THE AMERICAN ACADEMY OF FORENSIC SCIENCES

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410 North 21st Street Colorado Springs, CO 80904 Phone: (719) 636-1100 Fax: (719) 636-1993

Email: info@aafs.org Website: www.aafs.org

PROCEEDINGS

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Psychiatry & Behavioral Science—2022

I10 Death of a Doppelgänger: A Peculiar Case of Homicide

Caterina Bosco, MD*, Legal Medicine Section, University of Turin, Turin, Italy; Lucia Tattoli. PhD, S.C. Legal Medicine, Hospital A.O.U. Città della Salute e della Scienza, Turin, Italy; Cristiano Barbieri, MD, Dipartimento di Medicina Legale e Sanità Pubblica, Università degli Studi di Pavia, Pavia, Italy; Gabriele Rocca, MD, Department of Health Sciences, University, Genoa, Italy; Ignazio Grattagliano, PsyD, Dipartimento Di Scienze Della Formazione, Psicologia, Comunicazione, Università Aldo Moro di Bari, Bari, Italy; Giancarlo Di Vella, PhD, Legal Medicine Section, University of Turin, Turin, Italy

Learning Overview: After attending this presentation, attendees will better understand the Doppelgänger phenomenon (or heautoscopy) in a case of atypical first-episode psychosis.

Impact Statement: This presentation will impact the forensic science community by showing that delusional mood (also known as Wahnstimmung), as a prodromal feature of an impending psychotic illness, can be dangerous if not properly recognized.

The Doppelgänger phenomenon involves the experience of a direct encounter with one's self, characterized by: (1) the perception of a figure having identical physical features with one's self; or (2) the apprehension that the perceived figure shares the same personality and identity. The Doppelgänger not only looks like the same person, it is his double. The perceptual element is usually a hallucination, though occasionally there is a false perception of an actual figure that may be involved. This phenomenon has been described in individuals with overwhelming fear, severe anxiety or intoxication, epilepsy, and in the transition between sleep and wakefulness. It has also been reported in major psychoses. The fear of imminent death often precedes the Doppelganger experience.2

This report presents a case of a 30-year-old man, Mr. XY, who was stabbed to death at the gym by Mr. XY, his "double". The aggressor and his victim, although not related, shared both name and surname, same age, professional activity, and place of work. Moreover, they attended the same sport center but barely knew each other.

A week before the homicide, the attacker, who had no history of psychiatric disturbance, had returned to live at home with his parents and sister, appearing more introverted and socially isolated in the aftermath of the separation from his girlfriend. One night he began to rant nonsense things and to be fixated on certain facts that happened on TV, mentioning international conspiracies. He revealed to his mother that he was afraid of being spied on by neighbors and that his family was in danger. Furthermore, he had perceived as a sort of "intuition" that her sister "had got pregnant, following a rape" perpetrated by the victim. His sister, while admitting having met him once through mutual friends, denied both a romantic relationship and the alleged pregnancy. The family consulted a general practitioner, who identified only a "depressive state" and prescribed benzodiazepines. The day before the agreed appointment with a psychiatrist, the murderer went to the gym and, as he crossed paths with the victim, killed him by stabbing him in the chest with a 25cm-long diving knife. The subsequent psychiatric evaluations in prison were suggestive of a psychotic condition.

This case is very unique in the scientific literature. In the most serious psychotic forms, the theme of the "double" calls into question not only the dissociative processes involved in the etiopathogenesis of the disorder, but also bio-psycho-social elements, as well as personal data that made the victim and the aggressor "identical."

In the context of such psychopathological functioning, the delusional mood (Wahnstimmung) that precedes the development of delirium is a sort of gateway to an impending psychotic illness, referring to delusional awareness or mood (atmosphere). In psychosis, splitting is the main theme and this influence was seen as an evil, foreign, apocalyptic, and unknown side that is no more recognized as belonging to itself also in the physical sense.3 In such a situation, the only way to survive is the suppression of the one's own double as a defense against the disorganization of the self.

Reference(s):

- Brugger, P.; Blanke, O.; Regard, M.; Bradford, D.T.; Landis, T. (2006) Polyopic heautoscopy: Case report and review of the literature. Cortex,
- Maack, L.H.; Mullen, P.E. (1983) The Doppelgänger, disintegration and death: A case report. Psychol Med. 13(3):651-4.
- Matarazzo, I.; Vellante, F.; Di Nicola, D., et al. (2017) Doppelganger Theme Occurring after Psychotherapeutic Mourning Treated with Lai Aripiprazole. Psychiatr Ann. 5: 1102.

Psychosis, Doppelgänger, Homicide