certainly agree that if we say that culture influences behaviours (or actions as anthropologists would rather say), then we are indulging in a category error. 'Culture', however we define it, represents a society with all its conflicts and contradictions and its relationship with other societies; the boundaries are arbitrary. I am increasingly wondering if political is not quite simply a better term than cultural.

I am not altogether sure what families are, nor am I convinced that they are things which people generally live in and which ultimately determine their lives: socialising institutions doubtless, but not socially determining institutions.

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Impact of participating in research

SIR: Ben-Arie et al's study (Journal, January 1990, 156, 37-39) prompted us to conduct a similar one, examining the effect of research on psychiatric admissions and other psychiatric contacts, using a more specific group (depressed in-patients) and over a more immediate follow-up period.

We have re-analysed the data for 57 depressed inpatients who participated in one of the Nottingham electroconvulsive therapy (ECT) studies (Gregory et al, 1985). Using the Nottingham case register, we have compared their outcome at six months with that of 38 other patients who satisfied the entry criteria for the ECT study but did not enter, mainly due to lack of consent, and who were thus not followed up by the research team. In this example, as in that of Drs Ben-Arie et al, the clinical and research teams were separate.

We found no statistically significant differences between the two groups as regards the number and lengths of hospital or day-care admissions. The number of out-patient and other contacts were also similar for both groups.

These results suggest that participating in research did not have a significant effect on short-term outcome for these depressed in-patients. Although the two groups were not randomly allocated, demographic variables and mean index admission scores on the MADRS and HAM rating scales for the two groups were not significantly different. In contrast to the study of Drs Ben-Arie et al, the mean number of previous admissions and the mean length of the index admission were also similar for both groups.

It may be that the effect of research on admissions only becomes evident after six months. However, another more intriguing possibility is that the effect of research may be inversely proportional to the number of projects undertaken in any given clinical setting. The demographic profile of Nottingham lends itself to clinical research, and the frequency of such work here may have acted to desensitise patients and clinicians to its disturbing effects on presentation and clinical practice.

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Genital self-mutilation

SIR: Walter & Streimer (Journal, January 1990, 156, 125–127), in a case report of genital self-mutilation in a non-psychotic adult male, indicated that "The patient's father... was remembered as punitive and distant. The patient's mother was more available but was perceived as devaluing and affectionless", and stated that "The nature and dramatic culmination of the patient's dysmorphophobic symptoms may be understood in terms of a childhood during which he was demoralised, emasculated, and deprived of recognition". Finally, they emphasised that non-psychotic genital self-mutilation, while uncommon, may not be as rare as is generally stated.

However, the authors did not mention the cases of genital self-mutilation which occurred during the ancient mediterranean rites. In 1922, Frazer reported that the Great Mother Cybele's worship required from followers a ceremonial genital self-mutilation in recollection of the Attis' mythological experience.

Men who intentionally mutilate their own genitals are likely to be psychotic, and their behaviour may be considered as an acute psychotic breakdown in the context of a schizophrenic regression. Indeed, it should be conceived as an attempt to return to the mother's womb (Roccatagliata, 1982).

Roth & Ball (1963) found that, in a high proportion (94%) of male cases of transsexuality, there had been extreme dependence on and a strong preference for the mother of the family, and the father of

the majority had either been absent for long periods during the formative years (59%) or insignificant in the family setting, or had had a personality marked by coldness, hostility or psychopathic traits (77%). The child had thus been driven into an exclusive relationship with the mother, even when she had herself possessed some abnormal traits.

Genital self-mutilation is a psychotic disorder, although its relationship with dysmorphophobia (Morselli, 1886) is debatable (Birtchnell, 1988). The patient's familiar clinical picture, as reported by the authors, is congruent with this hypothesis.

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Psychiatric sequelae of listeriosis

SIR: Duncan recently reviewed the scant literature on psychiatric syndromes caused by central nervous system (CNS) infection with listeria monocytogenes (Journal, June 1989, 154, 887), which is in sharp contrast to the abundant reports describing neurological complications (Pollock et al, 1984). Because of the growing importance of listeriosis in the differential diagnosis of psychiatric syndromes, especially in immunocompromised hosts, we would like to point out two further psychiatric sequelae not mentioned by Dr Duncan and report the case history of one of our patients.

Orland & Daghestani (1987) described a patient in whom several catatonic episodes occurred in the course of a listeria meningo-encephalitis. This syndrome (not included in the report of schizophrenia-like listeria psychosis by Timofeyeva et al, 1953) was accompanied by frontal lobe electroencephalogram (EEG) abnormalities, and subsided after antibiotic treatment. Secondly, features of a chronic psychoorganic syndrome after CNS listeriosis might often escape diagnosis, as both patients and their families

will tend to neglect minor changes which can appear insignificant in the aftermath of a highly lethal disease. In adults, Seeliger (1955) mentioned incomplete recovery after listeriosis with persistent disturbance of memory and speech.

Here, we report the case of a 68-year-old male patient who, after a holiday in South America, had fallen ill with a listeria meningo-encephalomyelitis. In the acute phase of the illness he suffered extensive right-sided neurological deficits which recovered after adequate treatment. A few months later the patient complained of a loss of intellectual abilities with impaired short-term memory, difficulty in concentration, and a generalised apathy and lack of interest and drive. He was angry that these symptoms did not improve as did his physical complaints. He proved unable to resume his occupation in senior management. Cerebrospinal fluid showed no evidence for chronic inflammation, cranial computerised tomography and magnetic resonance imaging revealed several small lesions in the cerebral medulla around the ventricles, EEG showed generalised slowing, and single photon emission computerised tomography was unremarkable. The formerly highly intelligent patient achieved only an average IQ on the Hamburg-Weschler Intelligence Test for Adults, and was markedly cognitively slowed in several tests. Minor deficits in short-term memory, problem solving and attention were regarded as severe by the patient when he compared them with his pre-morbid abilities. There was no evidence for a depressive disorder. Although an early dementia secondary to a long history of arterial hypertension cannot definitely be excluded, we believe that the described syndrome is a late complication of the listeria meningo-encephalitis.

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