psychiatric emergency service, six patients manifested a Capgras delusion; four of these patients presented with the chief complaint of violence towards a family member (Fishbain, 1987). Only on inquiry as to the reason for the attack did the Capgras delusion become evident. Such observations indicate that unless specific inquiry is undertaken for a misidentification syndrome, the diagnosis could be missed, especially if the patient manifests additional delusional material. Violence or threatened violence towards family members is a relatively common psychotic presentation (Benezech et al, 1980). These findings and observations have led me to postulate the following: misidentification syndromes could be responsible for a much greater percentage of psychotic violent acts towards significant others and/or family members than once thought, but this diagnosis is routinely missed (Fishbain, 1987). I have therefore suggested that a chief complaint of violence towards a significant other and/or family member in a psychotic patient should alert the examining psychiatrist to the possibility of a misidentification syndrome.

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The Need to Compare the Effectiveness of Antidepressant Drugs: In Which Patient Populations?

SIR: The analysis of the present state of knowledge and its inherent limits in the field of antidepressant agents made by Garattini (*Journal*, January 1988, 152, 140–141) is realistic and has important consequences. In this therapeutic area, old and new compounds can be satisfactorily described in terms of their pharmacological activities (more than in terms of their mechanisms of action), but our understanding of the clinical relevance of their properties as to their efficacy is nonexistent.

The ex-juvantibus approach utilised to try to understand and describe the biological basis of depressive disorders through psychopharmacology has favoured the growth of scientific knowledge, but seems now to have come to a standstill: at present, it seems highly unlikely that any abnormality of a

single biochemical system possibly detected in this way could be related to a nosological entity (van Praag, 1986).

As we know, hypotheses can only be disproved, and we should search for differences; Dr Garattini suggests seeking differences by increasing the sample size of comparative clinical trials or by focusing on non-responders. On the other hand, differences within the patient populations studied as to their diagnostic classification, the clinical prerequisite (Ban, 1987), could be similarly important.

Acquisition of new knowledge in pharmacological research depends upon a process that "symmetrically relates diagnosis, treatment and outcome" (Joyce, 1986). The available diagnostic instruments have been shown to be able, at the most, to discriminate therapeutically more responsive patient populations from therapeutically less responsive ones, thus providing sufficiently homogeneous samples for establishing the efficacy of antidepressant drugs; the use of diagnostic instruments adequate to identify diagnostically distinct patient sub-populations would allow a more efficient detection of the differences between drugs. Identification and validation of more sensitive diagnostic approaches would provide reliable methods to collect the information needed for new and, perhaps, more productive efforts of pharmacological research. Proposals are already available (Ban, 1987).

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Barking mad

SIR: Recently I was asked to see an 86-year-old lady who had developed a paranoid illness for the first time following a prolonged hospital stay. Ward staff were bewildered by her occasional barking at night and, I am afraid, I was unable to enlighten them in relation to this matter. As the patient did have a delusional persecutory system, I suggested that she be started on thioridazine.

Other psychiatrists seem less reticent about offering explanations for this strange symptom. Arieti (1974) summarises thus a case originally reported by another investigator: "Reitman (1951) reported a patient who thought that as a private in the army he had a dog's life. While on parade he disclosed his manifest outbreak of schizophrenia. He suddenly went on all fours and started to bark. His thought 'I am treated like a dog' became 'I am a dog', and consequently he acted as a dog."

Arieti, thus, discusses the symptom as the behavioural manifestation of concreteness of thinking in schizophrenia. Concrete thinking seems to be the underlying mechanism suggested by Shapira & Roy (Journal, March 1988, 152, 432) when they attribute the "over-representation" of the syndrome in their hospital to "the proximity of the Newham Health Disrict to Barking and the Isle of Dogs".

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SIR: In response to Dr Buchanan's letter (*Journal*, October 1987, **151**, 562–563) and the subsequent case reports describing animal-like symptoms among patients (*Journal*, March 1988, **152**, 432–433), I wish to draw attention to the syndrome of lycanthropy, as so far no reference has been made to this in the correspondence.

Lycanthropy is a delusion where an individual believes that he or she has been transformed into an animal or whose behaviour is suggestive of such. It is the syndrome from which the 'werewolf' phenomenon has arisen. However, delusional transformation is not confined to wolves, and may involve any type of animal. Accompanying the virtual extinction of wolves in Europe has been a corresponding decline in reports of the 'werewolf' phenomenon and an increase in cited cases of transformation into other animals, most commonly the domestic type.

A detailed case report of a woman suffering from psychotic depression who believed she was a dog and adopted canine-like behaviour (including getting down on all fours and barking) has previously been reported in this Journal (Coll et al, 1985). Recently a further twelve cases of lycanthropy were reported involving delusional transformation into dogs, wolves, cats, rabbits, gerbils, etc. (Keck et al, 1988).

Lycanthropy is most commonly related to severe psychosis, and the differential diagnosis includes schizophrenia, manic-depressive disorder, psychotic depression, hysterical neurosis, and organic brain syndrome. It appears that lycanthropy is still very much alive as a clinical entity, and it warrants consideration whenever patients present with animal-like symptoms such as the recent cases reported in this journal.

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The Dopamine Hypothesis

SIR: I was surprised to read in the recent commentary by Crow (Journal, October 1987, 151, 460-465) that "direct dopamine receptor agonists (e.g. apomorphine, bromocriptine) are not found to be psychotogenic in the same way" as amphetamines. In a review of over 600 endocrine cases treated with dopamine agonists, mainly bromocriptine (Turner et al, 1984) we found that at least eight patients had suffered severe psychotic side-effects. These were largely paranoid psychoses, and one of them was an extremely complex delusional parasitosis with additional first-rank symptoms. These reactions occurred in individuals with no previous history of psychotic illness, and at a wide range of dosage levels. The survey was not exhaustive, although all patients had been closely followed up by the Endocrine Department. Nevertheless, an incidence of at least 1% cannot be dismissed. Nor were the patients suffering from a primary disorder of dopamine metabolism, such as those with Parkinson's disease who have also been reported as suffering from psychotic reactions to bromocriptine.

Such findings do seem to support the dopamine theory of psychoses, albeit in a small way. Perhaps we should consider dopamine as similar to the stimulus that causes epileptic seizures. Thus those with 'epilepsy' have a very low threshold to having fits, yet most of us can be induced to have one if enough voltage is applied through cerebral electrodes. Likewise, given enough excess dopamine, whether