in elderly patients (Post, 1972) and the presence of delusions, physical health problems and severe life events may be poor indicators (Baldwin & Jolley, 1986). This would suggest the need for maintenance prophylactic treatment in such patients. There is need for a double-blind trial to evaluate our clinical case findings further to assess this novel conjoint antidepressant therapy. Clinicians need to remain sceptical of monoreceptor theories of depression.

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Déjà Vu Experiences and Reduplicative Paramnesia

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A schizophrenic patient with different forms of experiences of inappropriate familiarity is described. The authors discuss traumatic experiences as aetiological factors in *déjà vu* experiences and reduplicative paramnesia. Finally, the differential diagnostic problem in psychotic and dissociative phenomena is stressed. *British Journal of Psychiatry* (1992), **161**, 565–568

Subjectively inappropriate impressions of familiarity of the present with an undefined past are generally known as *déjà vu* experiences (Neppe, 1983). These experiences can occur in any sensory modality and may be viewed as misidentifications of time, place or person. Psychopathogenetically, *déjà vu* experiences can be related to disturbances or alterations in the normally integrative functions of identity, memory, perception or attention. Therefore, in terms of the DSM-III-R (American Psychiatric Association, 1987), they may be classified as dissociative phenomena.

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Various authors (e.g. Harper, 1969) have argued that pathological and non-pathological forms of the *déjà vu* experiences differ fundamentally as they are based on qualitatively different psychopathogenetic mechanisms. However, the fact that the clinical features of *déjà vu* experiences can be similar in non-pathological and pathological conditions suggests that they can be produced by the same psychopathogenetic mechanisms. Rather than its qualitative nature, the distinction between pathological and non-pathological should be based on the quantitative differentiation of the pathogenetic mechanisms. Differentiation of experiences of inappropriate familiarity based on the severity of the disturbance of reality testing, as measured by its intensity, duration and pervasiveness, would then seem to be more appropriate. Consonant with the view of Dietrich (1969) and in line with a growing number of authors (e.g. Zigler & Levine, 1983) who argue a continuum view of delusions and hallucinations, we propose the concept of a continuum of experiences of inappropriate familiarity, ranging from the minor and major form of *déjà vu* experiences, as defined by Arnaud (1896), to what is referred to as reduplicative paramnesia. The minor form of the *déjà vu* experience is transient, paroxysmal and reality testing is momentarily and negligibly disturbed. Every detail of the present experience is perceived as being identical to an alleged experience in the past, while at the same time the subject is aware that this is impossible. The major form is of prolonged duration and reality testing is markedly impaired, although not absent, as indicated by doubts about the appropriateness of the experience of familiarity. The present experience is perceived as identical, but not necessarily in every detail (Arnaud, 1896). The term 'reduplicative paramnesia' was coined by Pick (1903) to delineate a delusional reduplication of place. In his view this phenomenon was characterised "in that a continuous series of events in the patient's remembrance, subsequently fall into manifold occurrences; the isolated events, though they remain pretty clearly in his memory, are impressed on him as repetitions thereof." Following Weinstein (1969) we suggest that the term 'reduplicative paramnesia' may include the delusional reduplication of time and person as well. The phenomenon belongs to the category of delusional misidentifications, which also includes the Capgras' syndrome. This redefinition is consistent with the notion that *déjà vu* experiences and reduplicative paramnesia are both intimately related or even identical to the Capgras' syndrome (Dietrich, 1969; Alexander *et al*, 1979). Reduplicative paramnesia is thus characterised by a delusion of familiarity related to a reduplication of time, place or person. As the reality testing is completely distorted, the subjectively inappropriate quality of the experience is absent. The duration is prolonged and the 'remembered' experience in the past is incorporated into a delusional system. The female patient described here had experiences of inappropriate familiarity.

Case report

The patient is a 19-year-old high-school student who comes from an intellectual family. In early childhood, she was treated for several years by a psychotherapist for alleged neurotic symptoms – eating problems, sleep difficulties (due to bedtime rituals and fear of dark), and disturbances of behaviour. These disturbances started at the age of three, after the birth of her brother. She became preoccupied with babies: she was intensely attached to baby dolls and fascinated by pushchairs. She periodically insisted on wearing specific garments. At nursery school she failed to play with her peers. Her play was ritualistic and her drawing stereotyped. She had temper tantrums for no apparent reason, or if someone interfered with her activities. It was assumed that her younger brother's epilepsy and her parents' numerous marital conflicts had led to a disturbance of the separation–individuation process. An electroencephalogram (EEG) at the time was evaluated as normal.

Her parents divorced when she was 15. Since then, she has lived with her mother, who herself had petit mal attacks as a child. At the age of 16, our patient spent a year at a psychiatric hospital following psychotic decompensation after she was raped by a boy she met on holiday.

When the patient was brought to our hospital, she had been in a state of growing confusion for a month. On admission, a child-like young woman of average intelligence was observed. She appeared depersonalised. Her affect was blunted. The patient believed she could see holes in her head. She was also convinced she had a rancid odour, and claimed she had a young son who had been kidnapped. She also had the idea that at some point in the past, she had already seen the psychiatrist who was examining her. She denied drinking alcohol or taking drugs.

Extensive physical examination and ancillary investigations, including computerised tomography, did not reveal anomalies of any significance. Nor did a psychological examination give any indications of organicity. The patient's EEG did show some abnormalities, i.e. bilateral synchrone theta paroxysms with and without sharp waves, but no specific epileptic activity, i.e. wave and spike discharges, was noted. On the basis of the clinical picture and the results of four previous EEG recordings, the consultant neurologist deemed an epileptic component improbable. Further investigations such as telemetric EEG and videomonitoring were not thought to be necessary.

The patient was treated with pimozide, 2 mg t.i.d., after which her agitation and her paranoid and somatic delusions diminished. It then became apparent that for years, the patient had been convinced she was the reincarnation of Marilyn Monroe. All the photographs and films she had seen of this famous film star had seemed very familiar

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to her. Thus, she must have experienced it all before. The pimozide had no noticeable effect on these notions and experiences.

During one of the sessions with her psychiatrist, the patient claimed that several weeks before her admission, she had met one of her later fellow patients in a park. On that occasion she suddenly realised that she had already experienced the incident before. She also felt that she was already familiar with the ward and with the people who worked there, and thought she had experienced many of the daily situations in the hospital or with individual patients at some point in the past. By way of an explanation for what she alternately called her auras, flashbacks or *déjà vu* phenomena, she later stated that she was living in a later year than the one on the calendar.

Discussion

The patient met the DSM-III-R criteria for paranoid schizophrenia. In addition she claimed that she frequently had inappropriate experiences of familiarity. The experiences concerning her fellow patient and the daily situations on the ward may be regarded as major forms of *déjà vu* experiences. In the beginning she still had some doubts about the appropriate quality of these experiences, which made it possible to correct her inferences about these experiences by reasoning. Her eventual delusional explanation that she was living later than the calendar date transformed these major forms of *déjà vu* experiences into reduplicative paramnesia. Her explanation coincides precisely with the statements made by patients described by Pick (1886) and Arnaud (1896). So in our terminology, these 19th-century authors were not referring to *déjà vu* experience but to reduplicative paramnesia.

The patient had probably initially had minor forms of *déjà vu* experiences concerning Marilyn Monroe. At a given moment, possibly concurrent with the traumatic experiences of her parents' divorce and her own rape, the subjective inappropriateness of these experiences disappeared and the subjectively inappropriate impressions of familiarity became a delusion of familiarity, interpreted as a reduplication of time and person. In other words the *déjà vu* experiences were transformed into reduplicative paramnesia. The different forms of experiences of inappropriate familiarity in this patient seem to support the concept of a continuum. This concept could offer the conceptual framework for a more thorough understanding of these fascinating experiences.

On admission, the patient appeared depersonalised. The association between depersonalisation, reduplicative paramnesia and *déjà vu* experiences has been stressed by numerous authors. Myers & Grant (1972) reported a significant relationship between the *déjà vu* experience and depersonalisation, particularly among the male students of his population. Like Freud (1914), Nemiah (1989) also held that the *déjà vu* experience could be viewed as the positive counterpart of depersonalisation.

Despite the family history of epilepsy and the abnormalities on the patient's EEG, a relationship between the patient's symptoms and epilepsy was considered improbable. Since Hughlings Jackson's (1888) description of a particular variety of epilepsy ("intellectual aura"), the one most widely described cause of *déjà vu* experiences has been temporal lobe or psychomotor epilepsy. Similarly, the importance of right hemisphere dysfunction in reduplicative paramnesia has been stressed by various authors (e.g. Alexander *et al*, 1979; Khanna & Khanna, 1991). Our inability to establish a link with epilepsy is consistent with the view of a number of authors, including Hughlings Jackson (1888), that only a *déjà vu* experience in combination with other psychiatric or neurological symptoms can be interpreted as an indication of epilepsy (Harper, 1969). In addition, Weinstein (1969) stated that reduplication appears in many forms with and without brain injury so that its presence, *per se*, cannot be attributed to any specific lesion of the nervous system. All the authors thus seem to agree that *déjà vu* experiences and reduplicative paramnesia can be based on an impaired functioning of the brain or the impaired integrative functioning due to psychological mechanisms.

Her delusion that she was the reincarnation of a film star was probably related to her megalomaniac fantasies as compensation for her low self-esteem. The traumatic experiences of her parents' divorce and her own rape when she was about 16 years old are probably significant in this connection. These traumatic experiences might also help explain the depersonalisation symptoms and her *déjà vu* experiences. Various authors have described a relationship between dissociative symptoms and traumatic experiences (Chu & Dill, 1990). Boon & Van der Hart (1988) referred to dissociation as a "survival strategy" in dealing with physical and sexual violence. The distinction between psychotic and dissociative symptoms is often not simple, but in view of the therapeutic consequences it is an important one. Particularly as regards patients with multiple personality disorders, the diagnosis of schizophrenia is sometimes erroneously made. The fact that dissociative symptoms can occur as prodrome or as an indication of a psychotic disorder also complicates the differential diagnosis. In addition, as in the case of our patient, there could be co-morbidity. Moreover, research has shown that the Schneider positive symptoms also often occur in

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patients with a multiple personality disorder (Kluft, 1987). The diagnostic confusion is probably semantically reinforced by the fact that the terms 'schizophrenia' as well as 'multiple personality' and 'dissociation', all suggest a splitting of the mind.

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