SOME CLINICAL AND AETIOLOGICAL ASPECTS OF DEPERSONALIZATION WITH A CASE REPORT OF IDENTICAL TWINS.

By ASHLEY A. ROBIN, M.B., Ch.B., D.P.M.,
Late Junior Registrar,

and

E. J. HARRISON, *M.B.E.*, M.A., M.B., B.Chir., D.P.M.,
Senior Registrar, Scalebor Park, Burley-in-Wharfedale, nr. Leeds.

A SEARCH of the literature has not revealed a report of the depersonalization syndrome occurring in identical twins, although Palmer (1946) published a report of twins in which one patient was described as suffering from " all round loss of interest with some depression. . . . His thoughts . . . milled round in a ceaseless turmoil concerning his loss of contact with people and things. There was some complaint of unreality and loss of sexual desire. . . . His condition was one of distressed perplexity. The illness had come on gradually." The second patient had " tried to get his twin brother to ' pull himself together,' when one Saturday he became intoxicated and for a wager attempted bestiality. He woke up next morning feeling unutterably guilty and depressed, and rapidly developed feelings of unreality. His compelling symptom was the fear that his mind was disintegrating."

These cases appear essentially depressive and progressed to a woeful, hypochondriacal state six years later.

CASE REPORTS.

Miss Barbara and Miss Elizabeth are identical twins aged 32. Barbara is the eldest by half an hour. The twins were bottle-fed, reached the landmarks in infancy and childhood at the usual ages, both attended secondary school and both obtained school certificates. They have two brothers—the first four, the second seven years older.

In January, 1938, when 19, Barbara developed depersonalization and derealization. Elizabeth developed the condition in the June of that year, i.e., about five months later. Elizabeth was first to give up work and has been hospitalized since 1939 intermittently. The duration of her present admission is 7 years. She has been treated conservatively. Barbara was admitted to another hospital in 1949—i.e., ten years after her sister. She has had intensive E.C.T. with some subjective improvement but with the development of some secondary changes. She now has periods of normality for a few hours from time to time, but on the other hand, she feels that people do not believe what she says and that they try to avoid her. Consequently she tries to avoid others.

Elizabeth describes her state as follows :

" There is no meaning in life. I don't know what to do. It is like being in a tunnel. I can't even face minor changes in life. Nothing has any meaning. I know that these are my eyes and yet they do not seem connected to me. What I see has no meaning or feeling."

Barbara says :

" It is as if I am watching a screen. I seem big and everybody seems tiny. Things seem unreal. I feel as if my body has changed and at night I have a sensation of spreading. I feel lost within myself. When I talk it is as if I am listening to someone else. If I go anywhere or do anything I feel peculiar. I don't know what to say to my friends." She denied that she felt depressed, and said that she was merely distressed with her condition. She also remarked that " peoples' eyes seemed deadened and without meaning—like hens' eyes."

Elizabeth, although she has been in hospital for many years, does not wish to leave as she is afraid of change. She is in a non-observation ward and quite willingly does almost full time house-work—indeed in view of the nursing situation she is almost indispensible. Barbara is anxious to leave hospital as soon as possible. She has been working in the local post office as a counter clerk for the past 18 months, though continuing to live in hospital. She complained at first of difficulty in reckoning up change and remembering the various types of form with which she had to deal, but she is now quite confident about her work. In the post office she presents a normal appearance and gets on well with her

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colleagues. Her symptoms of depersonalization, however, persist. She says that nothing has any meaning for her, everything and everybody appears unreal; she feels like an automaton. She asks for reassurance that her symptoms will clear up, but adds that she thinks that she will be able to carry on. She is now planning to leave hospital and live in rooms near her work. She has not been home for some considerable time, nor has she had any contact with her sister.

The onset in both cases was sudden. Barbara recalls that she was alone in the house into which the family had just moved and was looking into the fire. (Mayer-Gross (1936) strangely enough remarks that " a patient quietly reading by the fireside is overwhelmed by it "—i.e., depersonalization). Elizabeth knew of her sister's condition, worried about it and feared that she would develop it in the months before she actually did so.

Elizabeth says that she was always afraid of meeting people. She was very friendly with her sister and did not consciously feel any sense of competition. She was frightened by the onset of menstruation; she masturbated with considerable guilt and did not tell her sister of this. Her father she says was " little and quick." He did not visit either patient. Her mother she describes as " large and complaining." She feels that she ought to like her mother more as she has done more for her.

Barbara states that she was terrified by her father in early life. He drank heavily, and once threatened to cut his throat. She also has always been shy and retiring. She admits to a horror of going blind since she saw a film called " Michael Strogoff." This, we learn, was an adaptation of the novel by Jules Verne. The story (in the film) is that Strogoff is sent by the Tsar to suppress an uprising and is taken prisoner. There is an horrific scene in which he is condemned by his captors to have his eyes put out in the presence of his mother. This is duly performed by passing searing hot irons in front of them and his mother dies of shock. Unknown to her, however, the mistress of the rebel leader, by now in love with Strogoff, has arranged for him to be saved and the blinding is not properly performed. He returns to be congratulated by the Tsar.

The death of the twins' father has occurred since Barbara's admission to hospital, but this event does not have appeared to have affected either patient as far as their mental state is concerned.

Both girls are afraid of men friends, but Barbara admitted that tales of sex violence such as may be read in certain Sunday newspapers both excited and frightened her. Although she could not recall a dream on first questioning, she returned a few days later with a dream of some length recorded in detail. The dream is quite " real " but is nightmarish in character, ending: " I tried to kill a horrible worm composed of blue sleeping tablets with staring eyes and crawling all over, but couldn't kill it. I woke up in a sweat."

Test Material.

The following psychometric tests were employed: Progressive Matrices (Raven, 1938); Shipley-Hartford Retreat Scale (used on Barbara only) (Shipley, 1940); Ink Blot Test (Rorschach, 1921); Thematic Apperception Test (Murray, 1943).

The scores in the *Matrices* are as follows:

	Set A.	B.	C.	D.	E.	Total.	Time.	Grade.
Barbara	12	10	10	9	3	44	80′	III +
Elizabeth	11	12	8	10	6	47	27′	II

Elizabeth just falls within the second grade. Apart from the time taken the results correspond fairly closely.

On the *Shipley–Hartford Scale* Barbara scored as follows:

	Vocabulary.	Abstract.	Mental.
Raw scores	34	28	..
Corrected ages	17·8	15·7	17·5

This test has as its suggested purpose the detection of organic disease, and was used as an organic aetiology has sometimes been postulated in depersonalization. The rationale is based on the finding that ability to deal with abstracts disappears before vocabulary in organic conditions. The ratio abstract ability : vocabulary

ability is expressed as the conceptual quotient, and when above 90 is said to be within normal limits. The conceptual quotient arrived at, is 88 and this is interpreted as " slightly suspicious." The above tests, however, and the first Rorschach and T.A.T. on Barbara were performed within a few days of her admission, and the patient at that time was extremely upset at the necessity of having to come into hospital. This anxiety is probably enough to account for the discrepancy in times on the matrices and the lowered abstract ability on the Shipley-Hartford Retreat Scale. The latter test was repeated recently and while the vocabulary raw score remained a constant at 34, the abstract score rose from 28 to 36. The new conceptual quotient is 106, which is within normal limits, and it is apparent that other factors than organic disease can affect this ratio. A second Rorschach and T.A.T. were performed a few months after Barbara had completed E.C.T.

As far as the *Rorschach Test* is concerned, the essential points are that in all three records the number of responses is low and stereotypy is present. Before E.C.T. Barbara rejected four cards, while after treatment, like her sister, only two. Barbara's response times (T/R) and reaction times (Rt) fall after treatment, but are always within normal limits. After E.C.T. Barbara's anxiety as indicated by shading (K) and mid-line responses is relieved. On the other hand mythological responses—spirits and pixies—appear. There is a complete absence of colour (C) and original (O) responses in all three records, while the proportion of popular (P) responses is high. Shorvon (1946) mentions Rorschach findings in 40 subjects who presented depersonalization as a leading feature. His findings include reduction in colour (C), movement (M) and texture (c) responses ; increased rejections of cards and a narrow range of content. Over-emphasis of form (F), anatomical (At) and rare detail (Dr) responses are also commented upon. Finally there was an orderly rigid approach to the test, long reaction times on card VI, self-recognized perseveration, and " anxiety was displayed by almost every subject."

In general interpretation of our records (Klopfer and Kelley, 1942)—and their scantiness precludes dogmatism—we may say that their general appearance is depressive ; they indicate heightened self-concern ; anxiety is a feature—to some extent relieved by E.C.T.—but suggestions of autistic thinking appear after E.C.T.

The *Thematic Apperception Test* was administered as described in papers by Valentine and Robin (1950). Again Barbara's reaction times fell after treatment, but on T.A.T. her rejections increased from one card to three after E.C.T. as compared with a fall on the Rorschach Test. The stories are still for the most part scanty. Rosenzweig and Fleming (1949) give the general mean of the number of words in a story as 143, with a range from 114 to 181, while here they are all under 60 words. Content is poor, and outcomes were rarely obtained without elicitation. There is a popular aspect to the stories, which are all " nice " and generally conventional. So far these features bring a resemblance to the records of depressive subjects. On the other hand, there are a number of examples of reversal of sex of the subjects in the pictures—that is to say depicted men are described as women and vice versa. This feature is frequently seen in paranoid patients. In card 17 in each T.A.T. Barbara describes a railway. This is a misinterpretation of what is usually described as the sun's rays and is undoubtedly an autism. (One of us has seen it before in the record of a deteriorated paranoid schizophrenic.)

Finally at this point we wish to mention a third patient whose case is relevant to the discussion.

Mrs. Marjorie T—, a married woman of 28, was admitted to hospital in December, 1949 (three months after Barbara), following the desertion of her husband after four years of married life, during which time she had had two miscarriages. She was depressed, bewildered, making poor contact with her surroundings and expressing mild ideas of reference. Her previous personality was described as being that of a bright, cheerful and sociable person with plenty of friends, who had no worries and no attacks of depression. She was the elder of two children, there being a brother aged 18. Her early life had been happy, and she had worked after leaving school as a seamstress, and during the war years, in the Women's Land Army. She is of average intelligence.

She received a course of electroplexy, followed later by modified insulin, after which she showed some improvement, though she continued to complain of lack of confidence.

Mrs. T— and Barbara were in constant association from March, 1950, sleeping at first in the same dormitory, and later sharing a room. Mrs. T— continued to improve over the next twelve months, but she was always somewhat preoccupied

and felt disinclined to mix with other people, apart from Barbara. In March, 1951, she obtained a post as a seamstress in a local shop, but she had to give up this work two months later as she was very slow. She herself stated that she felt tired the whole time, that things felt unreal, that she was cut off from other people and felt as though she was looking at the world through a window. She sees all the people hurrying hither and thither and it has no meaning for her. She wishes to carry on with her work, though she admits that she has no great interest in it and feels that she is doing it automatically.

Discussion.

Depersonalization has been reported as occurring in numerous conditions, both organic and functional. The organic states range from epidemic encephalitis (Heuyer and Serin, 1920; Heuyer and Dublineau, 1932; Mayer-Gross and Steiner, 1921), brain tumour (Jackson and Stewart, 1899), and epilepsy (Stransky, 1922), to toxic states such as mescaline (Guttmann, 1936), and more recently dibenamine poisoning (Rockwell, 1948; Nickerson and Goodman, 1946). It has been reported as a withdrawal symptom in a morphine addict (Dicks, 1947), although here a psychogenic aetiology was supplied. It occurs in psychoneuroses (Mayer-Gross, 1936; Shorvon, 1946; Schilder, 1938), in depressive reactions (Lewis, 1934), and in schizophrenia (Galdston, 1947; Mayer-Gross, 1936). Mayer-Gross says that the depersonalization " disappears when the depression deepens or when a schizophrenic state of a paranoid-hallucinatory character follows." We have also seen it occur after E.C.T. in two patients who had not complained of it before. The first, a doctor's wife suffering from a puerperal depressive reaction with marked absence of feeling towards her baby, was treated intensively and became confused. The progress of her reaction during and after E.C.T. may be illustrated as follows: depression-depersonalization-confusion-depersonalization-depression.

The second patient, an aircraft designer with an intractable peccatiphobia, complained of unreality after three treatments. The condition again disappeared after E.C.T. was discontinued. Finally depersonalization is reported as occurring in normal individuals after emotional shock or fatigue. Inquiry among our acquaintances showed that momentary episodes were common, and that often no reason for their onset could be given.

We would point to the transitional nature of the depersonalization symptom in a number of the above conditions—the morphine addict returning to normality; the patients assailed in their current adjustments by E.C.T.; the depressive or schizophrenic before he is overwhelmed by the psychosis, when it disappears. Depersonalization here it is generally agreed is merely a symptom in a more general reaction.

There is however the special group with which we are primarily concerned in which the symptom and little else is present. Depression is denied, and over the course of years—Shorvon (1946) quotes a case of 26 years' duration—further disintegration of the personality does not take place. Because of this the suggestion is put forward that we are dealing with a new entity. Shorvon (1946) suggested the name " primary idiopathic depersonalization." Stockings (1947) compromises with the name " depersonalization syndrome." Galdston (1947) sums up as follows: " While an acceleration of the pulse beat is associated with all febrile and many other conditions it is a primary and specific disturbance in paroxysmal tachycardia. . . . There is in other words a specific nosological entity known as ' depersonalization,' and also a generic disturbance in psychic function carrying the same label which can be found associated with other specific psychopathies."

Mayer-Gross (1946) found these concepts difficult to agree with.

Our experience in the treated twin suggests that even where the symptom has persisted in apparent isolation it may well represent an unstable situation which, as in our case, may be pushed toward schizophrenic disruption, as well as, as has been conversely reported, allowing a return to normality. Fortunately our patient readjusted under a conservative regime, and has since been led to a better level of adjustment than before her treatment. In a condition where one author (Shorvon, 1946) can state, " There is therefore little or no place for the use of E.C.T. in the treatment of depersonalization," while another (Bockner, 1949) says, " E.C.T. is the treatment of choice for this syndrome," and where everything from benzedrine, nicotinic acid and calcium chloride urea to leucotomy has been used, we would merely point out that, while the symptom is generally tenacious and unalterable,

it does seem possible to produce further disintegration, and caution is therefore advisable.

In line with his attempt to describe an entity, Stockings (1947) listed a group of five symptoms: " reality disturbance, affective disorder, thought disturbance, cephalic paraesthesia, and absence of projection features." Shorvon (1946) quotes Haug (1936) as saying that the symptom of depersonalization is practically absent in paranoia, and he incorporates this statement into his list of " definite facts." It is not clear whether this is the reason that Stockings includes the " absence of projection features " in his cardinal symptoms, as Bockner (1949) goes even further and says that " it is the very absence of the process of projection that underlies depersonalization."

As paranoia (differentiated from the paranoid reaction type) is a rarity, and depersonalization as a persistent leading symptom not common, we cannot dispute Haug's finding. One of our cases (Barbara), however, does demonstrate projection features to a pathological degree, and yet undoubtedly belongs to the group that Stockings, etc., have in mind. One of us has recently seen a case with acute onset of unreality feelings three weeks previously in an intelligent housewife aged 35 who, 17 years previously, on returning to work three months after severe concussion, had had ideas of reference. We feel that a misconception has arisen which, when applied, perverts the clinical findings. It would seem to derive from a theoretical confusion which seeks to deny that " projection " and " withdrawal from reality " are consistent. In fact there is nothing inconsistent about them—a paranoiac is certainly withdrawn from reality. Depersonalization, therefore, may represent a " withdrawal from reality," but it is an unwarranted assumption to say that an " absence of projection underlies it." To take the opposing view further we can see no reason why this syndrome cannot represent a form of projection—an incorrect view of reality imposed on the world. Lewis (1934) quotes MacCurdy as postulating an " affect of sudden incapacity," which is projected as part of the process when depersonalization occurs associated with depression.

Another aspect of our cases is related to the problem of *folie à deux* or psychosis of association. Gralnick (1942) defines this as a " psychiatric entity characterized by the transference of delusional ideas and/or abnormal behaviour from one person to one or more others." Brussel (1938) suggested that the basis for these psychoses was " a common heritage . . . and background . . . common environment . . . a common threat . . . and a common inherent receptivity and suggestability." Identical twins who are reared together may be expected to share these factors. The ideas usually communicated in the condition are, however, tangible. For instance, Coleman and Last (1939) present cases where a husband comes to believe his wife's delusion that he is covered by insects; another pair shared delusions of friendship with Robert Taylor. Zabarenko and Johnson (1950) describe a case where wife and husband shared delusions that they were being poisoned by communists. Adler and Magruder (1946) describe identical twins who developed a schizophrenic-like excitement with a delusional overlay—that they had been poisoned, that their father was dead, etc. Oatman (1942) describes identical twins with identical delusional beliefs—that they were to be killed, that they had semen in their mouths, etc. Gralnick (1942), summarizing the literature in English at that time, quotes 97 cases, of which 71 displayed persecutory, 10 religious, 8 depressive, 5 grandiose and 1 pleasing delusions. Two more had ideas of infidelity. The psychoses are all delusional (usually paraphrenic, rarely manic or depressive), and concern the transmission of a false version of reality in which the prime mover believes without insight. Depersonalization, however, is not usually regarded as a delusion—although it has often been said to resemble certain types of delusion. The patient recognizes it as abnormal, is worried by it and seeks relief from it. Far from being tangible, Mayer-Gross (1936) says that it is " difficult of description by normal speech." We cannot answer the question as to whether we are dealing with a *folie communiquée* in the twins—first, the type of thought content or experience supposedly transmitted is unique; secondly, Kallman and Mickey (1946) maintain that like psychoses in blood relations should not be regarded as *folie à deux*, as the significance of heredity cannot be safely excluded; thirdly, separation did not here influence the illness of the second twin. On the other hand we may say that the basis is present for a psychosis of association as shown above, and many of the aetiological factors enumerated by Gralnick (1942) are also seen—close association, an active-passive relationship, nervous,

shy, pre-psychotic personalities in patients of the female sex, the shock and strain of seeing the (?) inducer's attack. Our patient Barbara insistently expressed the idea that people did not believe her, and this may be read as a positive wish to be believed. To complement this her sister reported her fear that she might develop the condition in the period before she actually did so. The idea that there is an active component (projection) to the illness makes the process of transmission easier to understand. The case of Mrs. T— is quoted as relevant to this issue, as after eighteen months' close contact with Barbara she too begins to express ideas of unreality in much the same words as the twin. The issue is important from the point of view of aetiology, as, apart from by bacterial or virus spread, organic aetiology is inconceivable in psychosis of association, whereas it has been postulated in depersonalization. The localization of pathology on the brain has largely been abandoned, and Mayer-Gross's proposal (1936), for example, is that depersonalization be regarded as a " pre-formed functional response." This is acceptable in so far as it goes. The implication is that depersonalization is a possible mode of reaction of the brain—and this we know to be true by virtue of the symptom's existence. Further, depersonalization is a potential mode of reaction of *any* brain—and again the clinical evidence is supportive, as it occurs in normal people and in a wide variety of pathological conditions. In fact we are only playing with words, for any symptom may be produced in any subject given the right pathological setting, and in a wide sense any symptom is a " pre-formed functional response "—a possible way for the body to react. Moreover it is not the knowledge that a symptom is " pre-formed functional response " that is important. (Sleep, for example, is such a response.) It is the pathological setting—the conditions for the release of the symptoms that count. (Knowing that a subject sleeps at night tells us little of his chances of developing hypersomnia). In our view the conditions for the release of the depersonalization symptom are psychogenic.

Many of the psychological theories concerning the condition have been criticized as being incomplete (Mayer-Gross, 1936), and some recent additions appear frankly sterile. Galdston (1947) suggests that the " ego is a functional entity without embodiment. The ego is related to the id and to the super-ego as ' the spinning is to the spinning top ' . . . or as ' the circulation to the circulatory system ' . . . The ego is engendered by the interaction of the id and the super-ego and its function is to integrate both. . . . Disruptive factors that can affect the integrative function of the ego may stem from the id or the super-ego or both. . . . Depersonalization is a degradation of the integrative function of the ego . . . perceived and appreciated by the ego." As a corollary of the above he suggests that depersonalization is present in practically every case except those of sudden onset and fulminating development. He also suggests that depersonalization arises from a functional weakness of the super-ego, and regards it as a benign form of schizophrenia (where the weakness is in the id). Mayer-Gross (1936) points out that theoretically speaking one would expect depersonalization to be present much more often than it is. It remains a fact that it is not present in " practically every case." Galdston only gives a brief report of one patient to illustrate his argument. This patient, a female, terminated her treatment saying : " Doctor, there is nothing wrong with me that a good man couldn't put right." There is no follow-up reported.

It seems to us that all this is tantamount to saying that when the subject is healthy and " personalized " the ego is adjusted ; when depersonalization is present it is maladjusted. Depersonalization is therefore a disorder of ego function —and this finding we feel might have been arrived at in a less round-about way.

Miss Searl defended the analytic school from the criticism that " the disagreement among them is discouraging " (Mayer-Gross, 1936) with an oft-quoted, but not always acknowledged review, designed to show that their attitudes are complementary. The salient points are that there is little or no breast-feeding, severe physical punishment for viewing or exhibiting in the Oedipus situation in defiance of restraining looks, a consequent increase in the scrutinizing tendency, and an attempt to escape punishment by assuming the immunity of inanimate objects. Lifelessness is compensated for by extreme activity and erotization of thinking identified with the frustrating parent. Bergler (1950), who is quoted by Miss Searl, has recently written extending his earlier view that the " anal-exhibitionistic repressed wish is warded off with pleasurable self voyeurism ; that defence is prohibited by the inner unconscious with the result that a secondary unconscious defence is

installed: 'I don't peep at myself, I just mournfully observe my sickness'." He now believes that a scoptophiliac exchange mechanism is the basis for depersonalization, and that the specific answer for the typical anal variety of exhibitionism hinges on beating phantasies. Depersonalization, he says, "represents one of the many attenuated end-results of 'a child is being beaten' phantasy in so far as it is being executed with scoptophiliac means." And again: "In cases in which beating phantasies are combined with extensive scoptophiliac tendencies depersonalization is used as a typical defence mechanism." Bergler expresses therapeutic optimism, which in this condition is not general in analytic circles.

We note the relationship of his finding to our patient Barbara's fear of blindness arising from her experience with the film, coupled with the onset of her illness when she was looking into the fire. We feel that the circumstance of onset—the psycholeptic attack (Muncie, 1948)—is worthy of investigation in these cases. One of us recently saw a case where a woman who at that time thought that she was behaving quite normally heard her husband say to her, "Why are you so distant with me?" She fainted and awoke depersonalized. We feel that Shorvon's results with ether abreaction were not due merely to physiological excitation, or the reversing of a hypothetical state of low tension (Janet, 1922), but to touching off relevant psychogenic material. In each of the cases he quotes (1946) the circumstance of onset was used to produce abreaction, although he himself does not make this point. In this respect Muncie (1948) notes that depersonalization is often the aftermath of vivid experience, and Fenichel (1945) says that it is a defence against excitement. We would relate the circumstance of onset to an underlying psychopathology, possibly as suggested by Bergler, with the resultant release of a symptom which may have organic concomitants. These, however, must be secondary if we are to allow that the condition may be transmitted by association.

Summary.

Case-histories of identical twins suffering from depersonalization are presented with relevant psychometric material. The case of an associate of one of the twins is also described. The diagnostic value of the Shipley-Hartford Retreat Scale is questioned. The distribution of depersonalization as a symptom and its transitional nature are discussed. The effects and possible dangers of treatment are examined. The concept that projection features are necessarily absent from the depersonalization syndrome is criticized. The question as to whether depersonalization can be transmitted in psychosis of association is examined in relation to the case-material. Some aetiological theories are reviewed, and the importance of the circumstance of onset is stressed.

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