

## References

- BIRLESON, P. (1981) The validity of depressive disorder in childhood and the development of a self-rating scale. *Journal of Child Psychology and Psychiatry*, **22**, 73–88.
- , HUDSON, I., GRAY BUCHANAN, D. *et al* (1987) Clinical evaluation of a self-rating scale for depressive disorder in childhood. *Journal of Child Psychology and Psychiatry*, **28**, 43–60.

## Positive symptoms of schizophrenia

SIR: Frith & Done (*Journal*, October 1988, **153**, 437–443) propose that the positive symptoms of schizophrenia arise from a failure in transmission, from goal-setting areas to a central monitor, of willed intentions that form the basis of self-generated action. They suggest that when self-generated actions are noted by the monitor, but not understood as such because of failure of advanced warning of willed intention, then these actions are attributed to external events.

Such a mechanism could underlie the “permeability of the ego-world boundary” mentioned by Schneider as possibly causing passivity phenomena (Koehler, 1979). However, there is another implication of this hypothesis which is more difficult to place: to lose awareness of willed intention to an extent sufficient to cause a florid positive schizophrenia may be to lose recognition of oneself as an independent thinking being. If the central elements of a singular identity are retained in the absence of awareness of the self-generated nature of activity, then Descartes’ phrase, “I think therefore I am”, would need to be restated as, “I respond therefore I am”. This is not a correct statement, since the ability simply to respond does not require an individual sense of consciousness.

Jaspers (1959) considered the effect of psychopathology on awareness of existence, and concluded that there are circumstances where *cognito ergo sum* is no longer a valid experience, particularly in the presence of derealisation and depersonalisation.

Such observations lead to the prediction that the more severe are the positive symptoms expressed by a schizophrenic patient, the more likely it becomes that the patient will be experiencing severe symptoms of depersonalisation or derealisation. This is generally not the case. One explanation for this would be that only the transmission of willed intentions relating to selected goals is impaired. This would account for the observation in many cases, particularly of paranoid schizophrenia, that positive symptoms are only experienced in a part of the patient’s experience as a whole. The question then becomes: why is there an abnormality in this particular area of self-generated behaviour?

HOWARD RING

*The Maudsley Hospital  
Denmark Hill, London SE5*

## References

- JASPERS, K. (1959) *General Psychopathology*. Trans. (1963) from the 7th edn by J. Hoenig & M. W. Hamilton. Manchester: Manchester University Press.
- KOEHLER, K. (1979) First rank symptoms of schizophrenia: questions concerning clinical boundaries. *British Journal of Psychiatry*, **134**, 236–248.

SIR: Frith & Done (*Journal*, October 1988, **153**, 437–443) draw attention to the lack of a psychological theory for the positive symptoms of schizophrenia. They propose what appears to be a simplistic model to explain the phenomena of auditory hallucinations. They believe that the patient is “talking to himself” but believes the voices he is hearing are from an outside source.

What they do not consider is the form or content of auditory hallucinations commonly seen in schizophrenia. For example, how would this theory explain two voices discussing the patient, one of which may be male, the other female? This would certainly not reflect “normal psychological processes”, whether or not it was labelled “my own”. Similarly, the content of auditory hallucinations in paranoid schizophrenia is often abusive and derisory; our understanding of this is not advanced by the theory.

It is admirable that experimental tests of monitor failure are possible, but surely the theory must first embrace those symptoms commonly seen in clinical practice.

BRIAN R. TIMNEY

*Adolescent Unit  
Northern General Hospital  
Sheffield S5 7AU*

## Sample Size and CT Scans in Schizophrenia

SIR: Smith *et al* (*Journal*, November 1988, **153**, 667–674) remind us that the use of high-tech research instruments such as computerised tomography (CT) often hides basic methodological flaws, such as the choice of bogus control groups. Ironically, however, the results of the authors’ own elegant meta-analysis of published CT studies in schizophrenia contain the seeds for criticism of their own study: the use of sample sizes too small to test hypotheses is another much-perpetrated sin. The figures derived by Smith *et al* from previous studies show that lateral ventricular size (as measured by VBR) in schizophrenic subjects exceeds that of healthy controls by about 30%. Entering these figures and an approximation of the authors’ value for overall standard deviation ( $\pm 3.1$ ) into a power analysis shows that, in order to be even 80% confident that a two-tailed test will produce a statistically significant difference, at least 60 patients and 60 controls are needed. It is not surprising,