

## The Ganser syndrome

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S.J.M. Ganser was born in Dresden on 24 January 1853 (Allen, 1993; Allen & Postel, 1993, 1994) and trained in Würzburg, Strasbourg, Heidelberg and Munich (Anonymous, 1901). His contribution to psychiatry has not been yet well studied (Allen, 1992). Ganser died in 1931, and only remains known for the state of ‘twilight hysteria’ that he observed in persons awaiting trial (Ganser, 1898).

### The ‘Ganser syndrome’

The term ‘Ganser syndrome’ is found in use very early in the century (e.g. Soukhanoff, 1904; Cramer, 1908; Nitsche & Wilmanns, 1912). In its entirety, this clinical cluster includes the following features: (i) disorganized sense of space and time; (ii) production of ‘I don’t know’ answers even to simple questions (which, in Ganser’s opinion, implied the ‘suspension of information’ usually at the person’s disposal); (iii) clouding of awareness; (iv) ability to understand questions matched by a psychogenic inability to give correct answers; (v) answers remain in the semantic sphere of the question (*Vorbeireden*) (Marneros, 1979) (e.g. how many ears do you have?) Three, etc. Ganser himself exemplified: ‘As if a railway employee gave you a ticket at random’ rather than the ticket you asked for; the point being that he did not give you a bucket of water or a cup of tea (Ganser was thus not writing *coq-à-l’âne*); (vi) the patient experiences hallucinations, and may re-enact or relive in a hallucinatory manner certain traumatic experiences; (vii) one may observe general or partial analgesia in the body (mouth area included), this may move around according to time of day or day of the week, etc.; (viii) patients are not offended by the childish nature of the questions – indeed – even questions like what is your name or what is this (watch, money, etc.) cause difficulty and stimulate ‘past the point’ answers (i.e. answers within the semantic area of the question showing that the general theme (identity, time, place, etc.) of the question is understood); (ix) symptoms tend to appear all at the same time, but go in a staggered manner leaving behind a ‘mode of being’ similar to the ‘personality’ before the period of twilight hysteria became established; (x) the patient is surprised when informed of his behaviour during the

twilight period (Ganser specifically remarked that the period of twilight hysteria was covered by a veil of amnesia); (xi) there is no memory loss for the period of time before the appearance *en masse* of the symptoms; (xii) before onset, patients may also have suffered from physical trauma, blows to the head, accidents, etc.; (xiii) at least one confessed to imaginary crimes; (xiv) in some cases, the ability to relate reading material is disturbed under questioning; (xv) many patients were awaiting trial; (xvi) the cases cannot be simulated (Ganser argued that, to reproduce such a symptom picture, subjects would require a deep knowledge of psychopathology); (xvii) simple counting may become difficult: one of Ganser's patients, W.H., counted his fingers as follows: '1, 3, 7, 5, 10, 12, 14, 16, Yes so 14'; (xviii) answers within the semantic area or locality of the questions were common to all cases; (xix) patients put a great deal of effort in attempts to concentrate and thereby try, but often fail, to overcome their distraction (*Zerstreuung*); (xx) the transition from the pathological to ordinary field of awareness is gradual but relatively rapid; (xxi) some complained of a difficulty in thinking (*Erschwerung im Denken*); (xxii) many were in a 'dream-like state'; (xxiii) so-called 'mistakes' are variable; (xxiv) at least one patient made a funny remark; asked how many ears he had he replied four, then when asked to explain said outside ears and with his fingers in his ears said these are the inside ears (25th Oct, 1902); (xxv) syndrome redolent of twilight hysteria.

### Historical antecedents

Reports redolent of what is now called the Ganser syndrome were made by F.M. Guazzo (pp. 168–70, 1608/1929):

Some say that they hear a voice speaking inside them, but that they know nothing of the meaning of the words. [compare to counter-will and local answers] . . . Others, when they are asked what they have done or said, confess that they remember nothing afterwards. [compare to amnesia for period of twilight state] . . . Some pretend to be stupid, and always grow even more so; but they can be detected if they refuse to recite the Psalm *Miserere mei Deus*, or *Qui habitat in auditorio Altissimi*, or the beginning of the Gospel of St John, *In principio erat Verbum*, or similar passages of Scripture. [counter-will – suspension of 'ordinary' information or hysterical negativism]. . . . Sometimes they become as if they were stupid, blind, lame, deaf, dumb, lunatic, and almost incapable of movement, whereas before they were active, could speak hear and see, and in other respects acted sensibly. [Many cases of the Ganser syndrome feature catatonia, catalepsy or vague rigidity of the body. . . .]

Likewise, Moeli (1888) had already noticed that prisoners awaiting trial might develop a sort of transitory confusional state. This writer described patients who 'forgot' well-known facts (e.g. their age, how to multiply, the coinage system), who confabulated about their lives, and whose answers, although incorrect, bore a 'certain' relationship to the question asked (p. 125).

The concept of schizophrenia was to take over some of the clinical features originally described as Ganserian, such as, for example, the language disorder which was only partially differentiated from that seen in catatonia by Henneberg (quoted in Labet, 1960). Bleuler (1911/1950) wrote of schizophrenia: 'The twilight states can show a good deal of variability. In some cases we find a consistently carried out dream-activity. The twilight state is then essentially the reaction of a mildly schizophrenic personality to a psychic trauma' (p. 220). This led in turn to a neglect of, and limited research into, Ganser's syndrome. However, a significant number of clinicians in Europe continued accepting Ganser's basic postulate that these patients showed significant memory disorder and 'answers towards the question' within the framework of traumatic or reactive hysteria. The amnesia is often seen as a form of defence or protection against the anxiety that accompanies the psychic or physical trauma. In elderly patients, Ganser type symptoms may be indicative of the onset of dementia.

### **Jung and the Ganser syndrome**

#### **The case of Godwina F.**

In a lecture entitled 'Contribution to the theory of twilight hysteria' (read in Dresden in 1902 at the 8th Congress of Psychiatrists and Neurologists of Central Germany), Ganser (1904) referred to a case reported by C.G. Jung (1902/1983). Still working under E. Bleuler, Jung had, in turn, quoted Ganser's paper (Ganser, 1898) together with that by Raecke (1901) (pp. 148–9, Jung, 1902).

Jung's patient (Godwina F.) was a factory worker with a lover who provided for her and two children out of wedlock. She had a hotel bill to pay (10 000 marks) and had been (wrongly) accused of theft:

The following case of hysterical stupor in a prisoner in detention was referred to the Burghölzli Clinic for a medical opinion. Apart from the publications of Ganser and Raecke, the literature on cases of this kind is very scanty, and even their clinical status seems uncertain in view of Nissl's criticisms.

When, on the morning of 4th June 1902 the cell was opened at 6:30, the patient was standing *rigid* (. . .) came up to the warderess *quite rigid* and furiously demanded that she should 'give back the money she had stolen from her'. (. . .) She began to rage and shout, threw herself about in her cell, kept on asking for her money, saying she wanted to see the judge at once, etc. (p. 138, Jung, 1902).

The warderess called for help, and the jailer, wife and assistant held her by the hands 'shaking' her with the idea of 'calming her down'. The trio denied hitting her and she was locked up in a cell: When the cell was opened again at 11 o'clock the patient had torn the top half of her clothes to shreds. She was still very worked up, said the jailer had hit her on the head, [and that] they [the trio] had taken the money she got from her husband, 10 000

marks in gold, which she had counted on the table, etc. She showed an acute fear of the jailer. (. . .) At 6pm the District Medical Officer found her totally disoriented (Jung, 1902).

According to Jung, the following symptoms were worth noting: (i) almost complete lack of memory; (ii) easily provoked changes of mood; (iii) megalomaniac ideas; (iv) stumbling speech; (v) complete insensibility to deep pin pricks; (vi) marked tremor of the hands and head; (vii) shaky and broken writing. Godwina:

fancied that she was in a luxury hotel, eating rich food, that the prison personnel were hotel guests. Said (. . .) she had millions; that during the night a man attacked her, who felt cold. At times she was excitable, screaming and shouting gibberish. She did not know her own name and could say nothing about her past life and her family. She no longer recognised money (pp. 138–9, Jung 1902).

What Jung here chose to call ‘gibberish’ may well be of the same nature as the interview material of the following day (5th June). (This apparently insignificant detail must be kept in mind because it anticipates latter views on the nature of the Ganser syndrome conceived of as gibberish, hysteria (within the Freudian framework) and simulation. Indeed, Jung discussed all three possibilities.) The following day, Godwina was examined by Jung (p. 140, 1902):

Where are you? – In Munich.

Where are you staying? – In a hotel.

What time is it? – I don’t know.

What’s your name? – Don’t know.

Christian name? – Ida. (This was the name of her second daughter.)

When were you born? – I don’t know.

How long have you been here? – Don’t know.

Is your name Meier or Müller? – Ida Müller.

Have you a daughter? No.

Surely you have! Yes.

Is she married – Yes.

Whom to? – To a man.

What is he? – Don’t know.

Isn’t he the director of a factory? – Yes he is (wrong answer).

Do you know Godwina F.? – Yes, she’s in Munich.

Are you Godwina F.? – Yes.

I thought your name was Ida Müller? – Yes my name’s Ida.

(. . .)

Who am I? – The headwaiter.

What is this (a notebook)? – The menu.

(. . .)

What is three times four? – Two.

How many fingers is this (5) – Three.

No, look carefully! – Seven.  
 Count them. – 1, 2, 3, 5, 7.  
 Count up to 10. – 1, 2, 3, 4, 5, 6, 7, 10, 12.

Godwina was unable to recite the alphabet, do simple multiplications or write ‘a single legible word’ with her right hand because of ‘strong tremor’. The following day (6th June) she recognized her Christian name but still regarded Ida to be her first name. She ‘knew her age, but was otherwise totally disoriented’. The interview notes of 7th June are a carbon copy of those above and ‘Ganser type’ symptoms dominate the clinical picture (i.e. distractibility, answers towards the question, hallucinations, fluctuations (or dipping) in the field of awareness, conversion symptoms, etc.).

Notes from 25th June intimate that her retrograde partial amnesia and the total amnesia continue unaltered. This ‘disappeared under hypnosis’ but the total amnesia resisted hypnosis. Whilst under hypnosis Godwina complained that she is ‘always afraid of the big fat man who beats me’ (p. 146, Jung, 1902). These features of her condition imply physical and psychological trauma and are in harmony with Ganser’s thinking.

### **Kretschmer and the ‘Bewegungssturm’**

Kretschmer’s clinical concept of ‘instinctive flurry’ or ‘motor storm’ is, in effect, a crude theorization of the Ganser state. According to Kretschmer (1924/1960), in the person with hysteria the perception of danger or anxiety-arousing situations will trigger ‘instinctive phylogenetic mechanisms’ which then dominate all his/her actions and thoughts. By making the *Bewegungssturm* a key element of hysteria, Kretschmer created a loose clinical concept linking up war neuroses (anxiety neurosis and conversion hysteria), shell-shock (‘sinistrosis’) (Postel, 1993) and the Ganser syndrome.

However, the German author was ambivalent vis-à-vis this concept, particularly when applied to the legal domain:

We cannot, separate fear neurosis from hysteria, yet cannot lump them together. Is the acute fear reaction a physiological reflex with an ‘extraphysical’ mode of operation, or is it dependent on hysteria-like autosuggestion? (. . .) we shall answer this question as follows: In acute fear symptoms physiological reflex mechanisms are evidenced as surely as are hysteria like elaborations of experience. An example characteristic of this first type is the vegetative–vasomotor symptom complex which includes from the psychic viewpoint, insomnia along with lability and anxiety–depression (. . .). On the other hand, the most striking example of the direct psychic elaboration of fear through hysteria like mechanisms is the Ganser type of twilight state (p. 28, Kretschmer 1924/1960).

In harmony with many who claim to refer to Ganser’s work, Kretschmer remains characteristically ‘on the fence’ not only because ‘reflexes can be willed to health’

but also because ‘perfect’ hysteria (massive symptoms, reflex mechanisms, flurries, stupors, paralyzes and twilight states) ‘is most likely to appear in situations closely linked to basic drives, namely erotic conflicts and mortal danger’ (pp. 28–9, Kretschmer 1924/1960); hysteria is simulation (fake) pure and simple and ‘true’ simulation – a small atypical variety of hysteria’ (Kretschmer quoted in p. 340, Eissler, 1986).

It is this logic that subtends the following extraordinary statement:

(. . .) As strange as it may seem, the twilight state of shock, even in able-bodied, level-headed men, may assume patterns which we are accustomed to see in criminals and to look upon as indications of crude hysterical deceptive tendencies that border on simulation: the Ganser syndrome, marked by spurious, theatrical conduct (pp. 24–5, Kretschmer 1924/1960).

In this regard, it would be a pity if Ganser’s concept suffered from the fact that it was first described in subjects in prison. Because it draws our attention to the complex and deep mechanisms that govern behaviour, it should rather be usefully employed to develop a veritable conception of man with which to study the nature of so-called ‘mild schizophrenia’ and *bouffée délirante* and other well-meaning concepts that have cluttered minds and bookshelves for much of this century.

## Clinical relationships

### Ganser and organic disorders

Ganser states have been reported in the wake of brain disease. In his important review, Whitlock (1967) suggested that it be, ‘restricted to patients who, following cerebral trauma or in the course of an acute psychoses, develop clouding of consciousness . . .’ (p. 28). In this regard, Heron et al. (1991) have recently reported a Ganserian state in a patient with a history of brain damage and polysubstance abuse; and Sigal et al. (1992) have concluded in their review that Ganser patients often show ‘symptoms of premorbid neurological pathology’. In the same vein, McEvoy and Campbell (1977) have reported a Ganser state in the wake of carbon monoxide intoxication, and Doongaji et al. (1975) apparently related it to a tumour on the left hemisphere. Latcham et al. (1968), in turn, accept an organic aetiology but combine it with hysteria.

The appearance on the scene of the so-called pseudodementia syndrome (Bulbena & Berrios, 1986) caused the additional difficulty of making a differential diagnosis with Ganser state. Thus, cases have now been reported of patients with more or less typical pseudodementia and Ganserian features (Steinhart, 1980; Good, 1981; González et al., 1985; Hampel et al., 1996); more surprising has been the report of a 10-year-old who, after a minor head injury, developed both syndromes (Adler, 1981).

**Table 21.1.** Ganser syndrome and schizophrenia

	Ganser syndrome	Schizophrenia
Amnesia limited to period of disorder	Yes	No
Conversion symptoms	Yes	No
Return to previous personality possible	Yes	No
Neologisms	No	Yes
Answers towards the questions	Yes	(?) (not in Ganser's sense)
Ideas of influence	Yes <sup>a</sup>	Yes <sup>b</sup>
Body experienced as fragmented or in space	No	Yes
Breakdown of real, symbolic and imaginary (Lacan)	No	Yes
Visual hallucinations	Yes	Yes
Auditory hallucinations	Yes (rare ?)	Yes
Variable analgesia	Very common	Very rare
Condition is reversible	Yes	No
Time lived as infinite	No	(Melancholia <sup>c</sup> or schizophrenic depression)
Confusion regarding time and space	Yes	Yes
Reliving or re-enactment of trauma	Yes	No
Impersonal or reified ideas dominate clinical picture	No	Yes (often in structured delusions)

*Notes:*<sup>a</sup> Often erotic influences.<sup>b</sup> With destruction of the sense of 'I' as in 'influence syndrome' (V. Tausk).<sup>c</sup> Cotard's syndrome.**Ganser and schizophrenia**

The question of whether Ganser is or not a form of transient psychosis remains unresolved according to some. The differential diagnosis with schizophrenia, however, can be made on a number of clinical features (see Table 21.1).

**Ganser and affective disorders**

Since the time of Mairer (1883), Cotard (1891) and Dumas (1894), the view has been taken that some forms of affective disorder can lead to temporal cognitive disorganization (Berrios, 1985). Tyndel (1956) suggested a connection between affectivity and the Ganser state; Grieger and Clayton (1990) have also remarked upon this relationship.

However, the mechanism of interaction and the direction of the causal arrow remain unclear: for example, whilst Arya (1997) has reported the development of

a typical Ganser syndrome in a 48-year-old housewife suffering from a major depressive episode, Haddad (1993) describes the case of a patient who developed a major depressive episode after improving from a Ganser syndrome.

### Ganser and children

All the putative explanations so far suggested for the Ganser state do not necessarily predict that it should develop in children. In their review of six cases, Miller et al. (1997) referred to them as 'imperfect representations'. Apter et al. (1993) reported the syndrome in two adolescent brothers in jail, awaiting trial; Dabholkar (1987) in one 11-year-old Indian lad, and Nardi and Di Scipio (1977) in a Hispanic black girl.

More controversially, Burd and Kerbeshian (1985) reported a 15-year-old who was visually impaired, mentally retarded, and showed features of both Ganser and Tourette syndromes. The case originally reported by Adler (1981) was followed up by the same author 8 years later and found 'to remain largely unchanged' and still pursuing compensation claims (Adler, 1989).

### The forensic dimension

Perhaps because of the legal and ethical questions raised by persons pleading 'temporary insanity', forensic psychiatrists, on the whole, are reserved about the existence and/or mechanisms of the Ganser state.

For example, Gunn and Taylor (1993) hedge their bet:

[The] Ganser syndrome is advanced as an independent clinical entity . . . although one which may manifest as part of other disorders such as schizophrenia and organic brain syndromes, usually in the context of overwhelming stress. . . . The possibility that the Ganser state is a manifestation of the conscious simulation of mental disorder is considered . . . to be dismissed in favour of unconscious mechanisms, or the impact of major stress on somebody who already has a mental disorder. (. . .) Perhaps more scepticism and less acceptance of the explanatory power of the unconscious is indicated . . . but, then again, perhaps it is better to follow Scott's pragmatic advice to avoid guesses or inferences about their motivation and to concentrate on observing with greater precision, the clinical picture of these odd states (p. 426).

It is understandable, but very sad from a scientific point of view, that these authors have chosen not to see the link between the Ganser syndrome and hysteria. Even Kraepelin (1915), not a friend of the simulator or the criminal, came down in favour of Ganser:

Of (. . .) the transitory hysterical conditions, the befogged states are the most prominent. They are characterized by a marked clouding of consciousness, of varying duration, and either follow, take the place of, terminate in, or are interrupted by, a convulsion. (. . .)



Sometimes the befogged states simulates ordinary sleep. The patients become drowsy, the eyes close, the limbs become relaxed, as in a profound sleep, and the respiration deep and regular. The state is usually of short duration, and the patients awaken gradually with no recollection of the interval (. . .). This last form borders closely on somnambulism (. . .) the patients leave their beds (. . .) and perform many peculiar acts (. . .). Similar attacks may occur during the daytime (. . .). The patients then walk about muttering unintelligibly to themselves (. . .) It is very difficult to arouse them from this state, even by the application of powerful electrical currents. This last condition is perhaps related to those befogged states with inconsequential speech, which have been described by Ganser (pp. 465–8).

Likewise, Paton (1905) – an American psychiatrist follower of Kraepelin – saw a link between the Ganser state and the ‘hypnoid state’ (p. 504); and Enoch and Trethowan (1979) in their remarkable *Uncommon Psychiatric Syndromes* showed themselves to be far more clear-headed than the writers of DSM III and IV.

## **Mechanisms**

### **Hysteria**

Perhaps more than any other syndrome, Ganser’s raises the question of the interaction between concepts, ideology and clinical observation. For example, during the First World War, French military psychiatrists were encouraged not to use on first medical certificates words connected to hysteria and trauma. Likewise, in civilian life, clinical statements concerning hysteria can be rapidly called upon in litigation for compensation. In other words, the issues that J.M. Charcot (1885/1984) raised concerning the concepts of railway brain and spine have not really been ‘solved’. Given that the semantics of hysteria itself seems to contain the implication that it can produce an almost infinite number of symptoms, perhaps there can be no lasting solution to the problem. To make matters worse, because the dialogue between doctor and patient is not only conscious, it is likely that the gaze of the clinician also intensifies the production of symptoms in hysteria.

Recent work suggests that ‘twilight hysteria’ should be separated from simulation and psychosis (Libbrecht, 1995; Maleval, 1981, 1985). Others also have supported a hysterical aetiology (Goldin & MacDonald, 1955; Tsoi, 1973; Hoffmann & Siegel, 1982; Weller, 1988) and given a special role to stress (Weiner & Braiman, 1955).

### **Dissociation**

More recently, it has been pointed out that the conceptual ‘instability’ of the Ganser syndrome originates in changes in the definition of some background notions such as malingering and simulation (Gorman, 1982) and hysteria (Sizaret, 1989; Provence & Schlecht, 1990). Indeed, even before the Great War, both Soukhanoff

(1904) and Henri Wallon (1911) wondered about the future of the Ganser state, given that for ideological, not clinical, reasons, hysteria was beginning to disintegrate.

As the concept of 'dissociation' has come into fashion threatening to become the new overarching explanation, there have been suggestions that the Ganser state results from the action of a dissociation mechanism (e.g. Cocores et al., 1984; Feinstein & Hattersley, 1988). This view became official in DSM-IV:

Some individuals with Dissociative Amnesia report depressive symptoms, depersonalization, trance states, analgesia, and spontaneous age regression. They may provide approximate inaccurate answers to questions (e.g. '2 plus 2 equals 5') as in Ganser syndrome. Other problems that sometimes accompany this disorder include sexual dysfunction, impairment in work and interpersonal relationships, self-mutilation, aggressive impulses, and suicidal impulses and acts. Individuals with Dissociative Amnesia may also have symptoms that meet criteria for Conversion Disorder, a Mood Disorder, or a Personality Disorder (p. 478, American Psychiatric Association, 1994).

## Conclusions

Given the above, our conclusion is that the clinical hypothesis of a Ganser syndrome should still be raised in cases of atypical amnesia with unexpected or ambiguous answers to questions and history of psychic or physical trauma. The clinician must be aware that a misdiagnosed case of Ganser-type hysteria may result in lawsuits, unnecessary surgical interventions, inappropriate use of minor and major tranquillizers, and social consequences that may be destabilizing for the patient and family. Positive results in the organic investigation should lead to a firm diagnosis and disconfirmation of Ganser syndrome. Persistent negative results and dramatic improvement should tend to confirm the diagnosis. Improvement, however, is not the end of the story. The patient has shown that he/she has in his coping mechanisms repertoire a very maladaptive form of behaviour and this needs dealing with. A period of rest is recommended, followed by psychotherapy or psychoanalysis. Medication has no specific role to play in the treatment of this condition.

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