two poems and the dated correspondence establish cryptomnesia as by far the most probable explanation. But this clear identification of a source has not been accomplished so far in the Bridey Murphy case. This failure does not in turn automatically confirm the interpretation of the case as an instance of either paranormal perception or reincarnation. These also remain quite unproven in the case. But until positive evidence supporting cryptomnesia is brought forward, the paranormal explanations are not ruled out.

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## PERSEVERATION IN SCHIZOPHRENIA AND DEMENTIA

DEAR SIR,

I was interested in Freeman and Gathercole's (1) pathopsychological study of this subject, having long felt (2) that such an approach to schizophrenia was being neglected. Schizophrenic symptoms and signs thus more clearly delineated psychologically should also help to advance the cause of psychophysiology. It would be interesting to know, however, whether Freeman and Gathercole consider their "compulsive repetition" to be synonymous with stereotypy, since the latter has been described by Henderson and Gillespie (3) as monotonous repetition, long after fatigue would ordinarily have caused relaxation, of an activity which may have begun in an understandable way but from which meaning has subsequently partially or wholly departed. The same authors defined perseveration as persistent repetition in spite of a patient's efforts to change the topic or produce new movement, and this equates well enough with Freeman and Gathercole's "impairment of switching", although the latter give no clue as to whether any subjective sense of frustrated volition was experienced by their patients.

To enlarge on the possible psychophysiological significance of such observations, when comparing jargon dysphasia (4) recently with "verbigeration" I encountered a difference of response between the organic and the functional, similar and perhaps related to that which Freeman and Gathercole have demonstrated within perseveration. I found that patients afflicted with such schizophrenic disorder of language could apparently read a text almost perfectly, in striking contrast to their disturbed spontaneous speech, whereas the jargon dysphasiac in question was able to produce written or spoken

thoughts somewhat better formed linguistically (5) than his difficulty with straightforward reading might have led one to expect. The psychophysiological mechanisms involved in my own observations (and maybe those of Freeman and Gathercole) therefore appear to be a disturbance of "fluid" spontaneity underlying "functional" gibberish, as opposed to difficulty with "crystallized" recall behind "structural" jargon.

I have used the word "verbigeration" (6) to mean schizophrenic language (as opposed to thought disorder), because Henderson and Gillespie describe verbigeration as the most complete degree of "disconnection" up to complete incoherence, i.e. simply a flood of unconnected words, some of them oftrepeated and similar to a word salad. Whilst containing the "ideational" perseveration of Freeman and Gathercole, this definition admittedly makes no reference to any "neologistic" element which it may have in common with paraphasia of organic origin as described by Brain (i.e., the utterance of nonexistent or incorrect words) in his account of jargon aphasia (7). Other authorities (8), however, have described paraphasia as the dysphasic use of wrong words or words in wrong and senseless combination, without making any reference to neologism, so that the failure on the part of Henderson and Gillespie to mention neologisms in their account of verbigeration may simply have been an oversight, especially as they stress that perseveration is often associated with paraphasia, where Brain does not mention this.

Finally, may I evoke memories of an earlier case of jargon aphasia due to a lesion of the left middle cerebral artery, described by Mott (9), and of Mott's other contributions on the subject (10-12). They illustrate the similarity of his interest in the analysis of intellectual function to my own (13).

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## REFERENCES

- FREEMAN, T. and GATHERCOLE, C. E. Brit. J. Psychiat., January 1966, 112, 27.
- 2. CRAWFORD, J. P. (1962). Lancet, ii, 888.
- HENDERSON, D. K. and GILLESPIE, R. D. (1944). A Text-Book of Psychiatry. Oxford University Press, London.
- 4. CRAWFORD, J. P. (1964). Psychiat. Quart., 38, 512.
- 5. (1965). Psychiat. Quart., 39, 729.
- 6. (1961). Lancet, ii, 487.
- BRAIN, W. R. (1940). Diseases of the Nervous System. Oxford University Press, London.
- DORLAND, W. A. N. (1948). The American Illustrated Medical Dictionary. Saunders. London.

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9. MOTT, F. W. (1909). Arch. Neurol. Psychiat., iv, 131.
10. —— (1899–1901). Proc. R. Inst., 16, 125.
11. —— (1904). Charing Cross Hosp. Gaz., 6, 33.
12. —— (1923). Brit. med. J., i, 403.
13. CRAWFORD, J. P. (1965). Brit. J. Psychiat., 111, 650.
14. —— (1966). J. neurol. Sci., 3, 117.
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## AUDITORY HALLUCINATIONS IN A CASE OF HYSTERIA

DEAR SIR,

That hallucinations are experienced by hysterical patients is well known, but when Dr. Levinson (Journal, January 1966, pp. 19-26), asserts that the auditory hallucinations of his patient were "... disclosed to be the result of an unconscious wishing and yearning to resurrect and rejoin her mother", he is drawing a conclusion not supported by his data. In fact, the patient states: "I've had these thoughts before, so I know you're right. The voices were my mother. When you first told me I didn't really believe it. I thought you were just telling me things to satisfy me, as I do to my daughter just to keep her quiet." Clearly, it was Dr. Levinson who "disclosed" the source of her hallucinations to the patient.

The origin of hallucinations remains unknown, and it is difficult to see how psycho-analysis, building and rebuilding upon the same old theories, can add any new knowledge in this area.

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## GENESIS OF HOMOSEXUALITY

DEAR SIR,

My previous correspondence, critical of Dr. Eva Bene's papers "On the Genesis of Male Homosexuality" and "On the Genesis of Female Homosexuality" was published in the January, 1966, issue along with Dr. Bene's reply. At the risk of prolonging a controversy beyond tolerance, I am compelled to reply to the reply.

Dr. Bene disapproved of my referring to her data-gathering vehicle as essentially an item check list. She prefers to call it a "semi-projective test". In this test a series of statements, printed on cards, is presented to the subject, including such items as "This person in the family was very pleasant". The cards are sorted into a group designated "mother" or one designated "father". For practical purposes

this is essentially the same as listing the statements in a column on a piece of paper and having the subject check off items which pertain to mother or to father. Even the author has previously (J. ment. Sci., 1957, 103:541) described the test as one "which could be reproduced, it is true, in a paper and pencil form..." However, as it was originally designed for children it was felt to be less an inhibiting reminder of school if paper and pencil were not used. Presumably, the adult subjects in Dr. Bene's more recent studies were no longer labouring under the same handicap.

I emphasized that the test is essentially an item check list in order to highlight the source of potential bias implicit in any study which must rely on the validity of a subject's reply to a question about his past. Dr. Bene has also recognized this potential bias. Her hypotheses regarding female homosexuality were wisely prefaced by "according to their childhood recollections". For male homosexuality, however, reference was made to the utilization of recollections as the investigative tool, but the actual hypotheses did not include the vital words found in the "female" paper. Unfortunately, in the study on female homosexuality, between the statement of the hypotheses and the interpretation of the results, the vital qualifier distinguishing recollection from fact tended to become less distinct.

In support of my contentions, consider first the statement taken from the "male" paper's summary: "The results confirm those of previous studies according to which homosexual men more frequently than heterosexual men had bad relations with their fathers, and had fathers who were ineffectual as parents..." More precisely, this study can only confirm other studies in which subjects also reported bad paternal relationships. If the study "confirmed" did not rely on retrospective reports, but utilized a more reliable measure of the father-son relationship, then Dr. Bene's study cannot confirm the latter, for a poorer measure should not confirm a better one, rather it ought to be the other way round. Consider next, from the "female" paper, "... and so was hypothesis 5 (confirmed) to the effect that the fathers of homosexual women more frequently had weak personalities". How do we know their personalities were weak? Dr. Bene's hypothesis was that lesbians would describe their fathers as weak, not that the fathers were so. Finally, to the specific point of contention in my previous correspondence—whether the fact that more lesbians than heterosexuals report their parents as having wanted a son can be accepted as indicating that such a phenomenon truly occurred. "Hypothesis 7, which states that the parents of homosexual women more frequently want a son,