NORMAL AND ABNORMAL DEPERSONALIZATION

By

W. W. ROBERTS, M.R.C.S., L.R.C.P., D.P.M.

Consultant Psychiatrist
Saxondale Hospital, Nottinghamshire

THIS paper is offered as a contribution to the better understanding of depersonalization. It is divided into two sections. In the first section an account is given of the occurrence of brief episodes of depersonalization in young normal adults. In the second section a consistent interpretation of the symptoms of the syndrome itself is attempted. The two sections are loosely connected; the conclusion drawn from the study of the material in the first section—that it is the persistence, and not the nature of depersonalization which is abnormal—needs to be applied to the considerations advanced in the second. The interpretation will do as well for the brief experiences as for the established syndrome. The writer hopes that—if the interpretation is acceptable—the way will be cleared for attention to the remaining problem posed by this perplexing condition; why, in some cases, it endures. The following abbreviations are used throughout: For the depersonalization syndrome DP; for the depersonalization symptom, *dp*; for derealization, *dr*; for desomatization, *ds*; for the loss of feeling which frequently accompanies the other symptoms, *dE*; for visualization, *vs*, and for loss of visualization, *dv*; for the slowing-up of subjective time, *dT*.

I

i. Three groups of students (N, K and P) were examined for the existence of, or proneness to, brief episodes of DP. The examination was by questionnaire. The questionnaire was headed by a brief summary of the main symptoms of DP (*dr*, *dp*, *dT* and *dE*). It contained the following questions:

1. In the summary of symptoms printed above, indicate by X those which you have experienced.
2. State the duration of your episode or episodes of depersonalization.
3. State their frequency.
4. State any condition, such as fatigue, danger or nervousness, which is constant in your experiences and which may help to determine them.
5. Write a full account of one such experience and attach it to this questionnaire.
6. If you have never had symptoms such as those outlined above, write "No" here.

Name..... Age.....

Before they considered the questionnaire each group was addressed by the writer, who for about forty minutes described the main symptoms of DP as clearly and as vividly as he could. No attempt was made to discuss theories of causation, and methods of treatment were only briefly mentioned. The

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

students were then taken through the questions. Two groups were asked to complete the questionnaire in the following twenty-four hours. The third group (P) completed theirs on the spot; these supplied the highest proportion of positive answers. It was made clear that question five was regarded as the most important one. The students were asked, when answering this question, not to be too critical of their experiences, but to put down any episode which approximated to DP; analysis and acceptance or rejection to be left to the examiner. They were asked also not to ignore the questionnaire if they could describe no such experiences. It was made clear that negative replies were as important as positive, since they gave some idea of the proportion of positives. It is unlikely that all students in the groups N and K returned their questionnaires. It was felt, however, that the replies probably reflected reasonably accurately the proportion of positive to negative in those addressed. The name of the student was not insisted on, but all were asked to make clear their age and sex. Groups N and P were psychology students, group K consisted of philosophy students. There were more "doubtful positive" answers from group K than from N or P.

ii. Fifty-nine replies were received; two were set aside by reason of age, for inclusion in an older comparative group. The positive answers in the remaining number were then examined. Their acceptance or rejection clearly depended upon a reading of the descriptions given in answer to question five. Assessment of these had to be subjective. The "method" used was to assume or imagine in each case that an account written by a depersonalized person was being read, then to decide if the account were true to life. In effect, each account was matched against the examiner's knowledge of the phenomena of DP, drawn from his memory of patients' descriptions of their symptoms and of descriptions in the literature. The assessment produced these results:

	N	K	P	Total
True positive	5	7	11	23
False positive	2	8	6	16
Negative	7	7	4	18

iii. (*a*) Sex distribution: Of the total of 57 students who replied, 33 were female, 24 male; in two cases the sex of the student was not clear. Among the true positives, 18 were female, 5 male and one unknown. Among the false positives, 5 were female and 11 male. Among the negatives, 9 were female, 8 male and one unknown. The percentage of women in the sample was $57 \cdot 9 \pm 6 \cdot 5$, and in the true positives was $75 \cdot 00 \pm 8 \cdot 83$. The difference ($17 \cdot 1 \pm 11 \cdot 0$) is not significant. Mayer-Gross (1935) and Shorvon (1946) describe a more emphatic preponderance of women in their series of cases of the DP syndrome. (See also paragraph vi, infra.)

(*b*) Age-distribution: The mean age of the sample was $21 \cdot 19 \pm 3 \cdot 5$ years, and of the true positives was $21 \cdot 35 \pm 3 \cdot 06$ years.

(*c*) Distribution of symptoms: 19 true positives had *dp*, 14 had *dr*, 10 had *dE*, 5 had *dT*, 1 had *dv*, and 1 had *ds*. *Dp* alone was mentioned by four positives, and *dr* alone by four. One student reporting episodes of *dp* and *dr*, said they never occurred together. Another witness, reporting *dp*, *dr* and *ds*, said that most of her experiences were of pure *ds*. No other symptom occurred unaccompanied.

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

(*d*) Frequency of experiences: Replies under this heading were so variable that it is difficult to summarize them. Four recorded single episodes, and three of these were at some distance in the past—3 years, 7 years and 11 years previously. Of the rest seven students reported their experiences either as events in past, or as events of diminishing frequency. Twelve replies indicated that the experiences were current possibilities, but of these only one stated that they were increasing in frequency. Eleven students reported frequencies of once or more a year, and of these six described attacks occurring more than once a month. Six students described attacks less frequent than one a year. Five gave answers too imprecise to list in this way.

(*e*) Onset and duration of experiences: Eleven students noted the age of the first episode. These were 4, 7, 12, 12, 12, 15, 15, 15, 17, 17, and 19 years. The mode of onset was discovered from the descriptions, and findings under this head depend upon the assumption that in this regard a student's description of one attack is typical of all attacks experienced by him or her. In ten descriptions the mode of onset is not mentioned. In ten descriptions the onset was sudden, and the word "suddenly" is used to introduce the experience; in two it was rapid, and in one gradual. This may be compared with Shorvon's case-histories of 66 patients, of whom 61 described a sudden onset (*ibid.*). In duration, the experiences of different students varied between momentary duration and a span of two days. Students having a number of experiences tended to have them for the same length of time. The mean duration was calculated as a grand mean, the assumption being made that each positive had an equal number of attacks; the figure was 5 hours 13·75 minutes $\pm$3 hours 44 minutes.

(*f*) Associated conditions: Answers to Q.4 fall into three groups. In the first group no condition is significantly or constantly associated with the attacks. There were three of these, and in two others the conditions mentioned —"vague sense of emotional disturbance" and "slight fatigue and nervous strain"—appeared to have little relevance. In the second group of two answers the conditions cited were those of background states, anxiety and frustration, which appeared not to be directly connected with the attacks. In the third group of seventeen answers the associated experience was emphatic and its connection with the attack direct. Ten of these mentioned fatigue, usually in association with other conditions such as nervousness, danger, menstruation, high room-temperature, novel surroundings, convalescence. The remaining answers did not group together; they included excited expectancy, relief after tension, after being in company, nervousness, and exhaustion during a dangerous illness. Fatigue therefore is by far the commonest factor in these DP experiences, as judged by the answers to Q.4. A somewhat different impression is made by the answers to Q.5, which in all but one case mention the setting of the experience described. In twelve out of twenty-three descriptions it is plain that the describer had recently passed through a period of effort, danger, strain or mental concentration. In three, the experience was one of illness, in two of grave illness—and in both these DP developed at the time when the student entered hospital and her illness became the active concern of others. In one case the experience cited was one of personal danger; DP developed half an hour later. In these instances there is a similarity of experience between the students and patients who develop the "Calamity syndrome" (which includes DP) described by Roth (1959). Five mention recent concentrated work at or for examinations; in each of these the work was in the recent past, and

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

DP occurred in the time of reaction after it. While it is plain that at the time of DP many of the students were tired, it is unlikely that fatigue was a causal factor; it seems rather that DP developed in circumstances of reaction when fatigue makes itself felt. If one can generalize from the descriptions above, it seems that DP does not develop—or at any rate did not develop in these normals —during activity, but usually after excessive activity or emotional engagement.

iv. *Examples of "true positive" descriptions:*

(*a*) "I was very tired after a hard term and had been working intensively for several days. I felt unwell and apathetic. Sitting in the Refectory at lunch time one day, I suddenly felt as if I was completely detached from my surroundings. I was still in a way conscious of the fact that they were still there, but somehow they did not seem tangible. Although I realized where I was, I felt in no way part of the situation. In some way I had lost contact.

"I was able to talk to the people around me, but it was only with great effort that I could keep up interest in a conversation. All the time I seemed to be drifting away, and it was only with conscious effort that I could concentrate.

"After lunch I went for a walk in the woods. It is very peaceful and restful there, and after an hour or so I gradually began to relax and the detached feeling passed off slowly. In the evening I was able to concentrate on my work again." (K42; female; 20 years.)

(*b*) "The most usual occasion when this occurs is when I am out of doors. The last time was within the last month or so. I was in Nottingham with a friend and suddenly as we were walking along, I seemed to be completely apart from myself. I felt that I was somewhere above looking down on the scene of which I was a part and yet not a part. I was walking and talking, as though automatically, I couldn't feel any movement and yet I knew that I was walking.

"Everything appeared to be of little importance any more, and yet all the time I wanted to get back and be completely whole once more. The experience on this occasion lasted for at least five minutes, but time as far as I remember passed as usual. We crossed the road, and although my legs moved with the motion, I felt that my brain had gone somewhere else and from there was just watching me.

"I was completely unable to tell whether I myself was still present or whether I was the part which had gone. In short there were two different beings, the one watching the other.

"The experience disappeared as suddenly as it had come and once again I felt complete." (P91; female; 19 years.)

(*c*) "Mild flattening of awareness of self, external objects and emotions always accompany prolonged physical fatigue. But an intense feeling of de-somatization of all the body except the head occasionally occurs as part of a short depressive episode. There is a feeling of extreme fatigue, and an inability to cope with or be interested in persons or things—coupled with emotional distress at this inability. I usually go to bed and give up all attempt at physical activity, and as soon as I relax I get an intense feeling of 'ME' being located in my brain just behind my eyes. I am extremely aware of myself as being alive and existing in this particular place, but the rest of my head and body—except my eyes—does not belong to 'ME'. My body is felt as a pure biological machine automatically pumping food and air to keep alive my brain. I feel detached from my body except through a few channels somewhere and that it could be removed and another 'screwed on' without in any way affecting my essential

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

personality. This feeling usually lasts about an hour and is coupled with depressive thoughts on the hopelessness of attempting to cope with life, etc. I usually then fall asleep and 2–3 hours' sound sleep is enough completely to remove all these symptoms." (P101; female; 25 years.)

(*d*) "The first experience was the most vivid probably because accompanied by terrible fear on account of the uniqueness. At some period after this I learned that my mother had had similar experiences, especially when young, and I therefore regarded the rest as quite normal and this helped me to throw them off more quickly.

"The first occasion was a sudden onset as I entered a room in a strange house (I am not sure whether I had been there before but certainly not often). For some minutes I was alone in the room and I had the impression that had someone come in I should have been unable to make an immediate response but my actions would have been delayed as in a case of absent-mindedness.

"I stood in the middle of the room and looked around—this seemed necessary because the objects had become not only unfamiliar, in the normal sense, but also unreal, in the sense that I had to tell myself what their use was, in the way one might describe it to a foreigner.

"This took place as an internal monologue with hardly any pictorial imagination, whereas normally I do much concrete thinking in pictures accompanied by vocally imagined sounds.

"My impression was that I did this to reassure myself—bring myself back. The most striking feeling being that I did not know what a person was. In other words I was saying to myself, 'I am a human being and my name is S— N—, but whereas this would normally have been a joke or a tautology because I could not imagine being anything else, it here took on significance because having a feeling of strangeness—that is, that it could be questioned.

"I was aware of exactly what I must do in order to appear normal but this was now a conscious effort and was more like manoeuvring a puppet.

"I do not find these experiences connected with fatigue, etc., because I find that to a certain extent this feeling can be induced or, at least, encouraged and also that I can force myself back to normality by concentrating on some other interest. I do not think I should find this so easy if I had not got over the fear which this first experience induced." (K23; female; 21 years.)

(*e*) "Feeling that surroundings are unreal and I am apart from them. They go flatter and fainter. Attacks don't last long and I feel perfectly all right before and after." (P105; female; 19 years.)

(*f*) "This experience of depersonalization occurred to me when I was about twelve years old and on holiday in Devon. I was walking along a road, the first or second day after I had got up after being ill with a stomach upset.

"Everything had seemed quite normal, and then it seemed as if I had become two people. One half of me was watching the other perform in a completely disinterested way. I could hear my voice and that of other people's very remotely, although there was no lessening of sound. It seemed rather pointless to reply to remarks made, but I heard my voice doing so. Time did seem to be going much more slowly—this I noticed mainly in relation to the voices I heard.

"I felt that no action I did had any particular relevance. The thought occurred to me that if I had had the energy I could have jumped over a cliff, and it would not have mattered at all. I did everything, walking, talking or listening with complete lack of emotion, for it was not me who was performing

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

these actions, but another person who seemed somehow to be in my body. There was no link between this part of myself and the self that was standing outside watching the actions.

"I cannot remember any derealization in my perception of the external world, except as I have said that the voices I heard seemed remote, as if coming from a wireless set rather than from real people with whom I was intimately connected.

"I find it difficult to recall the duration of the time; it may quite possibly have lasted ten minutes or for forty or so minutes, because time had no relevance at all. There was no gradual coming back into a normal state of feeling. Suddenly I was no longer two people, but one again; the world seemed relevant, and I possessed my own personality." (P90; female; 23 years.)

v. *Examples of rejected descriptions:* Some very discursive "false positive" answers were returned to Q.5, particularly by male students in Group K. Two brief examples are:

(*a*) "I have felt these symptoms when walking alone after an evening in a 'pub'. As a result of these conditions it is difficult to isolate a particular occasion. In general I have suddenly become aware that I was walking extremely quickly without having intended to do so, and my actions seem directed by something other than my conscious personality. I observe them as something unconnected with myself, and when I have seen, for example, that my hand was about to strike a tree or wall have done nothing to prevent it. In this state though my mind seems to be working rapidly, external stimuli like rain or cold are observed rather than felt. I become aware that my limbs are not properly controlled but I am unable to exert a control over them, even if I wish to do so. How I withdraw from this condition I am not certain, but I believe that I gradually connect my mind and my body, and I feel 'back in myself again'." This answer describes inebriation, not DP. (P92; male; 24 years.)

(*b*) "I have experienced a certain flattening of emotionality generally. I am less able to be moved by music or such sights as a sunset. I find myself faking a feeling which I do not experience in order not to appear lacking in sensibility. I express conventional words of shock when I do not feel in the least shocked.

"Because I do not feel that my presence will alter any situation in which I find myself I have tended to lose interest in many things which formerly did interest me." This condition, present for a period of two years with no other manifestation of DP, appears more probably to indicate incipient schizophrenia. (P106; male; 21 years.)

vi. Comparison with a group of older persons was effected by distributing the questionnaire to a number of psychiatrists. No preliminary lecture was given; it was felt that the responder's own knowledge of DP should suffice. An additional question was inserted after Q.3:

> 4. If they (the episodes of DP) were more frequent at an earlier age, give the time-span of their maximum frequency.

Thirty-five replies were received, to which the two replies mentioned in paragraph (ii) were added. Thirteen described valid experiences of DP. The proportion of positives comes pretty close to that in the group of students.

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

The mean age of the group is $39 \cdot 51 \pm 8 \cdot 64$ years; of the negative responders, $40 \cdot 41 \pm 9 \cdot 15$ years; of the positive responders, $37 \cdot 84 \pm 7 \cdot 9$ years. Six of the positives (mean age $33 \cdot 1$ years) described their experiences as current events; seven ($42 \cdot 0$ years) placed them in the past. Six women and thirty men replied to the questionnaire; in one case no conclusion could be drawn as to the sex of the replier. Two women gave positive replies. Thus, a predominantly male sample produced a proportion of positives not much below that of the students, of whom 33 out of 57 were women. With three exceptions—one, who recorded an experience at the age of 7, one who recorded present liability to DP at the age of 42, and one a similar liability at 39, the experiences occurred in an age-band extending from the onset of puberty to the 36th year. In other words: those having present episodes of DP are, with two exceptions, under thirty-five.

vii. *Commentary:* Out of a sample of fifty-seven young persons, twenty-three show a past or present liability to brief episodes of DP. These were selected by the tester on the basis of their descriptions of a typical episode. Selection had to be subjective, and this introduced a possible source of error. To minimize such error the descriptions were read, and the selection of true positives made, by a colleague L.W.B. He found twenty-seven positives. With one exception, all the writer's choices appeared on L.W.B.'s list, which contained five answers not on the writer's. The conclusion can be drawn with some safety that more than a third of the students examined described valid instances of DP. The DP syndrome itself often begins with a run of brief episodes. But from the numerical standpoint alone it is highly unlikely that the students, or a number of them, were exhibiting the prodromal stages of illness. The sample, more probably, contained a large number of individuals who although normal and healthy are briefly subject to DP. The sample is a specialized one. It is distinctive in age, occupation and intelligence. It possibly contains a higher proportion of unstable persons than the universe of persons of the same range of ages. It is a suggestible group, which may have been influenced by the oral and printed descriptions of DP when completing the questionnaire. It is not large, and the proportion in it of true positives ($40 \cdot 35 \pm 6 \cdot 63$ per cent.) carries a considerable standard error. All these features of the sample have to be weighed when considering what inferences can be drawn from the test. It is fairly clear that brief, repetitive DP cannot occur in the general population as frequently as it does in the sample. If it did so its existence would have been recognized and its incidence acknowledged in the literature, in which there is reference to descriptions of DP by exceptionally gifted individuals (e.g. Mayer-Gross, *ibid.*), but no comment as to whether these were normal or morbid experiences. It may be that these descriptions come from the same kind or universe of persons as those tested, and that brief DP as a normal experience does occur in a proportion of young, intelligent and reflective individuals. No valid inference can be drawn from the test as to its occurrence in the general population; but it can at least be said that DP can occur in two ways—as a persisting state, and as a brief and often repetitive state; the latter may herald the former, but more frequently does not. It can also be stated that persons subject to brief unominous DP probably far outnumber those who develop persistent primary DP. These comments are not disturbed by the results of testing an older group of persons. The enlarged sample (94) has a proportion of positives of $38 \cdot 3 \pm 5 \cdot 01$ per cent. There is confirmation of the statement that the brief episodes described do not run on into prolonged DP. An upper age-limit of about thirty-five is set to the

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

propensity to have the episodes. No tendency to favour one sex rather than the other is observed. All the persons tested are, or have been, university students; there is no conclusive evidence, however, that undergraduate life itself is a factor in the production of episodes. There is a suggestion (not statistically confirmed) of three periods of propensity in the age-band of incidence—one in puberty and early adolescence, one in the late teens and early twenties, and one from twenty-five to thirty-five.

II

Interpretation

i. In the following account *dr*, *dp* and *dE* are dealt with in that order and in most detail; some consideration is then given to *dv* and *dt* and to "as-ifness", the metaphorical phrasing of symptoms. The section concludes with a short note on the patchy distribution of symptoms, and a summary.

The interpretation starts from the propositions that *dr*, the most unambiguous occurrence in DP, does not differ in kind from *dp* and *ds*; that *dv* gives a clue to what happens in *dr*; and that *dE* is a result of what happens in *dr*. Since *dr* is clearly a disorder of perception, it implies that *dp* is also a disorder of perception, and that *dE* results from a disorder of perception. The nature of the perceptual loss in *dr* is first to be defined. This will be more easily done after a survey of the development of perception, since what is lost in *dr* is believed to be an element which is added to perception as it matures. The course of development as traced here is theoretical and speculative; its authority derives chiefly from its fitness to explain *dr* and perhaps other perceptual anomalies. Its understanding will be facilitated by a preliminary statement of the scope of imagination. Though a great deal has been written about images and imagery, not much has been written about the power of voluntarily producing images. One of the few to approach it as the subject of psychological study—Sartre (1948)—has stressed its importance as a constituent of consciousness. "Ainsi l'imagination, loin d'apparaître comme une caractéristique de fait de la conscience, s'est dévoilée comme une condition essentielle et transcendantale de la conscience." In the author's view, it takes part also in an intimate and essential way in the evolution of perception.

The immobile imaginer can summon up images around him, or be spontaneously visited by them, in the present time. He can also without movement represent himself as another person or object; and thus in part transform himself into an image. He can in part, and at once, represent or reconstitute himself among images of distant scenes and at different times from the present. He can in part reconstitute himself at another point in an observed scene, changing its pattern and resolving it into an image, and he can represent himself as another person or object at this point, in both instances transforming himself in part into an image. These exercises of the imaginer result in sensory and emotional experiences which are partially satisfying. Realism and vividness are sacrificed to a greater or lesser degree. They are rarely sufficient to extinguish current perceptions. Nor do the representations of himself obliterate his sense of his own identity, though each diminishes it.

ii. The infant has no external world. He is aware of sensations which are produced or aroused by objects. These sensations are the only representations of objects which he knows; his representations of objects are therefore completely internalized. Later, in that important developmental era, the third

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

quarter of the first year, awareness of the parts of the body, the first object to be explored, is achieved. With this knowledge, though slightly later and perhaps to a lesser degree, the existence of objects other than the body is realized. These objects combine with a series of internal sensations which are recognized by the perceiver. He interprets his discovery of objects by means of a belief that they have passed from inside to outside his body, and their association with internal sensations means (for him) that they are still parts of him. He learns more objects by clutching and mouthing them, applying to them the same process of absorption and ejection which appears to him to have been undergone by his primary objects. This enables him the more readily to regard his new objects as parts of him. At the same time that he acquires objects, he learns space, by crawling, climbing and tumbling. He also learns to "place" his objects in a spatial setting. But since the only space he knows is that into which he has taken his own body, the cognition of space does not at first affect his belief that his objects are parts of him. Space, at this stage, carries a strong personal sign.

iii. This second stage of perception cannot be of long duration. The experiences of the maturing infant must bring strong pressure to bear upon the belief that his objects are part of him. He must soon become aware that a number of "parts of him" at times remain stationary when he is mobile, or at times move when he is stationary in directions which he does not control. The increasing profusion of objects further embarrasses his primary assumption. His own space—the area in which he moves—becomes extended; and by exercising his power of visual accommodation, already trained by the focusing of objects in that area, he is able to place objects at increasing distances from him, and increasingly far away from his own spatial orbit. These distant objects cannot be accommodated by the simple belief that all objects are parts of him. He then substitutes for the statement "these objects are parts of me" the statement "these objects are as if parts of me"; not "like parts of me" merely. This involves an important change in his attitude to objects. Whereas they are first simply parts of him, they are now imagined parts of him, and this imagination calls for the conscious representation or reconstitution of himself in each object. He in part transforms himself into an image which occupies the boundaries of the object, and in so doing suffers some diminution of his own sense of identity. Such an exercise falls easily within the powers of the imagining child. At first conscious, it becomes increasingly effortless, until at mature perception it forms an important element of subconscious perceptual adjustment, and the diminution of the perceiver's own sense of identity is reduced to zero. In addition to the renunciation of objects as parts of himself, the developing perceiver renounces space as the content of a perimeter which is believed to be a vague outer margin of his body. For that space which is learned, and attached to him, by his own journeys, he substitutes distances covered by representing himself in part in imagery, at their end-points. This conscious reconstitution of himself in the perception of distance also becomes subconscious and automatized in development.

iv. If the mature perceiver should suffer the loss of this particular perceptual adjustment, there will be impairment of attachment, realism and 3-dimensionality. The adjustment is effected in order to retain as far as possible the feeling that objects are parts of the perceiver; its loss must produce a sense of separation from them, and a sense that they have become extruded from his

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

personal world. Furthermore since the adjustment consists of an imaginative reconstitution of the perceiver in the percept, its absence will set a bar to "going into" percepts, and these will stand off from the perceiver in a strange and hitherto unexperienced way. Again: the purpose in the retention of the feeling that objects are parts of the perceiver is to maintain a common standard of realism. If objects are such, they are at least as real as the body; the adjustment sustains the realism of the scene. In its absence, objects will appear to be both unreal and remote. Since space is subconsciously constituted by the same component of perception, deletion of the latter will gravely affect the assessment of distance and perspective. Impairment of spatial perception must in turn affect the apprehension of solid objects. Large objects are apprehended by a refined application of the methods used to decipher space, in particular by the inference drawn from the exercise of visual accommodation. They are construed in the same way as space is construed. The solidity of small objects is realized by descrying in them the same visual patterns *in petto* which are associated with solid large objects. When large objects appear flat, the presence of similar visual patterns on small objects will fail to carry its former conviction of their solidity.

There is an obvious and close similarity between these effects and the condition of *dr*. One may conclude that, if the author's account of perceptual development is accurate, it provides for the absorption into perception of a process whose contribution changes derealized to normal perception. Without it, perception fails in realism and attachment and the perceptual and physical worlds approximate more closely (Brain, 1951).

v. It is further assumed by the writer that the change in experience which produces *dr* is identical with that which produces *dp*. This assumption would from inspection appear to be correct. In each case the effect produced is one of strangeness. The depersonalized person is a stranger to himself—often describing his state in that precise way. The derealized person finds the world strange because different from any previous perceptual experience of it; and this strangeness invests equally perception of fresh and familiar objects. In each case there is an effect of remoteness and detachment. The depersonalized person describes himself as a spectator of his own actions. The derealized person watches objects, scenes and events as though they were the traffic of a play—an illusion heightened, but not mainly determined by the two-dimensional quality of his vision. In each case there is loss of realism in the thing perceived. In each case there is loss of substance in the thing perceived; in *dp* the observed self disappears or becomes shadowy, in *dr* objects become flat and weightless. In each case a sort of fission is described. In *dp* the sufferer is separate from, and in search of, his own self (*alter ego*). In *dr* there is a fissure between the patient and the world—an absence of that integration with objects which he formerly possessed, albeit without conscious awareness of it. It may be remarked here that the author's emphasis on detachment brings him pretty close to Ackner (1954), who ascribes the symptoms of *dr* to non-integrated experience.

The change of experience in *dr* appears to be the loss of the self-representing component from perception. If *dp* is also the result of a similar impairment of perception, what is the percept?

vi. At the core of all experience is the very self, the imaginer. The imaginer cannot be an object to the individual, for to be so he has to be made into an

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

introspective image which only he can supply. The imaginer continually retreats before introspection. He can be an object only to an outside observer. But the individual has an early and pressing need to apprehend himself, and to do so he creates a self-image. In this the body is utilized, but it is a percept of a different order from the body as an object. It is a construction—like other percepts—in which the individual represents himself within an object, in this case the body. But here he creates or objectifies himself—not his body or his other objects of attention. The self-image is set up soon after the development of self-awareness. It is not essential to this, though it may facilitate it. It is not present —or need not be present—in the second stage of perception, when objects though outside the body are believed to be parts or pieces of the body. When the existence of independent objects is conceded, the body is defined as well as the objects outside it. Self-awareness comes with knowledge of the body. With self-awareness comes the ability in imagination to pass into the body and outside the body. Thus are set up the conditions by which the imaginer, the aware self, can apprehend himself by the development of a self-image; can perceive his body as an object; and can enrich his perception of objects by representing himself in them. The self-image, therefore, arises early in the third stage of perception.

vii. It is the deep percept of the self-image which is affected in *dp*; the latter, indeed, consists of loss of the self-image. There is a failure by the imaginer to utilize bodily clues to set up or exteriorize an image of himself. In *ds* he is unable to objectify the body, or parts of the body, by failure on a more superficial level to represent himself in it. In *dr* there is a localized or partial weakness of imaginative power which renders the observer unable to represent himself in objects. In *dp* the individual returns to—and stays in—the brief primitive developmental period of self-awareness before self-apprehension. The object of normal introspection is lost; the individual becomes an object only to an outside observer. It is not difficult to understand that abnormal, intense and fruitless introspection will ensue: an unavailing search for the self-image, the persistent scanning of a blank internal environment.

There is a difference of a kind between *dp* and *dr*. In the former the object or percept as a whole is lost, in the latter a component of perception is lost. The component is one of self-representation in the percept; the object is a representation of the self. Loss of the self-representing power or process is bound to crumble and efface the self-image; the two effects are truly identical, though they occur over different areas of perception. What is the relation of the body-object, in *dp*, to the world of objects, in *dr*, when both have lost the representation of the self? There is a difference between them. In *dp* there is no recognizable object—no "self"; in *dr* the objects are present, but their perception is attenuated. (The body is not a form of the self-object.) In *dp* the body loses its property of belonging to the perceiver; it is disowned, but not (in the absence of *ds*) derealized. Since the individual can no longer "place" himself in his body, the latter will seem to behave as a selfless automaton. Since he is in a new and special sense apart from his body, he will watch it like a spectator.

viii. DE is a by-product rather than a direct effect of DP. It develops together with the derealization of objects of all kinds. It is not an inevitable outcome of *dp*, despite the intense involvement of the individual in his emotions; though, as will be shown later, the attenuation of the self-object may aid its development. Objectless emotion is not affected by *dE*; it is objective emotions

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

—sentiments—which fail. If, as the writer believes, the loss is to be construed as an inevitable outcome of *dr*, then in the severity of its effect *dr* is more akin to imperception, where the lost object is no longer recognized, than to removal of the object from perception by death or absence. In instinctual psychology acts of perception are described as the initiators of specific instinctive feelings and actions. It is nevertheless stressed, in most accounts of the psychology of perception, that emotion enters deeply into, and much affects, perception. It is also stated, for example by McCurdy, that lack of emotion diminishes the sharpness and realism of perceptions—produces *dr*, in fact. "When we have emotional contact with anything"—(he writes)—"we are identifying ourselves with it. When this identification takes place the thing feels 'real'; before that, it is phantasmal, shadowy" (1925). The author suggests that it would be better to preserve the distinction between, and relative independence of, perception and emotion—the one a mental operation, the other a mental state. It would be better, and truer, to say that the full use of perception permits the development of appropriate emotion than that emotion in some way combines with perception in order to sharpen or alter it. It is true that in anxious expectancy there is quickening and (maybe) apparent distortion of perception. But though this leads to restriction of the field of attention, and sometimes to premature breaking-off of perception, and in such an indirect way exerts an effect, it does not, strictly speaking, affect the process itself. Furthermore, the anxiety is a result of previous perceptions.

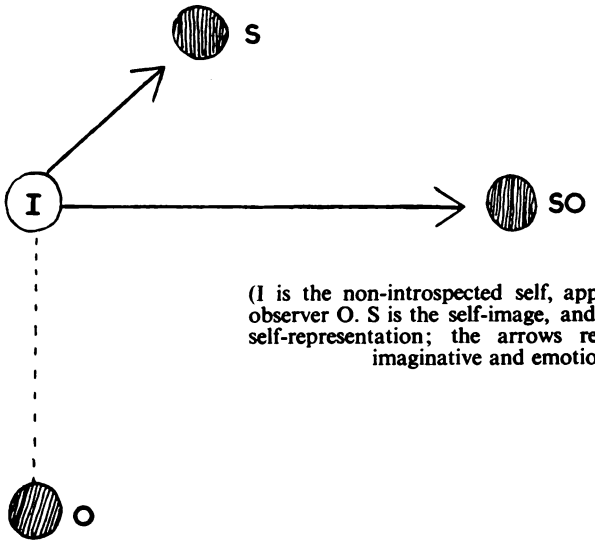
"Emotion" is a substantive derived from many adjectives used to denote a state of mind. It does not exist as an entity, any more than a word coined from the adjectives used to describe states of matter would label an entity. A particular emotion is said to be present as and when the mind alters its state, and to persist until this state alters. If the mind alters its state upon perception of an object, sentimental emotion is said to exist. A two-way traffic is felt to be present in such a case. The object is said to evoke feeling in the perceiver, and feeling is considered to flow towards or into the object. It is this sense of flow to the object which has probably led to the belief that emotion directly affects perception. The author now suggests that (if his account of perceptual development is correct) sentimental emotion must necessarily depend upon the presence in the percept of a representation of the observer. Or, in other words, that in *dr*, where this component of perception is lacking, sentimental emotion must fail.

Self-representation in objects completes perception in two ways. It binds the object to the perceiver, and it puts the object on the same level of realism as his own. A third effect should now be noted. Though the intention—and the effect—of the operation is to transfer himself into the object, in imagination to surround or clothe himself with the object, in a sense to be the object, the observer is also, by means of the objects, setting up a number of implicit and largely unacknowledged self-objects. These are not at the same level of awareness as the one self-image, nor do they diminish the reality of the self-image. But they are nevertheless representations of the self which because of their setting become objects of attention by the (non-introspected) self.

Turning now to the process of acquisition of emotional objects—that is, to the increasing number of changes of mental state which follow perception; the infant at first fills up and spills over with impersonal rage or pleasure. With self-awareness these feelings become personal: "these feelings are mine". With self-apprehension the first object of emotion is acquired; the infant loves or hates himself. With the acquisition of physical objects comes the capacity to

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

harbour feelings by and for objects. But these contain, or come to contain, representations of the self. May it not be that these arouse emotion because of this? That the strong emotions directed upon the first object, the self-image, can now be directed on similar representations in outside objects because of their close relationship with it? If this is so, it is the self-in-object which receives, is the real object of objective emotion. All sentimental states exist because of the re-duplication of self-representations. Altruistic emotion depends upon the degree to which the imaginer unites with—or identifies with—the object. Such a theory does not account for the difference between objects in the power to arouse emotion. But it does seem to show that perception completed in this particular way may be necessary before emotion can develop.



(I is the non-introspected self, apprehended only by an outside observer O. S is the self-image, and SO the object completed by self-representation; the arrows represent the routes both of imaginative and emotional transference.)

When feeling is aroused by, but not directed upon, the object there is a relationship with, and perhaps a return to, infantile pre-personal pleasure.

ix. Thus, in *dr*, the perceiver can be said to have no self-in-objects, and therefore no emotional objects. All objects assume the condition of those objects whose full perception is normally not associated with feeling. All will be emotionally neutral. Perception will lose its emotional after-effect. Feelings in the self will occur, but without perceptual evocation. The individual will return to the infantile state of undirected emotions. These will be personal only in so far as the experiencer escapes *dp*, and retains his self-image. If the ability to construct this is also impaired, he will find it difficult to acknowledge his feelings as his own; this will increase his complaints of loss of feeling. If no self-image exists, there will be no model to accommodate the feeling-tones which accompany actions. Feeling "by" objects will not be possible when the link attaching perceiver to percept is severed.

x. This concludes the interpretative account of those symptoms of DP which it is most important to interpret correctly—*dr*, *dp* and *dE*. The section is brought to a close by notes upon *dv* and *dT*, and some consideration of the two features of DP which affect its symptoms as a whole: "as-ifness", the qualified

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

phrasing of patients' descriptions, and the patchy exhibition of symptoms in the individual case (Lewis, 1935).

xi. *Dv* could well be expected from the nature of the perceptual failure, as this has been outlined above. If there is a failure to reproduce imaginatively the self in objects, there might well be also a failure of the imaginative capacity to succeed in visualizing. It is not clear, however, why *dv* occurs only in some cases of DP, and not in others. Nor can *dv* be causally related to *dr*. When *vs* is lost as a result of lesions affecting Brodmann's area 19 (Brain, 1957) there is no record of *dr*-like experiences resulting. Also the occasional loss of *vs* in *dr* appears to contradict the Jacksonian rule of the order of dissolution of functions in the central nervous system after a physical lesion (*Selected Writings*, 1931): here, the more voluntary and less organized function of *vs* disappears later and less frequently than the less voluntary, more automatic and more specialized function of self-representative completion of perception. *Dv* may be regarded as a clue to the kind of perceptive inhibition that occurs in, and produces *dr*, but its exact relationship to *dr* is not known.

xii. The slow subjective time of DP is, in the author's view, a basic slow time which is uncovered or released by *dr*. In individual development it comes to be approximated to clock-time under conditions of increasing use of, and familiarity with the latter. Clock-time is learned by frequent perceptions of the clock-face combined with a knowledge of numbers. In *dv* the personal perceptual link to the clock-face is severed, and with it the attachment of clock-time to personal time. The latter then reverts to its original speed. The phenomenon may be compared with the late disappearance and readily stimulated reappearance of the slow delta rhythm in EEG records from the pre-frontal area of the brain (Hill, 1950). The sense of time's slowness leads to paradoxical complaints, as noted by Lewis (1932). The same patient will say that time seems endless (because he cannot reach the future), and that there is no time (because his present appears prolonged). Or a patient may report that a point in the recent past seems ages ago, and also express surprise that clock-time is not earlier than it is. This paradox is to be explained by a difference in the direction of attention. The recent past becomes remote because a short journey has taken a long time. The clock-time seems advanced when attention turns to the slow passing of the minutes. *Dv* probably contributes to the inability of the derealized person to look forward.

In regard to memory: in the early case memories are strong and vivid, being largely drawn from the pre-morbid era. In the long-established case they are poor because for the most part they belong to the era of dulled perceptions.

xiii. Patients' reports of *dp*, *dr*, *ds* and *dT* are frequently introduced by the qualifying phrase "as if". This habit of description is consistent enough to earn the status of another symptom. Patients 'descriptions tend to issue in the form of metaphorical statements. These should not lead the hearer to doubt the authenticity of the symptoms. "As-ifness" has more than one cause. In *dp* there is the difficulty of explaining a perplexing and apparently unique experience—one which the describer believes to be without parallel in the hearer's life. In recent cases of DP the new sensations stand in contrast with former, more vivid, ordinary and more real ones. The contrast leads to their description in terms which question their authenticity. Then, too, there is the fact of insight.

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

"As-ifness" records the presence of insight, though it is not directly due to insight. It arises in part from the need to emphasize insight.

More important is the observer's standpoint—that of detachment from less real impressions. "As-ifness" stresses the nearness of these impressions to those of reproductions of experience in novels, paintings and photographs. It provides an explicit sign of their apparently reproductive character, though it works in the opposite direction to the "as-ifness" of admitted reproductions. In these, imagined or reproduced experience is implicitly presented as if it were real. In *dr*, actual (though faded) impressions are explicitly described as if they were imaginative reproductions. In *dr* disbelief or doubt is stressed to emphasize insight. In e.g. the novel suspension of disbelief is encouraged. It is a paradox of *dr* that the subtraction of imaginative participation from perceptions approximates these to experiences which are in the main imaginary.

When alteration of time is mentioned it is clock-time, not the new, slow time, which is described illusively. Loss of realism is also described with the prefix "as if"; there is a kind of "squaring" which multiplies the indirectness of the experience: unreality is itself unreal.

Summary

xiv. In perceptual development the non-introspected self (the imaginer) comes to set up a self-image, using the body as a fundament, to form an object of the body, and to complete external perception by representation in objects. These attainments or abilities are impaired in *DP*. In *dr* the impairment of external perception leads to detachment, since objects can no longer be subconsciously regarded as representatives of the perceiver; to lowered realism, because objects are no longer on the same level of perception as the body; and to flatness, because of the incompleteness of spatial perception. In *dp* there is an absence of the self-image. The persistent need to apprehend the self, results in ceaseless and useless self-scrutiny. The body can no longer be used as a basis for self-apprehension: therefore, it is watched by the sufferer as by a spectator, and movements become automatic. In *ds*, self-representation in the body, or in parts of the body, fails, and these are lost as realistic objects. DE appears to depend upon *dr*. The alteration of perception in *dr*, however, depends upon an alteration in the perceiver, from whom the power of representation in objects is withdrawn. This removes the emotional object from objects, which therefore become emotionally neutral; and (looking to the perceiver) reduces or destroys in him the capacity for the development of object-emotion.

The loss of *vs* is the loss of a function on a higher level, in the Jacksonian sense, than that occupied by representation in objects. Slow time is the emergence of basic early subjective time arising from the loss of perceptual attachment to the clock-face, and severance of the link between clock-time and personal time. The metaphorical character of the descriptions of symptoms in DP has three causes: (*a*) the difficulty of communicating an unique experience, (*b*) the memory of more vivid pre-morbid perceptions, and (*c*) the detachment of the observer from less real impressions.

Acknowledgments

The author's best thanks are due to Dr. W. Mayer-Gross for his advice and criticism, and to numerous psychiatrists in different hospitals, whose information helped to complete the first section of the paper.

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press

References

ACKNER, B., *J. Ment. Sci.*, 1954, **100**, 838.
BRAIN, W. R., *The Listener*, 1951, **45**, 660.
Idem, *Proc. Roy. Soc. Med.*, 1951, **44**, 37.
JACKSON, J. H., *Selected Writings*, 1931. London.
LEWIS, A. J., *Proc. Roy. Soc. Med.*, 1932, **25**, 611.
Idem, *Brit. J. Med. Psych.*, 1935, **15**, 125.
MCCURDY, J. T., *The Psychology of Emotion*, 1925. London.
MAYER-GROSS, W., *Brit. J. Med. Psych.*, 1935, **15**, 103.
ROTH, M., *Brit. Med. J.*, 1959, *i*, 579.
SARTRE, J. P., *L'Imaginaire*, 1948. 24th edition. Paris.
SHORVON, H. J., *Proc. Roy. Soc. Med.*, 1946, **39**, 779.

https://doi.org/10.1192/bjp.106.443.478 Published online by Cambridge University Press