The Dangerousness of Persons with Misidentification Syndromes

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The central feature of misidentification syndromes is the presence of a delusion in which either the identity of the self or other persons is misrecognized. Recent psychiatric case reports have noted the dangerousness posed by persons with misidentification delusions. The authors report on a series of 29 individuals whose delusional misidentification was associated with aggressive behaviors. Important parameters which may assist in defining this sample of dangerous delusional misidentification syndrome persons are discussed.

Delusional misidentification syndromes (or simply misidentification syndromes) continue to attract interest from a variety of perspectives, including phenomenological, diagnostic, biological, and sociocultural.1-3 The most common of these syndromes is Capgras syndrome or the syndrome of doubles. The Capgras patient delusionally believes that others have been replaced by physical duplicates who have different psychological identities from the originals.4 Since Capgras and Reboul-Lachaux first described a patient with the syndrome of doubles in 1923,4 several other types of misidentification syndromes have been described. All of these syndromes may be categorized as either misidentification syndromes of others, exemplified by the prototypical Capgras delusion, or misidentification syndromes of the self in which the patient’s own identity is misidentified.2,5 Signer2 has proposed that the latter type of syndromes be designated as “reverse” types of misidentification syndromes in order to distinguish them from misidentification syndromes involving others.

Delusional misidentification phenomena usually fall under the rubric of syndromes, although many consider them as merely symptoms, while others postulate that they represent discrete diagnostic entities. This controversy cannot be presently resolved given the paucity of systematic data from large-scale studies. In this article, we use the term syndrome in referring to delusional misidentification phenomena since most of the psychiatric literature has adopted this usage.6,7

Despite the increasing attention devoted to misidentification syndromes in
recent years, limited attention has been devoted to dangerous behavior as a by-product of misidentification delusions. It is generally known that misidentification syndrome patients view the misidentified persons with suspicion and hostility.\textsuperscript{5,7} Although many of these patients confine their hostility to their thinking, some have threatened and/or seriously injured the misidentified persons.\textsuperscript{8-10} Most of the anglophonic psychiatric literature on misidentification syndromes and dangerousness has been reported as single case studies with an occasional article devoted to a small series of cases.\textsuperscript{9,10}

In this article, we analyze a series of 29 individuals suffering from one or more of the misidentification syndromes with two cases presented in detail. We discuss several parameters as they related to the issue of dangerousness in these patients. We briefly explore how knowledge of misidentification syndromes may be helpful in assessing dangerousness.

**Methods**

The sample consisted of 29 individuals who had been examined by two of us (J.A.S. or G.B.L.) as a result of a court-ordered psychiatric assessment or during routine evaluation for psychiatric inpatient treatment. The individuals were confined in different jail settings, a state hospital, or evaluated in a psychiatric emergency setting or inpatients wards of a Veterans Affairs Medical Center. Inclusion in our sample, which was collected over an approximately four and one-half year period, required the presence of or a history of misidentification delusions. Psychiatric diagnoses were made according to DSM-III-R criteria.\textsuperscript{11} Medical charts were reviewed in order to verify demographic data (sex, age, marital status, and ethnicity) and collect information pertaining to delusional content and dangerous behaviors.

All subjects with evidence of delusional thinking were routinely evaluated for content of their delusions, including misidentification delusions. We used the following definitions for misidentification syndromes of others: Capgras syndrome is the delusional belief in which the physical appearance of another remains unchanged but the psychological identity has changed radically;\textsuperscript{4-7,12} Frégoli syndrome is the delusional belief in which another person changes his or her physical appearance but remains psychologically unchanged;\textsuperscript{5,12-14} and syndrome of intermetamorphosis is the delusional belief in which others undergo radical changes in physical and psychological identities culminating in a different person than the original.\textsuperscript{3,5,12,15} For the three misidentification syndromes of the self identified in this study, we used the following definitions: Syndrome of "reverse" subjective doubles, or "reverse" Capgras, is the delusional belief in which the patient's psychological identity changes radically with the physical identity remaining unchanged;\textsuperscript{2,5,16} Syndrome of "reverse" intermetamorphosis is the delusional belief in which the patient undergoes radical changes in both physical and psychological identities;\textsuperscript{5,17} and "reverse" Frégoli syndrome
is the delusional belief in which the patient has undergone fundamental changes in physical makeup without any psychological changes. In addition to these six misidentification syndromes, there are two “subjective” variants: the syndrome of subjective doubles (or probably more accurately “subjective” Capgras) in which the patient delusionally believes in the existence of physical duplicates of him or herself who have different psychological identities; and the syndrome of “subjective” Frégoli in which the patient delusionally believes that people with bodies dissimilar to his or her own harbor minds identical to that of the patient. Criteria for inclusion of dangerousness included either verbal threats to physically harm another or actual physical attack on another.

Results

Twenty-seven males and two females comprised our sample. The average age for our series is 39 years. The sample contained 18 blacks, six whites, four white Hispanics, and one Asian. In regard to marital status, 13 were single, five married, 10 divorced, and one separated. Twenty patients (69%) of our sample suffered from paranoid schizophrenia. Two of the remaining patients suffered from schizoaffective disorder, while two others presented with bipolar disorder and one other with psychosis not otherwise specified. Four subjects met diagnostic criteria for organic delusional disorder.

The 29 subjects in our series misidentified a total of 59 human objects. Eleven subjects in our series presented with more than one type of misidentification syndrome. For delusional misidentification syndromes of others, the Capgras and intermetamorphosis delusions were the most frequent, accounting for 21 (36%) and 13 (22%) of the misidentified objects, respectively. For delusional misidentification syndromes of the self, “reverse” Capgras and “reverse” intermetamorphosis were the more frequent, appearing in 13 (22%) and six (10%), respectively, of the misidentified objects. The Frégoli, “reverse” Frégoli, and “subjective” doubles were present in two (3%), one (2%), and three (5%) of the misidentified objects. No subjects harbored the “subjective” Frégoli delusion.

Concerning the relatedness of the misidentified object to the subject, the following frequencies were observed: mother (8), father (5), sibling (4), wife (6), other relatives (1), police officer (2), acquaintances (5), celebrities (1), and stranger (4).

Concerning a past history of aggression, 21 had threatened to harm others and 16 had physically attacked others without any evidence that misidentification syndromes had been involved. When misidentification syndromes had been present, 16 had threatened others without acting on the threats, while 13 became physically assaultive in connection with their misidentification syndromes (see Table 1).

Case 1

Mr. A is a 44-year-old white male who has spent the previous nine years committed to a secure forensic psychiatric
The text contains a table and a narrative about a case of physically aggressive behavior.

### Table 1: Physically Aggressive Cases

<table>
<thead>
<tr>
<th>Case No.</th>
<th>Age</th>
<th>Dx/M.S.</th>
<th>Misidentified Object(s)</th>
<th>Dangerous Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>30</td>
<td>1/a</td>
<td>Police officer</td>
<td>Hit officer with fists</td>
</tr>
<tr>
<td>2</td>
<td>28</td>
<td>1/d</td>
<td>Self (as Christ)</td>
<td>Hit others with fists</td>
</tr>
<tr>
<td>3</td>
<td>43</td>
<td>3/c</td>
<td>Wife, brother</td>
<td>Hit wife and brother with fists</td>
</tr>
<tr>
<td>4</td>
<td>46</td>
<td>1/b</td>
<td>Stranger</td>
<td>Killed stranger by gunshot</td>
</tr>
<tr>
<td>5</td>
<td>21</td>
<td>3/a,d</td>
<td>Police officer</td>
<td>Hit officer with fists</td>
</tr>
<tr>
<td>6</td>
<td>40</td>
<td>2/d,e</td>
<td>Self (as a deity)</td>
<td>Hit officer with fists</td>
</tr>
<tr>
<td>7</td>
<td>56</td>
<td>1/c</td>
<td>Wife</td>
<td>Hit wife with fists</td>
</tr>
<tr>
<td>8</td>
<td>40</td>
<td>1/c</td>
<td>Teacher, stranger</td>
<td>Hit strangers with fists</td>
</tr>
<tr>
<td>9</td>
<td>36</td>
<td>1/d</td>
<td>Self (as God)</td>
<td>Hit officer with fists</td>
</tr>
<tr>
<td>10</td>
<td>41</td>
<td>1/e</td>
<td>Self (as a brother)</td>
<td>Hit others with fists</td>
</tr>
<tr>
<td>11</td>
<td>44</td>
<td>1/a</td>
<td>Parents</td>
<td>Killed parents by stabbings</td>
</tr>
<tr>
<td>12</td>
<td>43</td>
<td>1/d</td>
<td>Self (as Antichrist)</td>
<td>Sexually molested child</td>
</tr>
<tr>
<td>13</td>
<td>41</td>
<td>1/a</td>
<td>Mother</td>
<td>Hit mother with fists</td>
</tr>
</tbody>
</table>

Dx = diagnosis; 1 = paranoid schizophrenia; 2 = bipolar disorder; 3 = organic delusional disorder; M.S. = misidentification syndrome; a = Capgras; b = Frégoli; c = intermetamorphosis; d = "reverse" Capgras; e = "reverse" intermetamorphosis.

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Facility after being found legally insane for killing his parents. Except for the double homicide, Mr. A had no criminal history. Mr. A's psychosis began at age 19 with the onset of paranoid thinking. Sometime before the killings, Mr. A developed the delusion that his parents were not his real parents. Though he did not know what had occurred to his real parents, he believed that the persons posing as his parents were impostors. While fearful of these putatively impostor parents, he also harbored angry and hostile feelings toward them. Along with the misidentification delusion of his parents, he also heard voices commanding him to kill the parental impostors because the ersatz parents wanted to kill his sisters.

On the day of the homicides, Mr. A surprised his 80-year-old father and stabbed him multiple times. He then physically overpowered his 78-year-old mother and stabbed her several times. Mr. A believed that after killing his mother, her body became filled with bubbles and began to partially disappear. This confirmed his belief that his mother was an impostor.

Despite his nine years of continuous psychiatric inpatient treatment that included the use of neuroleptic medication, Mr. A continues to exhibit florid psychotic symptoms. He currently delusionally believes that the Mafia and CIA are persecuting him, that it was the CIA who had killed his real parents, and that he is a leader of an army that only he can see and hear. Mr. A now hears the voices of Senator Edward Kennedy and former FBI director J. Edgar Hoover. The hospital staff frequently observe him to be responding to unseen stimuli. On the ward, Mr. A mistrusts everyone—both hospital staff and other patients—and is almost always hostile and
belligerent toward others as manifested by frequent verbalizations of explicit homicidal threats and/or aggressive gestures. He oftentimes complains of being attacked by imaginary aggressors at night while sleeping. Mr. A’s speech frequently displays loose associations. In regard to the double homicide of his parents, Mr. A continues to believe that his real parents had been replaced by impostors who had intended to harm him.

There is no history of head trauma, seizures, or major medical illnesses. Mr. A met criteria for a DSM-III-R diagnosis of schizophrenia, paranoid type, chronic.¹¹

**Case 2**

Mr. B is a 43-year-old white male who is charged with murder after shooting a stranger to death. Mr. B began to experience paranoid delusions and auditory hallucinations at age 39. At age 41, he had been hospitalized for physically attacking his wife and threatening to kill other family members. During the year before the homicide, Mr. B began to believe that his wife was acting in X-rated films, that her vagina was changing, and that her skin color was changing to a different color. He believed that his wife would change her external physical appearance in order to pose in X-rated movies and not be detected by Mr. B. Mr. B would watch pornographic films and then would believe that the female stars were his wife. He acknowledged that the stars looked physically dissimilar to his wife but believed that they were his wife because they had the same psychological identity as his wife.

The victim was a 65-year-old man whom Mr. B had seen regularly at the neighborhood coffee shop they both frequented in the mornings, though they never met or had talked to each other. On the day of the shooting, Mr. B believed that he had actually witnessed the victim having sex with his wife on the previous day. Mr. B indicated that the woman and her alleged lover did not look like his wife and the victim, but he knew it was them by the way they “acted” during sex. Mr. B acknowledged that both his wife and the victim had assumed different physical appearances during their sexual activity in order to go undetected by Mr. B. Mr. B indicates that his wife and the victim never had met when they had occupied their original bodies.

Past psychiatric records have documented Mr. B’s associations as frequently loose and that he has acknowledged experiencing thought withdrawal. His behavior is guarded and his judgment poor. Mr. B has been treated with antipsychotic medication in the past. In spite of psychopharmacologic treatment, Mr. B remained psychotic. During a psychiatric hospitalization three months before the shooting, Mr. B’s head CT scan and physical examination were normal. Mr. B met DSM-III-R criteria for schizophrenia, paranoid type, chronic.¹¹

**Discussion**

Our series, which was collected over a four and one-half year period, indicates
that individuals who suffer from misidentification syndromes and who also display dangerous behaviors may not be as rare as suggested by the paucity of case reports of such in the anglophonic medical-psychiatric literature. Although jail and emergency evaluations may select for violent patients, it is still noteworthy that misidentification associated with violence is not rare. Concerning the parameter of gender, the available psychiatric literature indicates that a preponderance (70%) of the cases of misidentification syndrome patients exhibiting aggressive behaviors involves males.\cite{3,8,12,21-31} The preponderance of males as perpetrators of violence is consistent with the greater number of violent males incarcerated in jails and prisons as well as involuntarily hospitalized for dangerous behaviors. While our series also shows a strong preponderance of males (93%), this larger figure can also be explained by the vast majority of our cases emanating from institutions whose populations are male (Veterans Affairs Medical Center and the Los Angeles County Jail system).

Concerning the relational nature of the subject to the misidentified object, we found that parental misidentification accounted for 22 percent of all misidentified objects, with the mother being more common (14%). Spouses and siblings were infrequently misidentified, 10 percent and 7 percent, respectively. Thirty-one percent of the misidentified objects in our series were family members of the affected individual, in contrast to 70 percent for the dangerous misidentification syndrome patients reported in the literature.\cite{3,8,12,21-31} Our lower percentage is likely explained by the origin of our sample from both the hospital and jails, whereas the cases in the literature were generally brought to the hospital by concerned family members who were living with the patients. It is well known that misidentification syndrome individuals tend to misidentify those who are emotionally and geographically close to them.\cite{3,7,10,32}

Not all misidentified objects were known by the patient. Nevertheless, most strangers who became misidentified objects held some affective importance to the patient. For example, in our series two individuals believed that they were contemporary political figures who were clearly admired by the patient. Another patient thought that his wife was a well-known singer and one patient believed that President Bush, Vice-President Quayle, and President Saddam Hussein were no longer the original identities. None of these patients were hostile toward these high profile figures, but were hostile toward other misidentified persons. However in a series of 12 individuals who delusionally misidentified political figures, there was evidence that some of these patients displayed considerable hostility toward the misidentified politician.\cite{31} Although, to our knowledge, no president has been physically harmed by an individual suffering from a misidentification delusion, the first United States presidential assassination attempt involved such a delusional person. In 1835, Richard Lawrence who believed that he was the King of England and the United States har-
bored the delusion that President Andrew Jackson was depriving him of his rightful rewards. As a result of this perceived injustice, Mr. Lawrence attempted to shoot President Jackson—though fortunately his guns misfired.33,34 It is possible that some individuals suffering from misidentification syndromes have been prevented from injuring politicians. Recently, the Secret Service arrested a man in former President Ronald Reagan’s home. The arrestee came to kill Reagan whom he believed to be the Antichrist.35 In the entertainment industry, celebrities may also be misidentified by delusional persons. Mark David Chapman, who killed musician John Lennon, is reported to have suffered from a misidentification delusion involving his victim.36

The delusional misidentification syndrome individuals in our series have a significant history of aggressive behaviors, as 45 percent of our sample engaged in physical aggression connected with their misidentification delusions (see Table 1). The psychopathology of Mr. A is consistent with Capgras syndrome involving the patient’s parents. In the case of Mr. B, he believed that his wife and the victim had acquired different physical identities in order to deceive him—a delusional presentation consistent with the Frégoli syndrome. Both Mr. A and Mr. B exhibited hostility and suspiciousness toward the misidentified object. Paranoid ideation and hostility are also present in all the individuals of our series and correspond to typical symptoms exhibited by most delusional misidentification syndrome individuals.7,32 Both Mr. A and Mr. B lived with some of the misidentified figures, consistent with our results that most misidentified objects are persons with whom the delusional individual has an emotionally and geographically close relationship. Mr. B’s case also illustrates that strangers can be misidentified. Nevertheless in such cases, there can be some emotional connection, as Mr. B believed that the stranger-victim was having an affair with his wife.

We emphasize that not all individuals suffering from misidentification syndromes actually attacked their misidentified objects. In many cases, their dangerous behaviors were likely prevented, or at least forestalled, by involuntary psychiatric hospitalization or imprisonment. Nonetheless, 13 of the delusional misidentification syndrome individuals in our series, all of whom were male, perpetrated physical violence as a result of their misidentification (see Table 1). Some of the individuals misidentified family members, but others misidentified strangers such as police or someone they met out of the home, as in the case with Mr. B. The people who were misidentified in the environment were perceived as inauthentic, i.e., thinking of them as supernatural entities (e.g., devils) or frank impostors. However, other explanatory delusions were common, such as modern technological procedures (e.g., surgery, genetic engineering) or science fiction themes (e.g., extraterrestrial beings).3,31 The delusional explanation for the lack of authenticity of the misidentified object is likely to be
strongly associated with the patient’s cultural background.\textsuperscript{37,38}

The violent delusional misidentification syndrome individuals in our series who misidentified themselves were usually dangerous in part because they tended to see themselves as powerful religious figures (a deity). Paradoxically, they advocated violence because they thought that others did not acknowledge their omnipotent and divine nature and therefore decided to punish or hurt others in spite of their contentions about being basically “good.” Not all individuals with dangerous misidentification syndromes of the self, however, identified with benign religious figures. Patient 12, for example, called himself, “the evil one” as well as the Antichrist and therefore decided to sexually abuse a young child.

The mechanisms by which delusional misidentification syndrome individuals may become dangerous are likely to be multifactorial. At one level, delusional misidentification syndrome individuals have significant histories of physical aggression independent of their delusional misidentification. Therefore they appear to be more likely to engage in aggressive activities. For the delusional misidentification syndrome of others, the misidentification process facilitates aggression because the affected individual tends to perceive others as inauthentic and therefore no longer a part of the patient’s social network (e.g., family, neighbors, or treating mental health professionals). Another possibility that remains to be systematically tested is the contribution by specific organic factors. Neuropsychiatric or neurologic abnormalities have been found in many delusional misidentification syndrome patients.\textsuperscript{2,39} For example, there is some evidence which indicates that delusional misidentification syndrome individuals may suffer from right brain abnormalities resulting in facial recognition deficits.\textsuperscript{40} Illusionary phenomena associated with perceived facial distortion in others may cause in turn the affected individual to become increasingly paranoid and aggressive when perceiving the distorted face of the misidentified object. Facial misrecognition appears to be more consciously experienced by those individuals who suffer from the syndrome of intermetamorphosis in which the individual may perceive substantial facial distortion in others.\textsuperscript{3} However, even among many Capgras syndrome patients who deny significant facial recognition problems, neuropsychological testing has shown otherwise in some cases.\textsuperscript{23,41–43}

In conclusion, understanding misidentification syndromes may be of importance for several reasons. First, understanding misidentification phenomena may help elucidate factors of potential significance in the causation of dangerous behaviors. Careful evaluation for misidentification syndrome may help the forensic psychiatrist who regularly assesses psychotic individuals and their degree of dangerousness. Second, early recognition of misidentification phenomena may be of value in the inpatient or correctional facility management of these psychotic individuals. Misidentification phenomena may lead
these persons to mistrust, dislike, or even attack those around them, including other patients, inmates, or staff. Third, given that misidentification syndrome individuals can also become hostile to high profile figures they misidentify, information on misidentification phenomena warrants further study to assist protective agencies (e.g., the Secret Service) in their respective missions. Fourth, careful study of misidentification syndromes may eventually lead to a better understanding of the neurobiological basis of these syndromes as well as perhaps some biological factors associated with aggression. Finally, this study suggests that misidentification syndromes with associated aggressive behaviors are not as rare as previously thought. We emphasize that our study was based on a sample collected from a variety of clinical and forensic settings and therefore it is not possible to deduce an accurate prevalence of dangerousness behaviors among persons living in the community who are suffering from delusional misidentification syndromes. However, future systematic study containing large numbers of these cases to offset any sampling bias may very well contribute to an improved understanding of the psychology of aggression in psychosis.

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