

Delusional Misidentification Involving the Self

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The delusion of replacement of one's self by a double or imposter is a feature of two delusional misidentification syndromes. In the syndrome of subjective doubles, the self-delusion is the sole delusion of doubles. In the Capgras syndrome, the delusion of a self-double is infrequently reported; however, when it is reported, self-replacement is always accompanied by delusions of duplication of other people and sometimes of places. We review all such cases reported since 1900 and highlight the variety of presentations.

Two delusional misidentification syndromes feature duplication or replacement of the self. The first is the Capgras syndrome (Capgras and Reboul-Lachaux, 1923a) describing a case of "illusion des sosies" (illusion of doubles): In this first descriptive case, a 53-year-old schizophrenic woman believed that her husband, children, prefect of police, neighbors, and even herself had been replaced by doubles. The second is the syndrome of subjective doubles, described by Christodoulou (1978a). In his prototypic case report, Christodoulou described an 18-year-old woman, Ms. A., who, after a febrile episode, began to suffer from the delusion that a neighbor had transformed herself into Ms. A.'s double. This was Ms. A.'s sole delusion of misidentification.

Delusions involving replacement of the self have received little attention from 1950 to present. In a comprehensive review of 133 cases of Capgras syndrome in the English-language literature, Berson (1983) cites only eight cases of delusions of replacement of the self. (His list includes Christodoulou's case of the syndrome of subjective doubles as a variant of Capgras syndrome.) Three other cases of delusional self-replacement are cited by Kimura (1986) in a review of 106 cases of Capgras syndrome. Perhaps, as Berson suggests, the paucity of reporting on delusions of self-replacement is due to reliance on the synopsis (Capgras and Reboul-Lachaux, 1923b) of the original Capgras paper, which omitted reference to the patient's delusion of the existence of an imposter of herself.

We herein present a new case of delusional self-replacement which is the third reported case of subjective doubles.

Case Report

Mrs. B. is a 50-year-old white married homemaker and mother of five children with three previous psy-

chiatric hospitalizations for depression and bipolar illness. She was admitted to a psychiatric inpatient unit suffering from paranoia. Efforts to engage Mrs. B. in discussion of her condition proved to be fruitless, until several weeks after admission when she admitted to a delusion of self-replacement. She firmly believed that another Mrs. B. existed who had replaced herself in her husband's affections. Evidence for Mrs. B.'s conviction was based on her perception that Mr. B. had lost interest in sexual relations. She reasoned that, because he no longer wanted her sexually, he must have someone else who, since Mr. B. was married to Mrs. B., must therefore be Mrs. B. Mrs. B. was convinced that the "grooves in her fingers were smoother," and that the double had taken her fingerprints. She was so concerned about the existence of another Mrs. B. that she required the constant presence of her driver's license to reassure herself that she was the real Mrs. B. In addition to her delusional belief, Mrs. B. reported that she had actually seen the other Mrs. B. She believed that the other Mrs. B. was also a patient in the unit who looked exactly like her facially but was heavier in the body. (Another, younger, patient, who was pregnant, was actually the person upon whom this illusion was superimposed.)

Upon initial presentation, mental status examination revealed an apprehensive woman with depressed affect. Her thought process was logical, but the content revealed paranoid ideation. She reported strong fears of ceasing to be herself if the self-double were to be accepted by others as the true Mrs. B. She denied hallucinations, ideas of reference, suicidality, or homicidal thoughts. She did admit to ideas of influence, saying that an outside force was exerting control over the minds of herself and her family. Appetite was poor and she showed prolonged sleep onset with multiple awakenings at night. She admitted to feelings of helplessness in the face of her perceived self-replacement. Short-term and recent memory were poor, as was concentration. Judgment and insight were poor by history. Abstraction was somewhat concrete.

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TABLE 1
Cases of Delusional Self-Replacement in the English and French Literature Since 1900

Reference	Description of Self-Replacement	Other Doubles	Diagnoses
Janet, 1903	A 23-year-old woman believed her double was the queen of a gang of criminals.	One attendant to the queen had a double.	Paranoid-depressive psychosis
Bessiere, 1913	A mentally disturbed woman believed an imposter of herself was using the resemblance to perform misdeeds.	An impersonator of her mother had the same motivation.	Not provided
Halberstadt, 1923	A 41-year-old woman believed she had a double.	Doubles included her husband, son, the whole world, and theologians who used the resemblance to withdraw the subject's money from the bank.	Psychosis with hallucinations
Capgras and Reboul-Lachaux, 1923a	A 53-year-old woman believed that multiple doubles of herself existed.	Her husband, police, and neighbors had doubles. Her daughter had over 2000 doubles.	Chronic paranoid psychosis
Dupouy and Montassut, 1924	A rich woman believed a double of herself existed who exhibited offensive behavior.	Friends whom she perceived to be scandalized by the double's behavior themselves had doubles.	Psychotic hallucinations
Vie, 1930	A 52-year-old woman believed her double differed only in the shape of the nose.	Her husband had many doubles. Her son had consecutive doubles with slight physical differences.	Chronic psychotic hallucinations
Larrive and Jasienski, 1931	A female singer believed her double was an Italian princess.	Her lover's double had different scars and sexual prowess. Sisters' doubles had different scars.	Chronic psychotic hallucinations and delirium of persecution
Brocado, 1936	A 64-year-old woman believed she had 20 doubles whom she called her "sisters."	The nurse, hospital staff, hospital secretary, and psychiatrist all had doubles.	Chronic psychotic hallucinations
Frey et al., 1956	A 55-year-old woman believed she had a double during her second hospitalization.	Her husband and children had doubles and even triples.	Psychosis with chronic delirium
Gluckman, 1968	A 61-year-old woman believed her double lived in her house. She visualized the slightly different looking woman in the mirror.	A double of her husband lived in the house also.	Paranoid schizophrenia and cerebral atrophy
Simouopoulos and Goldsmith, 1975	A 34-year-old man (Mr. A.) believed that he himself was another man (Mr. B.) who had adopted the body of Mr. A.	None	Paranoid schizophrenia
Mikkelsen and Gutheil, 1976	A 44-year-old woman believed she was a good person using the body of the real patient who was a "no-good bitch."	The husband, mother, and youngest son had doubles.	Paranoid schizophrenia
Christodoulou, 1978a, 1978b	An 18-year-old woman believed a neighbor had transformed herself into her double.	None	Hebephrenoparanoid schizophrenia
Fialkov and Robins, 1978	A 43-year-old woman believed herself to be from Uranus, trained by the FBI as a doctor, and part of an American secret political organization, which had altered her features to look like the real patient.	Her husband had a double.	Paranoid schizophrenia
Thompson et al., 1980	A 32-year-old man believed an imposter replaced him in his hometown.	Eight imposter-cities existed with duplicates of his family members.	Schizophrenia
Todd et al., 1981	A 41-year-old woman believed another woman was her double and was abetted by her son, who provided photographs for the deception.	Her husband, two stepsons, and parents were replaced by doubles.	Paranoid schizophrenia
Staton et al., 1982	A 31-year-old man believed that his current persona was a slightly different double from the physical self that he could recall from his past.	Doubles existed of his friends, family, relatives, city of hospitalization, and cat.	Reduplicative paramnesia with Capgras features
Berson, 1983	A 32-year-old woman believed one of her doubles was being groomed for the Presidency and that the other was elsewhere in the hospital performing sadistic sexual acts.	Doubles existed of her only living relatives, her therapist, and the hospital staff.	Chronic paranoid schizophrenia
Atwal and Khan, 1986	A 34-year-old man believed his double had acquired his physical characteristics via a facelift, was a homosexual, and was performing unlawful deeds.	His mother and family had doubles.	Paranoid disorder with borderline intellectual functioning
Current case	A 50-year-old woman believed a double of herself existed who had replaced the patient in her husband's affections.	None	Delusional depression

Physical and neurological examinations were unremarkable. CT scan showed enlarged ventricles and widened sulci, suggesting atrophy somewhat advanced for Mrs. B.'s age. EEG revealed diffuse slowing secondary to medication. Atypical bitemporal spikes were also noted. Extensive neuropsychological testing, with attention to evaluation of organic and visuospatial disturbances, was slightly atypical, but no clear pattern of organicity was noted.

A diagnosis of delusional depression was made based on the presence of somatic and affective symptoms in conjunction with the presence of delusions. Organic disease was considered, based on CT and EEG findings; however, the results of these and the neuropsychological tests were nonspecific. Treatment with neuroleptics and antidepressants relieved Mrs. B.'s dysphoria and anxiety about her delusion. However, 2 months later, her delusional system remained intact. She was discharged to home on fluphenazine 5 mg twice daily and desipramine 75 mg alternating with 150 mg every other day.

Discussion

A summary of cases in the English and French literature since 1900 in which a delusional misidentification syndrome involving replacement of the self has been reported are presented in Table 1. Several interesting features may be noted.

First, the delusion may involve either the physical or the psychological self. The majority of cases are delusions of the replacements of the physical self; *i.e.*, the subject believes another person exists who looks exactly or almost exactly as he/she does. Only a few cases are seen involving the self as a psychological imposter using the subject's body (Fialkov and Robins, 1978; Mikkelsen and Gutheil, 1976; Simoupoloulos and Goldsmith, 1975; Staton et al., 1982). In these complicated cases, the patient believes that his/her own personality has replaced that of the person whose body he/she is using. Inherent in this form of the delusion is the notion that the patient does not recognize his/her physical self as his/her own.

A second interesting feature of these cases describes the extent of the delusional system. In most reports, the self-delusion is seen with many other delusions of replacement. Most often, these other delusions include other persons, but sometimes include animals, cities, and even the whole world. These cases are examples of Capgras delusions. In contrast, only three cases, including ours, report the self-delusion as the sole delusion of replacement (Christodoulou, 1978a; Simoupoloulos and Goldsmith, 1975; current case). This type of delusional misidentification, in which the sole delusion is replacement of the self, is termed a case of

subjective doubles.

In the cases of subjective doubles, the subject claims to have actually seen his/her double. These delusions of seeing one's replacement must be differentiated from autoscopic hallucinations which occur in a setting of stress, fatigue, or worry, such as in hospitalization (Fauget, 1979). In an autoscopic hallucination, the patient sees an illusion of his/her real self, both physically and psychologically. The patient is convinced that the illusion is real even though recognizing the implausibility of the situation (Damas Mora et al., 1980). Treatment is limited to reassurance and attention to resolution of the underlying physical stressor.

In contrast, in delusional misidentification involving the self, the patient acknowledges the physical resemblance of the self-imposter but denies that the imposter is his/her true psychological self. The patient is convinced that the self double is real. Paranoid thinking and/or visuospatial disturbances are always present in delusional misidentification syndromes. In these cases, one treats the underlying psychiatric illness, *e.g.*, with neuroleptics.

Although delusional misidentification is most often seen in psychotic or affective illness, recent reports raise the issue of organicity as an etiological factor (Gluckman, 1968; Merrin and Silverfarb, 1976; Weston and Whitlock, 1971). In case reports and small series, cerebral lesions or dysfunction in different anatomic areas have been demonstrated by MRI, CT, EEG, and/or neuropsychological testing. These areas include: right hemisphere (Hayman and Abrams, 1977; Staton et al., 1982; Waziri, 1978; Wilcox and Waziri, 1983), combined right hemisphere and bifrontal lobes (Alexander et al., 1979), cortical atrophy (Todd et al., 1981), temporal lobe epilepsy (Chawla and Virmani, 1977), paroxysmal bitemporal slow-wave activity (MacCallum, 1973), and frontotemporal impairment on neuropsychological testing (Morrison and Tarter, 1984).

When a Capgras delusion subsequently developed in a patient with preexisting prosopagnosia (inability to recognize faces) and CT-proven bilateral occipitotemporal lesions, MRI revealed additional bifrontal lesions (Lewis, 1987). Such cases strengthen the association of bifrontal lesions with delusional misidentification and have led some authors to suggest that impaired frontal lobe executive performance provides a necessary substrate for delusions, confabulation, and hallucinations. In contrast, Joseph (1985) reports a case of coincident misidentification syndromes, including Fregoli syndrome, intermetamorphosis, and reduplicative paramnesia, in a patient with bitemporal lesions. He concludes, based on this case and others with bitemporal findings, that bitemporal lesions are needed to produce delusional misidentification (Joseph, 1985). Similarly, in a distinct but related clinical entity, dis-

sociative phenomena (e.g., multiple personalities) are seen in conjunction with temporal lobe epilepsy (Mesulam, 1981; Schenk and Bear, 1981).

The prognosis of patients with delusions involving replacement of the self is variable. Most patients are currently treated with neuroleptics. Some patients' symptoms of delusional self-replacement resolve with neuroleptics; but for others, the course is one of chronic resolution and relapsing of their delusional misidentification. In our patient, the delusional system remained intact despite neuroleptic treatment; however, with antidepressants and supportive psychotherapy, she was able to be discharged in a euthymic state.

Conclusions

We have shown, through a review of the literature since 1900 that many cases of delusional misidentification involve the self. This syndrome may be underreported due to a lack of familiarity with its manifestations. By presenting this review, we demonstrate the various and interesting forms this delusion may assume in the hope that its prompt recognition may lead to prompt treatment by informed therapists.

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