single person (cases 1, 6, 7). These misidentifications were accompanied by alterations in the sense of familiarity for a familiar object or place (cases 1, 3, 4, 6, 7), for the misidentified person in their novel role as the patient’s caregiver (cases 3, 6, 7), for unfamiliar events as familiar (case 6) or for personal characteristics (case 2).

In dementia, an initial altered sense of familiarity for a familiar person may initiate person misidentifications and may result from one of three cognitive mechanisms. First, disturbed facial perceptions may fail to match with prior knowledge of a person. Altered perception could have been present in patients 5 and 6 who were visually impaired and had visual hallucinations. However, facial perception is not the only contributing factor in person misidentification since patients with the Capgras syndrome perceive the ‘impostors’ as nearly identical in physical appearance to the replaced persons (Signer, 1987). A failure of normal facial perceptions to trigger the recovery of pertinent memories constitutes a second potential source for decreased feelings of familiarity. The temporal limbic areas that are damaged in dementia mediate the integration of perceptions with past memories (Damasio et al, 1984), and damage here can decouple normal perceptions from their associated memories. A third cognitive mechanism for reduced feelings of familiarity is a primary memory disturbance. Defective new memory formation may result in the failure of perceptions of a person to correspond to established memories of how the person should appear (Ardilla & Roselli, 1988).

A loss of the sense of familiarity is not sufficient by itself to result in persistent person misidentification; the denial of identity must be sustained against all contrary evidence. In dementia patients the persistence may result from paranoid delusional elaboration of a feeling of strangeness for a familiar person (Todd et al, 1981), as in the malevolent ‘impostors’ of cases 1–5. Dementia patients may also rationalise the conflict between feelings of unfamiliarity and any preserved memories for a person by splitting the person’s identity with an invented double (Alexander et al, 1979), as eventually ensued in cases 1, 6 and 7.

The characteristics of these patients suggest that person misidentifications in dementia are initiated by a decreased sense of familiarity from a mismatch of new perceptions with past memories and perpetuated by paranoid elaboration or by the confabulatory rationalisation of a double. Future investigations can examine the conclusions of this paper by exploring the neuropsychological correlations of these disturbances in organic disorders.

References

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Charles Bonnet’s Description of Cotard’s Delusion and Reduplicative Paramnesia in an Elderly Patient (1788)

HANS FORSTL and BARBARA BEATS

An elderly woman developed the delusion that she was dead ("Cotard’s delusion") and that she was in another place ("reduplicative paramnesia"). Charles Bonnet reported this unique combination of symptoms a century before Cotard’s influential description of the nihilistic delusions and of Pick’s description of ‘reduplicative paramnesia’. British Journal of Psychiatry (1992), 160, 416–418
Jules Cotard (1840–1889) described what he called 'delire des negations' or nihilistic delusions (1882) as "a particular type of delusional formation, which seems to develop in a considerable proportion of melancholic patients. In some cases negation is total. Nothing exists any longer, not even themselves". Cotard pointed out that Griesinger, Guislain, and Leuret, had described similar phenomena before him. The term 'Cotard's syndrome' was first used by Seglas (1897). Today it is commonly applied to patients who suffer the nihilistic delusional belief that they are mortally ill or dead. Charles Bonnet (1720–1790) wrote this earlier report of a patient with clear features of the delusion. Today, Bonnet's name is not associated with this condition, but with another characteristic psychiatric disturbance often of organic origin (e.g. BeaK et al, 1989) - dynamic and coloured visions occurring in clear consciousness and unimpaired intellect, as observed in his grandfather and, later in his life, in himself (Bonnet, 1769).

The following case was translated for Gnothi Saton (the first psychological and neuropsychiatric periodical) and published in 1788 (Moritz et al., 1783–1793) (Förstl et al., 1991a) by Carl Friedrich Pockels, tutor of the Prince of Brunswick and temporary editor of the journal. Pockels added a comment which apparently foreshadowed many later attempts of German psychopathology to make delusions understandable in the context of normal mental life (Schmidt, 1940). He also presented a cognitive–behavioural model aiming to modify the patient's 'dysfunctional ideas' step by step.

**Case report**

The following story from Bonnet is a strange one. An old lady of otherwise sound reason suddenly starts to believe in death. She was agitated and began to scold her friends vigorously for their negligence in not offering her this last service; and as they hesitated even longer, she became extremely impatient, and began to press her maid with threats to dress her as a dead person. Eventually everybody thought it was necessary to dress her like a corpse and to lay her out in order to calm her down. The old lady tried to make herself look as neat as possible, rearranging tucks and pins, inspecting the seam of her shroud, and was expressing dissatisfaction with the whiteness of her linen. In the end she fell asleep, and was then undressed and put into bed. She was barely awake, when the delusion, that she was really dead and should be buried, recurred. This paroxysm lasted a long time. The doctor gave her a powder of precious stones mixed with opium. When she at last believed that she was still in the land of the living, she held, that she was in Norway with her daughter and argued strongly with those who contradicted her. At times she made preparations for her journey to Copenhagen and could not be convinced that she was already there. Finally, somebody thought of a cunning trick: a carriage took her around the city wall and brought her back into town, she then recognised her house and thought that she had just returned from Norway. She could move her hands and feet as she wished, she enjoyed her meals and was apparently healthy in all respects, but she could not sleep without taking opium. Later-on she redeveloped her paroxysm every three months and after each episode was consistently taken by surprise that she had returned to life. During the periods when she thought that she was dead, she talked to people who had long been dead, preparing dinners for them and hosting the occasion sombrely and constantly.

In the present case, this lady's idea that she was dead, became more vivid than other ideas, which could have convinced her of the opposite, and such cases are in no way exceptional. When the patient was hit by a stroke, this thought overtook her — now you die. Until she regained consciousness, this remained the only and dominating thought in her mind. All other ideas were automatically pushed into the back of her mind. The mind — surprised by this powerful idea — soon became used to it. The most exceptional and strange ideas can gain such acceptance, if the mind is suddenly thrown from its ordinary reasoning and forced into a new main idea. A sudden physical disorder in the brain or a sudden violent excitement can cause such a change that we are pushed beyond insight into its unreasonable nature, because we assume to notice a correct functioning of our imagination (even in delusion). This is the case with all strange imaginations. He who has them cannot accept that they are imaginations, partly because the strength of the conviction does not permit a comparison with other more natural or reasonable ideas; partly because the deluded does not realise a gap, a discontinuity in his thinking, and because the elaboration of this initial idea appears to him a natural and logical progression. From this it can be explained how difficult it usually is to cure patients from their vivid imaginations. One has to completely dismantle their thought processes, if they are to be healed; one has to substitute a new sequence of ideas, and the most difficult task is to banish the main idea by approaching it indirectly, step by step. Furthermore, this illustrates why those who are in the grip of a delusion are so totally preoccupied by it. If their thoughts are not completely disordered, they usually draw apparently logical conclusions unfortunately on a completely unsubstantiated premise.
Cotard’s delusion has been described most commonly in psychotic depression and schizophrenia (Enoch & Trethowan, 1979). It was suggested that patients with this delusion may show focal cerebral abnormalities, most accentuated in the parietal or frontal lobes (e.g. Enoch & Trethowan, 1979). This psychopathological phenomenon shows a distant resemblance to the preoccupation with death which may be experienced in complex partial seizures (Greenberg et al., 1984). Bonnet’s case provides further evidence that Cotard’s delusion can be caused by underlying brain disease, in this patient probably a stroke.

A combination of Cotard’s delusion with Capgras’ delusion, the false belief that another person has been replaced by an impostor, has been reported (Enoch & Trethowan, 1979). Another patient showed an accompanying Capgras’ delusion, the delusion of subjective doubles, and palinopsia (Joseph, 1986). We do not share the conviction that such associations bear great scientific significance; however, to our knowledge, this is the only report of Cotard’s delusion with reduplicative paramnesia. This term was used by Pick (1903) to describe the disturbance of a 67-year-old woman with depressed mood, hysterical features and questionnable seizures, who held the false belief that she was not in the hospital in Prague, but in another hospital, similar to the one in Prague. Such misidentifications of place are often associated with a neurological deficit (Förstl et al., 1991b). They can be caused by head trauma (Benson et al., 1976), more rarely by stroke (Kapur et al., 1988) or other brain diseases.

In the 18th and 19th century (perhaps even today) case descriptions gained importance by being published, quoted, translated and incorporated into foreign journals and textbooks. In this case this tradition appears justified for several reasons. The report is a detailed description of delusions which received increased attention more than a century later. It was one of little more than 100 case reports presented and discussed in the first neuropsychiatric journal (Moritz et al., 1783-1793): an analysis of 124 case reports. Psychological Medicine, 21, 299-304.

References


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