden states play a role in the aetiology of inserted thoughts. However, although Martin & Pacherie's model makes an important contribution to integrating the role of affective states into the process of thought—and delusions—formation, here I claim that there is a better way of making sense of their model: It is not just that our current affective states can influence the content of our thought but rather that each one of the factors and constraints described by the authors can have a specific affective valence and therefore, that they can become egodystonic under certain circumstances.

The idea is that negative affectivity—potentiated by the different affective impairments described in section 2.2—plays a crucial role in the structuring of the phenomenological manifestation of thoughts under pathological conditions. It can be hypothesized based on the empirical evidence available that negative affectivity might act as the *framework of meaning* where thoughts are given and this might infuse with a certain negative quality the formation and experience of a thought. For instance, a certain external factor might be given a negative valence—i.e., egodystonic—and this would infuse the process of thought formation with a negative character; a certain situational

factor such as being forced to make my own decision can have an associated aversive character. In this context, it seems plausible to think that one can attach aversive feeling to any of the triggering and constraining factors described by Martin & Pacherie and that therefore, negative affectivity—among other factors—might play a crucial role in the development of delusions of thought insertion just as it is intuitively suggested by the TAH. Certainly, this understanding of the relationship between affectivity and the process of thought formation might contribute to completing the picture that current deficits approaches have of our target phenomenon.

It is important to note that our suggestion does not take *aversiveness* as sufficient for a thought to be externalized, as the TAH does -. An adequate account of thought insertion needs to account for why egodystonic thoughts such as immoral and obsessive thoughts in OCD are not attributed to an external agent. Aversion may indeed be a necessary condition for a person to externalize certain thoughts under certain circumstances, but it is by no means sufficient to do so. In this context, it seems plausible to invoke a 2nd factor to explain why patients go from aversion to externalization. Agreeing with what advocates of 'two-factor theories' of delusions suggest, what might explain the route from aversion to externalization is the patients' inability to reject implausible beliefs once they are suggested by first-factor experiential phenomena (see Davies et al. 2001; Coltheart et al. 2007). Apparently, this cognitive deficit is not present in patients suffering with OCD and this would account for the non- delusional nature of obsessive thoughts. However there is another element that might help us to distinguish between these cases. In contrast to cases of obsessive thoughts, inserted thoughts occur in a general delusional context (Fuchs 2005). Roberta, a patient diagnosed with schizophrenia, claims that her episodes of thought insertion were always preceded by general transformations of her experience of the world, this phenomenon 'lasting even weeks' (Unpublished interview). Arguably, this delusional context along with underlying affective and cognitive impairment – not present in OCD – is what causes patients to externalize certain thoughts. However, further research about the causal relationship between delusional moods and specific delusional episodes is needed.[7]

Until this point, I have claimed that affective impairments should not only be understood as the result of the anxiety and stress produced by delusional episodes, but also, as an important doxastic force in the process of formation of delusions of thought insertion. This suggestion is not only consistent with the empirical evidence discussed in section 2, but also with a current shift in psychiatry concerning the general understanding of the relationship between affective and psychotic disorders. Traditionally, diagnostic systems of mental illness have maintained a sharp distinction between these two types of disorders. Nevertheless, this distinction is currently under revision based on the premise that affective factors are a key element in the development of psychotic disorders (Birchwood 2003; Fuchs 2013). For example, it is suggested by Häfner et al. (2013) that, in their early stages, psychotic and affective disorders are indistinguishable until the emergence of clear bizarre psychotic symptoms that, in turn, might be based on affective impairments. Marwaha et al. (2013) have recently claimed that this diagnostic distinction overlooks the crucial role that impairments in affectivity

[7] It is important to note that most approaches to delusions have overlooked the examination of the role that the *context of the occurrence* might have in the aetiology of delusional episodes

may have in the process of delusions' formation. This trend has certainly influenced the way in which current deficit approaches to thought insertion have conceptualized the phenomenon.

In this section, I have examined a broader view of the process of thought formation. This view allows us to make sense of the role that affectivity-laden states might play in the aetiology of thought insertion. My suggestion has been proven not only to be conceptually appealing but also consistent with current empirical research in affectivity in schizophrenia. One of the advantages of this way of understanding the relationship between thought formation and affectivity-laden states is that it overcomes the limitations of the TAH and Graham & Stephens' suggestions. The potential problem for the TAH in the context of thought insertion is in explaining cases with no aversive content, while the problem for Graham & Stephens is in explaining cases with this common aversive nature and why only some thoughts are inserted. If we understand the role that affectivity-laden states have in delusion formation not in terms of content but instead in terms of triggering and constraining factors, we might be able to make sense of all cases of thought insertion. Thought insertion might not only implicate perceptual and cognitive impairments, but also important affective preconditions. Inclusion of this into the aetiological picture of the phenomenon would not only lead us to a more comprehensive and complete account, but also to the development of more specific techniques in the treatment of delusions, that are usually associated with motivational accounts.

6 Concluding Remarks: Exploring a Theoretical Integration

Thought insertion is a complex phenomenon and in trying to understand it, deficit approaches have neglected the role that affectivity impairments might play in its aetiology. In turn, these accounts miss a number of advantages coming from the integration of this aspect to the discussion (see section 2). I have explored an alternative view that provides a more complete picture of the phenomenon. Some people might suggest that the attempt to explain all cases of thought insertion with one single model is too ambitious. This suggestion seems too restrictive and not consistent with the complex and affectivity-laden nature of the process of thinking I have been discussing so far. In this section, a more fruitful path is taken and I explore the way in which my analysis can complement and complete the current two-factor view (TFV) of thought insertion.

Although the TFV enjoys well-deserved popularity, it faces some difficulties that might be resolved by recognising that egodystonic states play a crucial role in the aetiology of the delusion. The TFV identifies first-order neuropsychological impairments as leading to anomalous thoughts. However, it is noted that there are several cases of delusional patients where no neuropsychological impairment can be identified (Butler 2000; McKay et al. 2008). In fact, the case has not been clearly made for cases of thought insertion. Most of the evidence regarding neuropsychological impairment related to thought insertion is established by analogy with the evidence of existing impairments in cases of alien control of movements (Walsh et al. 2014). Synofzik et al. (2008) have criticized this analogy for, unlike movements, thoughts do not have sensorimotor characteristics to inform a feed-forward inhibition of the self-monitoring system, which is the subpersonal mechanism claimed to be defective in cases of

delusions of alien control. Consequently, it is not clear that the impairments identified in these cases actually lead to the delusions of thought insertion. The problematic nature of this analogy suggests that, without the clear identification of a factor-1 impairment, the TFV seems unable to provide an explanation that is consistent with its main argumentative structure. This difficulty can be resolved by endorsing the view that egodystonic states can, under certain circumstances, act as a source of first-order experiential input, as in cases of thought insertion for example (section 5). This suggestion seems to have strong empirical support. At the same time, it is conceptually complementary to the TFV. On the TFV, the first factor involved in thought insertion is an unconscious evaluation disorder (Fine et al. 2005).[8] Consequently, when no neuropsychological impairment can be identified, it would be plausible to appeal to affective impairments involved in the process of thought formation as leading to abnormal thoughts (factor 1), which along with impairments in the belief evaluation system (factor 2) might lead to the conscious experience of thought insertion.

Now, here is the second difficulty for the TFV. As proposed by Fine et al. (2005) if one is to explain the route from abnormal experience to delusions as being the result of a defective belief evaluation system, 'one would predict that patients would come to accept the many odd thoughts that occur to them as well as to normal individuals' (162). However, people with schizophrenia do not experience all their odd thoughts as alien. The reply offered by the defender of the TFV is that the belief evaluation system in thought insertion is defective but not completely inoperative (cf. Fine et al. 2005: 162). This reply seems unsatisfactory, for it cannot explain the *selectivity* and *specificity* of inserted thoughts. However, this difficulty might be overcome by endorsing the idea that egodystonic states act not only as a first-factor source of input, but also in the second-factor. The second factor in the TFV is supposed to explain why delusional beliefs are adopted and maintained. Arguably, a certain explanatory hypothesis is endorsed as more plausible than its alternatives, for the adaptive benefit it serves, namely, as a way of dealing with first-order abnormal thoughts. Thus, the avoidance of certain egodystonic states provides a set of constraints for the functioning of this 'not completely inoperative system of belief evaluation'. As McKay et al. (2008) suggest: 'it may be that incoming doxastic information is processed so as to yield beliefs that allow the individual to function adequately in the world by virtue of (a) closely approximating reality; and (b) allowing the individual a measure of security and satisfaction' (175). Now, by the same token, our complementary reply might also explain why delusional beliefs are *maintained* despite evidence to the contrary. As Frankish (2011: 27) points out: 'Perhaps patients adopt delusions because they answer some emotional or other psychological need, rather than because they are probable'.

Finally, by integrating these ideas into its framework, the TFV might be able to grasp the potential adaptive role of delusions and with this, to overcome some of its limitations. Some might say that these two ideas are irreconcilable. However, I suggest that the notion of *deficit* that underlies the TFV is not completely incompatible with the idea of delusions having an adaptive role. I have proposed that by grasping the role that delusions play in the patients' psychological life, an understanding of the potential benefits of delusions emerges. The TFV denies that delusions are *motivated* but it does

[8] Interestingly, this idea resembles the way in which the TAH explains the first stage of the occurrence of inserted thoughts (Section 3).

not necessarily deny that the conscious manifestation of the delusion can be somehow relieving for the patient. Therefore, the notion of 'adaptive role' needs some refinement. The TFV claims that delusions are not *intrinsically adaptive*. However, delusions can be the result of different impairments yet having an adaptive role in the patients' psychological life. Arguably, the conscious delusive manifestation confers some coherence and basic order to the general disturbed and generally disorganized way of experiencing the world in schizophrenia and related pathologies. Consequently, the TFV is consistent with the idea of delusions having a *secondary* or *derived* adaptive role. Delusions can be a way of consciously overcoming unconscious impairments at affective, perceptual, and cognitive levels. It is doubtless that further examination of this issue will not only contribute to the development of more comprehensive and complete approaches to the aetiology of thought insertion, but also to the development of better and more specific techniques for its psychotherapeutic treatment.

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