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Delusional Perception

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This paper reviews the phenomenology of delusional perception and discusses its differentiation from similar phenomena, its diagnostic value, and its pathogenesis. The study of delusional perception is of particular interest, because, unlike other delusions, its identification rests on form as well as content. Also, it is one of the first-rank symptoms of schizophrenia, and its mode of onset, which is an important part of the phenomenon, may help us to understand how other delusions develop.

Forty years ago, the First World Congress of Psychiatry had a section of general psychopathology which was devoted entirely to the subject of delusions. Mayer-Gross (1950) congratulated the organisers on choosing this subject at a time when interest in the psychopathology of delusions was at a low ebb. Almost 20 years later, Hoenig (1968) wrote in a similar pessimistic vein that virtually everything that is written on the subject of delusions is a re-statement of Jaspers' position. Progress during the past 20 years cannot justify any beginning to this review other than that of considering delusional perception in the context of Jaspers' primary delusions.

Delusional perception as a primary delusion

Jaspers (1963) stated that we need to see beyond the external characteristics provided by the definition of delusions to their psychological nature. To do so we must distinguish between the inceptive experience and the judgement that derives from it. If we do this, we can then distinguish between two major groups of delusions. In one group, the delusions emerge understandably from disordered mental functions such as abnormal affects, or false perceptions. In the other, the delusions do not arise from underlying abnormal phenomena, but are, in Jaspers' terminology, psychologically irreducible and statically non-understandable; these are primary delusions.

Jaspers accorded membership of this group of primary delusions to delusional ideas, delusional perceptions and delusional awareness. He also described with this group, although it is not actually a delusion, the phenomenon of delusional atmosphere. His description of delusional awareness seems to differ little from that of delusional notion and because of this Schneider (1959) omitted it from his descriptions of primary delusions.

Delusional atmosphere

Jaspers preceded his description of primary delusions with an account of *Wahnstimmung*, or delusional atmosphere. Fish (1968) criticised Hoenig & Hamilton's translation of this term preferring 'delusional mood' (Jaspers, 1963). However, this experience is more than an altered mood state. Jaspers described the experience of delusional atmosphere as an uncanny sense of something happening that is strange and suspicious. There is a feeling of distrust and distressing discomfort. Patients suffer terribly and find the experience unbearable. They find themselves in an environment that "offers a world of new meanings". Qualifying Jaspers' description, ordinary objects seem to portend, but do not reveal, important new personal meanings.

The features of delusional atmosphere can be overlooked, if the patient's experiences are inadequately explored and the phenomenon dismissed as anxiety, or perplexity. The important role played by delusional atmosphere in the formation of delusional perceptions will be considered later.

Delusional notion

The delusional notion, sometimes referred to as an autochthonous delusion, is easily described and is not a controversial concept. The sudden judgement or belief, that forms the delusion, does not derive from any sense data, but enters suddenly into consciousness. Gruhle (1932) described it as the establishment of a groundless reference. Although they are usually associated with schizophrenia, Schneider (1959) believed that delusional notions had limited diagnostic value, because in their form, they resembled ordinary notions, or 'brain waves'. The major difference between them and normal notions is the extraordinary conviction with which delusional notions are held and the imperative influence that they exercise upon the patient's life.

Phenomenology of delusional perception

Mayer-Gross (1950) credited Gruhle (1915) with the first description of delusional perception. Schneider (1959) clarified the clinical identification of this

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phenomenon and, like Gruhle, considered that delusional perceptions might offer criteria for identifying by form rather than content. He included delusional perception in his group of first-rank symptoms of schizophrenia, because, apart from its diagnostic value, it was easy to identify and unlikely to be mistaken for other phenomena.

Delusional perceptions usually occur in a setting of delusional atmosphere and Schneider described their formation as a two-stage process. Firstly, there is the percept which is real, in that the patient recognises and will acknowledge the meaning that it has for others. Secondly, the patient recognises that this percept has a special and important meaning which is private and exclusive; this is the delusion. The delusion, to the examiner, has no understandable connection to the percept, but to the patient the meaning contained within the percept is the delusion.

Case report

A 32-year-old man, first treated for schizophrenia two years earlier, had experienced delusional atmosphere for several days. Distressed by this, he went to see a priest he believed might help. While driving there, he saw a red pick-up truck parked on a bridge under which he had to go. He knew that it was an ordinary vehicle and did not attribute any special intent to the driver, nor significance to its location. Nevertheless, he knew almost instantly that it was a very important sign that was meant for him and him alone. This red pick-up truck parked in this particular location meant that he was John the Baptist, and that he had to starve himself for 40 days and 40 nights so that he would be worthy to introduce the new Messiah to the world in seven times seven day's time.

The percept that gives rise to the delusional perception is usually visual, but Schneider (1959) stated that memories could also evoke delusional perceptions. However, Jaspers (1963) has designated such experiences as delusional notions. Matussek (1952, 1953) identified two kinds of percept that could play a part in the development of delusional perceptions. The first is visual and the second is verbal. Unfortunately, I have not found convincing examples of verbal delusional perceptions. The example Matussek gives is of a woman drying dishes who has to make a pile of plates. The word pile comes into her mind and evokes the thought of a pile of faeces. This means that she knows herself to be a worthless person. In this case, the word pile gave rise to the delusional meaning.

Matussek also asserted that the so-called 'normal visual perception' was not really normal, although the patient's initial description of the percept made it seem so. He explained the change in terms of the *Gestalt*, claiming that there was a de-differentiation of the figure ground, and once this was identified the relationship between the percept and the delusion would be more apparent. He admitted that such experiences were difficult to identify in clinical practice, because they required an intelligent, co-operative patient with minimal thought disorder. Conrad (1958) developed Matussek's ideas into a comprehensive theory, not only of the development of delusional perception, but of the levels of schizophrenic disorder.

Case report

A patient getting off a bus at a petrol station saw a pump set apart from the others for the sale of paraffin. On the top of this pump was a sign. When he saw this sign he knew that he was dammed to hell for all eternity, because God, and everyone else, erroneously believed that he had committed the unforgivable sin of sodomy with a famous figure in British public life. He said that he knew this sign was the customary one found in such locations, and nobody had put it there specially for him, yet he knew that it had this message for him. However, when examined more closely about his perception of the sign, he said that "I first saw a circle, and a circle has no end and so must be immortal. Inside this circle was another circle parallel to it. Parallel lines meet at infinity, so that two parallel circles having no end and meeting only at infinity must mean God. In the centre of the inner circle were bright red flames, the flames of hell, and written across these flames in capital letters was the word GULF. [The name of the oil company.] This showed me the gulf that exists between me and God".

This change in *Gestalt*, with its new meaning, was not consciously worked out by the patient, but occurred almost instantly, and the delusion immediately followed. The process of psychological reduction demonstrates how the symbolic form of the experience was changed and its relationship to the delusion is, for the examiner, no longer totally incomprehensible. However, this understanding applies only to a small and peripheral part of the experience, because the central meaning of the percept, that God and others erroneously believed that the patient had committed sodomy etc. is psychologically irreducible and non-understandable.

Differential identification of delusional perception

There are several types of phenomena in which there are relationships between delusions and percepts. They are often collectively and loosely described as delusions of reference, and some might be mistaken for delusional perceptions. (In a clinical climate of relaxed diagnostic specificity, delusional perceptions may be referred to as delusions of reference.)

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The differentiation of these phenomena, which are listed below, from delusional perception is not usually difficult.

(a) *Delusion reinforced by a percept*. This does not present a diagnostic problem as the delusion exists before the significant perception occurs. The perception has a meaning that derives understandably from, and strengthens, the delusion.

(b) *Delusion-like idea induced by a percept*. The delusion develops after the perception and this development is associated with considerable ruminative activity about the meaning of the perception. Patients believe that the relationship between the percept and delusion is self-evident to themselves and to others. The examiner finds that the relationship between the meaning of the percept to the patient and the delusion can be reduced to the patient's underlying mental state, usually a severe affective disorder, and in this setting the delusional context is understandable.

c) *Delusion-like idea evoked by a percept*. This experience is similar to (b) above, except that the delusion appears suddenly, having been triggered by the percept. The phenomena described by Kretschmer (1966) as sensitive delusions of reference are examples of this type of symptom. The 'key' experience, which evokes the delusion, is usually a percept. The delusion understandably arises out of a pre-existing abnormal mental state.

(d) *Delusional notion linked to a percept*. This phenomenon has been described in detail by Koehler (1976, 1979), who refers to the emphasis that Schneider, in his later work, put upon its differentiation from delusional perception. The delusion is triggered by a percept and the patient believes that the relationship between the percept and delusion is evident to everyone. The percept has a delusional meaning for the patient, but this meaning is conveyed by the percept, unlike the delusional percept where the special meaning is contained within the percept and is restricted to the subject alone. The delusion is not understandable in the context of the percept.

Diagnostic value of delusional perception

Schneider (1959) included delusional perception in his group of first-rank symptoms that were diagnostic of schizophrenia in the absence of an organic mental disorder. The criteria for inclusion in this group were that the symptoms should occur frequently enough to be useful, be reliably identifiable, and differentiate schizophrenia from cyclothymia (manic–depressive disorder).

The frequency of delusional perception in an initial study by Mellor (1970) of 173 patients with schizophrenia was 6.4%. Marneros (1988) found the frequency to be 19% in 1208 first admissions for schizophrenia. This was a record study using cases admitted to the Cologne University Clinic for the period 1950 to 1979 when the diagnostic orientation was strictly Schneiderian. A similar rate, of 15.5%, was noted by Koehler & Sauer (1983) in first admissions with schizophrenia, while Zarrouk (1978) found delusional perception in 5% of Saudi-Arabian schizophrenics. These differences could be explained by delusional perception having a tendency to appear at an early stage of the illness and thus being found more frequently in first admissions.

Evidence about the reliability of the clinical identification of delusional perceptions is lacking. Similarly, the evidence about their value in discriminating between schizophrenia and manic–depressive disorder is inconclusive. Many studies in this area do not distinguish between the individual first-rank symptoms. The Present State Examination (Wing *et al*, 1974), which has been frequently used to identify first-rank symptoms, does not provide, as Koehler (1976) pointed out, a rigorous operational definition of delusional perception. It is worth noting that in an eight-year follow-up of patients presenting with first-rank symptoms (Mellor *et al*, 1981) none of those with delusional perception subsequently had their diagnosis of schizophrenia changed. Although it is not strictly germane to the diagnostic claims made for first-rank symptoms, Marneros (1988) found the frequency of delusional perception in 1698 patients with organic mental disorders to be only 0.7%.

How are delusional perceptions formed?

Delusional perceptions could provide a key to understanding how delusions in general are formed, because they provide an opportunity to observe the birth of a delusion. Theories about the formation of delusions have already been surveyed in this supplement. This discussion, therefore, will be limited to a recent theory (Maher, 1988) that provides one of the better explanations for the development of delusional perceptions. It has some resemblance to Conrad's (1958) theories.

Maher (1988) has postulated that delusional thinking is not aberrant in itself and the cognitive processes involved are basically no different from those involved in non-delusional beliefs or judgement. Delusions are best thought of as theories – theories that provide order and meaning for empirical data obtained by observation. The need for a delusion arises when nature presents us with a puzzle – something which is difficult to understand

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and to explain. An explanation of the puzzle is accompanied by feelings of relief and tension reduction. A delusion is not given up until something better explains the puzzling experience. In this, Maher maintains, deluded patients are like normal people, including scientists, who are extremely resistant to giving up their preferred theories despite the presence of damning evidence to the contrary.

What do we know about the development of delusional perceptions? They are usually preceded by a state of delusional atmosphere, which is an extremely unpleasant experience, characterised by uncertainty, anxiety, depression and perplexity. Familiar objects in the environment threaten but do not concede new meanings. Suddenly, within this terrifying world, one perception stands out, because it has a meaning that explains the strange experiences. This is the delusion, and with it comes a remarkable improvement in the patient's level of distress. The delusional atmosphere diminishes and the familiar meanings of other objects are no longer in doubt.

This theory does, to some extent, explain how a delusional perception might arise, and its importance to the patient, because it provides a solution to a difficult and distressing situation. It does not explain why many patients have persistent delusional atmosphere which is unrelieved by delusional perceptions. The theory makes delusional atmosphere the fundamental disorder underlying delusional perception. Whether this theory can be extended to other primary delusions remains to be explored.

Conclusion

The delusional perception's place as the exemplar of the primary delusion is well established. The phenomenology of this experience is clear, and little difficulty should attend its clinical identification. Its diagnostic value in schizophrenia has not been established and this must wait for an improvement in the clinical application of the criteria advocated by Schneider. The possibility of delusional perception providing a contentless definition of delusion has not been realised. Although form plays a much greater part in its identification than it does for other delusions, the final decision still rests upon a value judgement about whether the content is delusional. The hope that delusional perception may shed some light upon the origin of delusions in general has not been realised, but it does provide limited support for theories that emphasise the value of delusions in enduring what Minkowski (1933) has called '*les troubles du temps vécu*' (trouble in enduring the present moment).

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