British Journal of Psychiatry (1988), **152**, 91–96

Dangerous Delusions

Violence and the Misidentification Syndromes

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Among the mentally ill, those with well-developed delusions are more likely to commit violent crimes against persons than those with chronic, undifferentiated psychoses. Reports of violence associated with delusional misidentification are reviewed and four patients described who were either perpetrators or victims of assaults as a consequence of the syndromes of Frégoli, Intermetamorphosis, Subjective Doubles and Capgras. The cases illustrate the multiplicity of factors which have to be taken into consideration in order to predict whether an individual will act in a violent manner on these delusions.

Twelve different misidentification syndromes have so far been described in the psychiatric and neurological literature (Siomopoulos & Goldsmith, 1975; Joseph, 1986). The most common of these colourful delusions are: the Capgras syndrome, a denial of the identity of familiar persons and the belief that they have been replaced by doubles; the syndrome of Subjective Doubles, a conviction that false doubles of the self exist; the Frégoli syndrome, the identification of familiar persons disguised as others; the syndrome of Intermetamorphosis, the physical transformation of one person into others; Reduplicative Paramnesia, the replacement of a physical location by a duplicate; and Environmental Reduplication, the misidentification of the geographical location of a familiar environment and relocation in an unfamiliar one.

The relationship between violence and psychiatric disorders is a complicated and much debated subject. Most of the factors associated with violent behaviour among psychiatric offenders apply also to those without psychiatric disorders, and, despite their identification, predictions remain unreliable (Krakowski *et al*, 1986). The results of a large survey of patients in a French hospital for mentally abnormal offenders indicated that delusional disorders (paranoia), paranoid schizophrenia, and undifferentiated psychoses were more often associated with violent offences than other psychiatric disorders (Benezech *et al*, 1980). The highest percentage of homicides was in patients with delusional disorders and paranoid schizophrenia, and their delusions had usually existed for some time before they acted on them. Family members and acquaintances were particularly vulnerable to become victims. In a subsequent study the offences of these patients were found to be the direct result of their illnesses, whereas this was not the case with those suffering from chronic undifferentiated psychoses, who generally committed crimes against property rather than persons (Addad *et al*, 1981).

Among the elderly, psychiatric patients experiencing delusions or hallucinations which lead them to believe that they are in danger of being attacked are the most dangerous (Petrie *et al*, 1982). Those who develop late paraphrenia are particularly prone to act in a calculated and violent manner against their persecutors.

Violence associated with the Capgras syndrome has been reported by several authors (Crane, 1976; Weinstock, 1976; Romanik & Snow, 1984; Woytassek & Atwal, 1985). A particularly chilling warning about its potential dangerousness has recently emanated from a secure psychiatric facility in Missouri State, where Blount (1986) found three cases with the delusion among a group of 50 chronic schizophrenic patients. One had accused his stepfather of being a robot and subsequently decapitated him to look for batteries and microfilm in his head.

The other varieties of delusional misidentification are less frequently encountered and reports of violence associated with them are correspondingly rare. Nevertheless, a survey of the literature does reveal striking examples. The subject of Courbon & Fail's (1927) original description of the Frégoli syndrome was first admitted to hospital following an assault on a former employer whom the patient accused of being a well known actress of the time. She believed that the actress pursued and tormented her, disguised as relatives, friends and strangers. Christodoulou (1978) described a woman with the syndrome of Subjective Doubles who attacked a fellow patient whom she claimed to have seen acquiring her physical characteristics, while Barton & Barton (1986) reported a case of violent behaviour associated with the syndrome of Intermetamorphosis. Kimura *et al* (1981) published an intriguing account

https://doi.org/10.1192/bjp.152.1.91 Published online by Cambridge University Press

of a young Japanese woman, charged with murder and referred for a court report, who had developed the Capgras syndrome as well as Reduplicative Paramnesia in the setting of an amphetamine-induced psychosis. She initially believed that her grandfather, father and brother had been replaced by impostors but eventually her delusional misidentification extended to include neighbours, the sky, whole villages and cities, and Japan itself. Despairing of ever finding her true relatives, she concluded that only the police could do so. Therefore, in order to draw their attention, she stabbed and killed another woman.

The patients described in this study manifested several varieties of the delusional misidentification syndromes and either attacked their 'false' persecutors or threatened to do so or were themselves assaulted as a direct result of acting on their beliefs. The cases illustrate the interplay of the multiplicity of cultural, psychosocial, personality and neuropsychiatric factors that not only contribute to the aetiology of these psychopathological states but also determine whether a particular individual acts in a violent manner on his or her delusions.

Case reports

Case 1

Mrs GC, aged 66, a divorcee with one daughter, living on her own, was referred four months after she had become convinced that her married cousin had moved into her neighbourhood with a lady friend and that they were following her. She vividly described, often in minute detail, how the couple disguised themselves with make-up, wigs, dark glasses, false beards and different clothes and hairstyles. She also believed that in order to pursue her they frequently changed cars or had them resprayed in minutes. But despite their efforts, she was able to recognise the couple by certain characteristics, such as their gait, voices and mannerisms.

During the previous 30 years, Mrs GC had received out-patient treatment for anxiety and depression on four occasions. Her premorbid personality was described as secretive and easily angered and she was said to be a poor social mixer. Though her marriage to a heavy-drinking man ended in an early divorce, she was plagued by nightmares about him years later. Relatives disclosed that her daughter was born out of a love affair with the above-mentioned cousin. They met over a period of 20 years but the relationship ended about a decade before her presenting illness.

Her medical history included a head injury sustained in a fall at the age of 63 and a transient ischaemic attack and right-sided temporal arteritis a year later. A month before the onset of her delusional misidentification she suffered another cerebrovascular attack. Physical and laboratory investigations were unremarkable. An EEG was suggestive of epilepsy, with excessive background slow activity and rhythmic and sharper elements, particularly in the temporal regions, and with an overall right-sided emphasis. A CT scan demonstrated a right-sided posterior tempero-parietal infarct associated with moderate general cortical atrophy. Her score for unfamiliar faces on the Recognition Memory Test lay at the 7% for normal subjects of her age. A diagnosis of delusional disorder (paranoia) secondary to structural cerebral pathology was made.

Mrs GC's delusional misidentification responded to treatment with trifluoperazine but she relapsed after stopping it. Driven by her delusions, she started haranguing neighbours, passers-by, and drivers, whom she took for her cousin in disguise. When she was found prowling around her cousin's house, his daughter assaulted her. She was eventually admitted to hospital and again responded well to treatment.

Case 2

Mr GS, aged 29, a single, unemployed, mildly mentally impaired man, resided with his elderly parents. He had been receiving treatment for chronic paranoid schizophrenia for ten years when he attacked his mother, claiming that every time she put her glasses on she changed into a local woman whom he disliked intensely. He believed that this woman sometimes changed into his mother as well, which enraged him even more. Once he also attacked his father, saying that he had been transformed in front of his eyes into a person who had been spying on him.

He is the second oldest of five children, two others of whom also suffer from mental impairment and schizophrenia and have assaulted others. He did poorly at school and was never able to hold down a job for more than two weeks. Before the age of 17, he was described as an affectionate though shy and solitary boy, interested in pop music and animals. Subsequently Mr GS became socially withdrawn, hypochondriacal, and preoccupied with his appearance, which he believed to be particularly attractive. He saw a psychiatrist a year later after an accidental overdose and claimed that he was in fact a famous singer, Mr DO. His behaviour became increasingly bizarre: he dressed in his sister's clothes, put on make-up, ransacked his parental home at night, assaulted his mother and claimed that the members of his family were robots. He spent long periods in front of the mirror, at one stage complaining that he couldn't see himself properly. Over the next decade he was admitted to hospital on four occasions as a result of his disturbed and aggressive behaviour. Though he responded satisfactorily to oral and depot neuroleptics, his compliance with treatment as an out-patient was poor. He remained preoccupied with his appearance and at times thought people in public were talking about him and looking at him.

Mr GS's delusional misidentifications responded well to treatment with pimozide. Because he described his outbursts of anger and aggression sometimes coming like a wave over him, the possibility of an epileptic disorder was considered. However, he refused to have an EEG. Laboratory investigations revealed no specific abnormalities.

Case 3

Mr SC, aged 29, a single, unemployed man, was admitted under a hospital order to a regional secure unit, charged with assault and damage to property belonging to a man

https://doi.org/10.1192/bjp.152.1.91 Published online by Cambridge University Press

who, he claimed, lived in his home, 'masquerading' as his brother. Denying the identity of his father and mother, he stated that over the previous three years he had been living with his 'so-called parents'.

He was born prematurely as a rhesus negative baby and received a total replacement transfusion, but otherwise his upbringing, schooling, and family background were unremarkable. He left school at 15 without any qualifications and worked irregularly for the next four years. Two years later he fell out with the parents of his first girlfriend and assaulted the father and abducted the girl. He was subsequently convicted for several other offences, including burglary, assault and carrying offensive weapons.

Mr SC's first psychiatric contact occurred at the age of 25 after he had stabbed a girlfriend during a domestic dispute. In prison he claimed to have cancer and VD and that he was in fact Mr SS, a bodyguard to the monarch, and not Mr SC. He responded rapidly to neuroleptic treatment and received a tentative diagnosis of schizophrenia. At the time, he was noted to be hypertensive (blood pressure 160/100), but an intravenous pyelogram and metabolic and hormonal investigations were normal. He irregularly attended a day hospital for follow-up and gradually deteriorated at home. He refused to go out, secluded himself in his room, wandered about at night and ate the leaves of trees in the belief that the 'growth hormones' they contained would help him become taller. He accused his family and particularly his younger brother of stealing from him and became convinced that the latter was impersonating him in public. A year later he attacked his father on several occasions, believing him to be an impostor. Afterwards he explained that one day he had seen his father leaving the house, only to find him sitting a few seconds later in the living room wearing entirely different clothes. The fact that his (and his brother's) blood had been 'changed' at birth was further proof to him that his parents had been 'switched' and that he was in reality of noble descent. Mr SC also asserted that his father's hair, now black, had been blond before his son's birth. Upon his family's return from a holiday, he attacked his brother with a knife, having previously destroyed the contents of the latter's room. After his arrest various weapons were found in his own room, the walls of which were covered with knife marks and pornographic material.

On psychometric testing he was found to be of average intellectual ability, although performing below his capacity. He was severely hypertensive (blood pressure 170–180/120–130) and his fundi showed hypertensive changes. However, laboratory investigations, an EEG and CT scan were unremarkable. He was treated with sulpiride and antihypertensive drugs. His delusional misidentifications remitted and his blood pressure stabilised at 140/90, and four months after his admission he was discharged to a hostel.

Case 4

Mr MS, aged 64, a single, unskilled labourer, was born in eastern Poland, now part of the USSR. He received little formal education and joined the army at the age of 17. Following the invasion and occupation of that part of Poland by the USSR in 1939, he was imprisoned by the Soviet authorities and subsequently sent to do forced labour on several collective farms. He was later released and commandeered into the reorganised Polish army, being eventually demobilised in the UK, where he has resided ever since. The whereabouts of his relatives in Poland are unknown.

Over the next 30 years he was admitted to hospital and treated on numerous occasions for paranoid schizophrenia. He frequently experienced auditory and somatic hallucinations, passivity feelings and ideas of persecution. On one occasion 'a radar man' instructed him to kill, and he was compulsorily detained and treated following an attempted murder; on another he attacked a fellow patient while suffering from persecutory delusions. He led a vagrant life until the age of 56, when he killed another Pole, acting on the delusional belief that the victim held a bullet in his key which he could convert into a pistol, with which he was about to harm Mr MS. As a result he was admitted to a special hospital for mentally abnormal offenders.

In the special hospital he received treatment with neuroleptics, but assessment of his response, mental state and intellectual abilities was hampered by his poor command of English. Laboratory investigations and repeated EEGs were normal. When he was interviewed in Polish, it became apparent that he remained floridly psychotic, despite his settled demeanour and adaptation to the hospital routine. He stated that though his surroundings were 'known to others as England', he was in fact in eastern Poland and could visit the capital, Warsaw, without having to cross any frontiers. He was convinced that everyone in the hospital could speak Polish but did not do so in order to trick him into believing that he was in the UK. When a nurse with a Polish spouse greeted him in his own language, this merely confirmed his suspicions and strengthened his resolve not to learn English for fear that he would otherwise be completely deceived. He claimed that people from his native village were around and that he had recognised fellow soldiers among the patients, although they had changed their appearance and refused to speak Polish.

Seven years after his admission, while Mr MS was being considered for a transfer to an open hospital, another patient wounded him in an unprovoked attack. Interviewed a month later, he described his assailant as 'artificial', with artificial limbs and wearing a mask, despite which he was 'able to move and behave as a normal person'. On this occasion Mr MS was convinced that his attacker possessed a pistol concealed in a black box which could be fired by the press of a button. He saw it as his duty to kill this man to prevent him from harming anyone else and because he was 'artificial'. Mr MS was therefore deemed too dangerous to be cared for outside the special hospital.

Discussion

Initial reports of delusional misidentification were all of women, but many male cases have now been

https://doi.org/10.1192/bjp.152.1.91 Published online by Cambridge University Press

documented, and while there is a preponderance of female Capgras patients in the literature, the Frégoli syndrome is predominantly described in men. Combinations of the different forms of misidentification have been reported, as well as their occurrence together with other circumscribed delusional syndromes such as morbid jealousy, dysmorphophobia, erotomania and Ekbom syndrome (Barton & Barton, 1986). Three of our four cases also exhibited more than one misidentification syndrome: case 2, Intermetamorphosis and Capgras; case 3, Subjective Doubles and Capgras; case 4, Environmental Reduplication, Intermetamorphosis, Frégoli and Capgras. The difficulties that case 2 had at one stage in identifying himself in a mirror may be an example of the latest variety of delusional misidentification described by Foley & Breslau (1982), but it was too poorly documented to make a definite diagnosis. One could similarly speculate as to whether the denials of their true identities by cases 2 and 3 were not due to delusional misidentification as well (Siomopoulos & Goldsmith, 1975).

Aetiological formulations of delusional misidentification often reflect the psychodynamic/organic dichotomy that continues to bedevil the clarification of the psychosocial and neurological correlates of psychiatric disorders. Psychodynamically, delusional misidentification has been conceived as the psychotic resolution of intense ambivalence towards the object of misidentification. Pathological splitting of the internalised object representation into good and bad supposedly resolves the conflict by creating a double or an impostor, an alien object which can be treated with hostility but without the guilt that would accompany the same emotion towards the real person (Enoch & Trethowan, 1979; Berson, 1983). Right-sided cerebral hemisphere dysfunction has been implicated in cases of delusional misidentification which arose either secondary to neurological and toxic–metabolic disorders *per se* or following their occurrence in primary psychopathological conditions. Joseph (1986) has conceptualised these syndromes as the result of a disconnection between the right and left cerebral hemispheres, a hypothesis consistent with the growing evidence suggesting a disturbance of interhemispheric functions in schizophrenia (Nasrallah, 1985), the psychosis most frequently associated with delusional misidentification. Whereas each hemisphere would still receive and decode incoming information according to its specialisation, the results would be presented separately to conscious awareness instead of being fully integrated beforehand. The particular clinical syndrome that is manifested would depend upon which hemispheric functions were the most damaged.

Though delusional misidentification has been reported in affective, epileptic, toxic–metabolic and structural cerebral disorders, it most commonly occurs in the setting of primary (idiopathic) or secondary (symptomatic) schizophrenia. The course and prognosis of any particular variant are closely related to the resolution or effective treatment of the underlying disorder in which it developed. However, in some patients with schizophrenia, the delusional misidentification remits more slowly than or even achieves autonomy from the primary condition, which may itself resolve completely (Christodoulou, 1986). Violence which ensues as a result of delusional ideation, whether in paranoid schizophrenia or a delusional disorder (paranoia), is usually well planned and directed at a specific, significant individual in the patient's life. In contrast, the violence which occurs in the context of affective disorders and disorganised psychotic states, such as undifferentiated schizophrenia or dementia, is less focused, more spontaneous and often less dangerous (Krakowski *et al*, 1986). Christodoulou & Malliaria-Loulakaki (1981) found delusional misidentification to be more common among paranoid as opposed to other schizophrenic subtypes. They also reported that, perhaps because of contributary cerebral dysfunction, the degree of personality disintegration was less pronounced in patients with misidentification syndromes than in those without. It is interesting to note that two, possibly three, of our patients also developed their misidentification syndromes in a setting of cerebral dysfunction – severe hypertension, cerebral infarction and suspected epilepsy – and that the personalities of all four showed relatively little evidence of disintegration related to the duration of their illnesses.

While each of the four cases described here demonstrates the unique contribution that the individual's dynamic–experiential background made to the content of his or her delusions, the underlying neurobiological determinants of these conditions remain to be clarified. Though a cerebral insult seems to have been a necessary determinant of the Frégoli syndrome in case 1, the choice of persecutor and the general content of her delusion are understandable in the light of a sensitive premorbid personality and a clandestine affair of 20 years' duration. Her accusations against her cousin became increasingly troublesome and it remains a moot point whether she would not have acted upon her delusion in a violent manner had she not herself been assaulted by a member of his family. In case 2, low intelligence, poor social and occupational skills, an unattractive appearance and a possible epileptic disorder were important factors against the background of a

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chronic, debilitating illness. It seems plausible that in case 3 a hypertensive encephalopathy, superimposed on a primary schizophrenic disorder, played a cardinal role in the form of his delusion, though the content and choice of victim were shaped by his aggressive temperament, knowledge of his replacement transfusion and poor relations with his brother. In case 4, the traumatic experiences of war, deportation, forced labour, cultural shock and isolation due to poor communication have all taken their toll; while his delusions may have restored him to his lost fatherland, the need for vigilance against the enemy in whatever disguise has remained.

Whether violence will ensue as a result of delusional misidentification cannot be predicted in isolation from various other features pertaining to individual patients and the disorders they suffer from. Although violence in psychiatric patients is more common among men (Krakowski *et al*, 1986), our review of delusional misidentification revealed a preponderance of female assailants. However, the majority of our own cases were male and in view of the fact that the most common variety of these syndromes is reported more often in women, no definite conclusions can be drawn about the importance of gender. Where the clinical picture is marked by morbid suspiciousness, hostility and discord, as well as previous aggressive behaviour, delusions that focus on interpersonal relationships (i.e. the syndromes of Capgras, Subjective Doubles, Frégoli and Intermetamorphosis), rather than on locations or inanimate objects, render these patients particularly prone to attack the subjects of their misidentification. Their emotional and behavioural responses may, however, depend on the extent and locality of any cerebral pathology, such as severe frontal lobe dysfunction or dementia, which may leave them apathetic or incapable of acting consistently on their beliefs. The likelihood of delusions being acted upon is further increased when misidentification develops and becomes persistent in refractory illnesses, such as primary or secondary delusional disorders and paranoid schizophrenia, rather than in the shorter-lived affective psychoses. The former patients are more likely to retain the degree of intact functioning required to successfully carry out an act of assault, including the ability to plan and execute violent behaviour along lines consistent with their beliefs. Our findings support these observations, and so far reports of violence as a result of the delusional misidentification syndromes have been restricted to such cases.

Although uncommon, delusional misidentification may not be the clinical rarity that we have been led to believe. The cases described in this paper were diagnosed or collected over 18 months' practice, during which time colleagues drew our attention to five additional patients, and more than 20 case reports appeared in the English-language literature alone. The apparent rarity of these syndromes can be attributed to the sparse references in the past, which often failed to clarify the subtle differences between the various forms of misidentification. As a result, the true prevalence of delusional misidentification may have been underestimated and the reason for any ensuing violent behaviour may have gone unrecognised.

Acknowledgements

We wish to thank Dr Antonio Garcia-Rodriguez and Dr Jeremy Kenrick for allowing us to describe the two patients in their care. We are very grateful to Dr Bogdan de Barbaro of the Nicolaus Copernicus Academy of Medicine, Cracow, whose interviewing skills elicited valuable additional information, and to Mr Herschel Prins for his helpful and critical comments.

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