between neurochemistry and pathogenesis of affective disorders. However, epidemiological data is necessary to confirm a different incidence of affective disorder in Down's syndrome. Age and developmentally-matched control subjects, and further neurochemical information regarding young adult Down's syndrome patients without dementia, are necessary before the two putative findings may be connected.

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Dangerous Delusions: The 'Hollywood Phenomenon'

SIR: We agree with Drs de Pauw & Szulecka that both the prevalence of delusional misidentification and its relationship to violence are underestimated (*Journal*, January 1988, **152**, 91–97). We report two cases of a variant of delusional misidentification of the environment. The delusion consists of the belief that the patient's environment has been changed to a film or theatre set peopled by actors and in which the patient has a role to play. We propose the term 'Hollywood phenomenon' for the delusion, which is a symptom rather than a syndrome. It can occur with a typical Capgras phenomenon (Enoch & Trethowan, 1979) (case ii), and may result in violence (case i) or verbal hostility and non co-operation (case ii).

Case reports: (i) Mr A, a 22-year-old single Australian man with a history of two admissions for bipolar affective disorder, left Australia in the early stages of a manic episode. On arrival in the UK his condition deteriorated, with elevated mood, decreased sleep, excess energy, and accelerated thoughts. He recognised that he was relapsing and consulted a GP, who arranged an urgent out-patient appointment. Before that appointment he became convinced he was "an actor and that everything that was going on was a film" in which he was the main player. He stole a car which he deliberately crashed because "it was a stunt car and I was a stunt man who was supposed to crash it . . . it was rigged so I wouldn't get hurt". He was arrested and later assaulted the police surgeon with what he erroneously believed was a bottle of "harmless sugar glass", causing severe injuries. Mr A. claimed that he, the surgeon, and the police were all play actors and that his actions would have "no real consequence". Remanded in prison for psychiatric reports, he was intermittently violent in response to similar misidentifications until he became euthymic following medication. He was transferred after conviction on a Hospital Order, and on admission had insight into his previous delusions.

(ii) Miss B. exhibited both a Capgras phenomenon and a 'Hollywood phenomenon'. She was a single retired midwife in late middle age, living alone. She had had several admissions with a diagnosis of depressive psychosis or schizophrenia. On this occasion she was depressed with early morning wakening, psychomotor retardation, appetite and weight loss, and felt hopeless and worthless. She believed relatives were impostors and was verbally aggressive towards them. She believed that the hospital was a film set peopled by actors, the admitting doctor a film director, and that the purpose of the interview was to obtain a script for the film. While she struggled and was verbally hostile at attempts to detain her, there was no serious violence. She recovered fully after ECT.

Both cases involved affective illness without organic impairment. However, we do not believe that the 'Hollywood phenomenon' is specific for affective disorders, and would be interested to hear of other examples. We believe that like the Capgras phenomenon itself, the 'Hollywood phenomenon' is not uncommon, but under-reported. It differs from the superficially similar transient experience in derealisation in that it has a real, not an 'as if' quality, is enduring, and has all the features of a delusion, including the tendency to be acted upon.

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Calcium Therapy for Neuroleptic-Induced Extrapyramidal Symptoms

SIR: Lichtigeld (1965) hypothesised that hypocalcemia disrupts nerve cell function in the basal ganglia, causing extrapyramidal symptoms (EPS). Schaaf & Payne (1966) reported neuroleptic-induced EPS in hypoparathyroidism only when these patients are hypocalcemic. We report two patients

with neuroleptic-related EPS whose symptoms disappeared with calcium.

Case reports: (i) A 57-year-old male with chronic organic brain syndrome, hypertension, emphysema with COPD, and diabetes mellitus was confused and depressed on admission. His medications included haloperidol (1 mg, t.i.d.), benztropine (2 mg, o.d.), alprazolam (0.25 mg, q.d.s.) and chlorpromazine (250 mg, b.i.d.). On admission he showed generalised rigidity and drooling of saliva which did not respond to discontinuing haloperidol and increasing benztropine to 2 mg b.i.d. for one week. He was started on calcium (Sandoz) (1 tab, o.d.). The drooling and rigidity disappeared within seven days. Calcium and benztropine were both discontinued, and no neuroleptics prescribed. The symptoms did not recur, and he was discharged a month later.

(ii) A 37-year-old male with paranoid schizophrenia was on several neuroleptic drugs at the time of admission. The medications were tapered to fluphenazine decanoate (injection; 50 mg, 2 weekly). The patient developed drooling of saliva, difficulty swallowing, and tremors of the hands. Fluphenazine was further reduced to 25 mg 2 weekly and benztropine (2 mg, b.i.d.) prescribed for 3 weeks with no relief. Even with diphenylhydramine (50 mg, t.i.d.) for ten days the drooling and dysphagia persisted. The patient was then started on calcium (Sandoz) (1 tab, o.d.) and within two days swallowing improved and the drooling diminished, disappearing completely in 10 days. Calcium was then discontinued and the symptoms recurred within 24 hours. The patient was restarted on calcium and procyclidine and the symptoms disappeared in four days and did not recur during the next 4 months, after which he was discharged on trifluoperazine (2 mg, q.i.d.), procyclidine (5 mg, b.i.d.) and calcium (Sandoz) (1 tab, b.i.d.).

EPS in these two patients did not at first respond to reducing or discontinuing neuroleptics or to adding anticholinergic medication, but disappeared within days of introducing calcium. In the second patient the extrapyramidal symptoms recurred on discontinuing calcium. There is evidence that calcium facilitates dopaminergic synthesis, degradation and release, and may affect the initiation of muscle contraction and relaxation (Ganong, 1987). Calcium also stimulates cholinergic activity (Katz & Miledi, 1965) and may somehow alter the balance of antidopaminergic-anticholinergic activity of neuroleptics, thus influencing the EPS (Ganong, 1987). Recently, Dinan (1987) proposed that neuroleptics act by altering potassium conductance in central neurons, but did not offer an explanation for a role of calcium in causing EPS. The serum calcium levels in both cases prior to introducing calcium were at the lower end of normal limits. Further work needs to be done to see if a relatively innocuous drug like calcium can relieve patients of the distress of EPS.

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A HUNDRED YEARS AGO

Lunatics in workhouses

The Inspectors of Lunatic Asylums in Ireland, in their recent report, state that the lunatic accommodation afforded in workhouses has been but slightly altered within the past decade; the little done, however, lies in the way of improvement, and is so far satisfactory. The classes in question – imbeciles, epileptics, and idiots – do not require, in the great majority of cases, what may be designated as a genuine asylum treatment, however much their condition might be benefited by a uniform and more liberal attention to personal comforts and requirements, particularly in respect to day-room provision, a better system of ventilation, and means of exercise in the open spaces, the yards allotted to them being for the most part small, rough and gloomy. Hopeless, however, as many of the inmates may be, and incapable of appreciating fully the value of domestic comforts, if not carefully looked after, they not infrequently become very excitable, and subject to outbreaks of violence, particularly epileptics; when as a rule they are transferred to district asylums for indefinite periods, and thus occupy beds that could be far more usefully reserved for acute and curable patients. Hence a double disadvantage results – asylums become overcrowded, and their enlargement a necessity – while between the expense of costly