neurological side effects produced by phenothiazine derivatives—for example, buccal dyskinesia, dysostia, and Parkinsonism. When the drugs were withdrawn, these abnormalities remitted after periods varying from a few weeks to a few months. Severe cases were left with amnesia for the events during the period of intoxication and also with one or other of the disabilities present previously, but in attenuated degree.

In the advanced stages of this intoxication the patients presented all the features shown by Cairns's case of akinetic mutism, and it is difficult to escape the conclusion that the underlying pathology may also have been similar. Support for this is provided by the demonstration by P. B. Bradley and his colleagues that chlorpromazine abolishes the neuronal activity mediated by noradrenaline as excitatory transmitter. The neurones of the ascending activating system of the brain stem appear to be selectively antagonized by this drug, and this may therefore be the basis of the central action of chlorpromazine and may also explain the close similarity between these two groups of cases of different pathology. Wide differences in the chlorpromazine plasma levels have been found in different individuals when this drug is administered in standard doses. High plasma levels account for the idiosyncratic adverse reactions and, as with other drugs, such toxic effects can usually be overcome by prescribing the drug in greatly reduced doses.

A number of cases of drug-induced mutism were mistaken for catatonia, a psychiatric syndrome which was first recognized by Karl Kahlbaum a century ago. His description of catatonic mutism reveals the striking resemblance of the speech disorders in these two conditions.

"When catatonia is incomplete the patient speaks so softly as to be almost inaudible, or he may only move his lips. He never speaks spontaneously but may say a few words in answer to forceful questioning, or he may remain silent."

In catatonic mutism, sodium amytal interviews may bring to light typical depressive or schizophrenic thought content.

Episodic mutism is commonly due to hysteria or to migraine, especially in children, in whom dysphasia is less common than in adults. Mutism is not uncommon among children up to the age of 3 or 4 whose behaviour and hearing are normal, or it may occur as "elective mutism," a term introduced to describe the behaviour of children who remain silent among all but a small circle of intimates, usually their peers. This has been regarded as attention-gaining or fear-reducing behaviour.

Words are symbols, but silence is also meaningful in communication. "Mute of malice" is a phrase familiar in the law courts. And again, "All my friends are mute," wrote Winston Churchill when the Dardanelles expedition, which he had planned, proved a failure.

---

### Unchecked Growth

Population policies of various kinds are no novelty to governments. Both France and Germany tried to encourage population growth, essentially for military purposes, between the two world wars. China was recently in favour of expanding its birth rate but is said now to be taking a more cautious line. India on the contrary has encouraged the limitation of family size. But until lately the general opinion in Britain has been that the number of children in a family is the private concern of the parents, and no government has dared to breach this reticence and look critically at the size of the country's population in terms of the responsibility that each individual parent has for it. Last week's report from the Population Panel recommending that the Government should define its attitude to questions concerning the level and rate of increase of population is a welcome if modest decision.

In the short term—that is, over the next 40 years—the report takes a comforting line that Britain should be able to find the means of accommodating any likely increase in the population, which is estimated to be about 10 million on top of the present 54 million. Here it is partly bowing to the inevitable, partly taking comfort from the view that the evils of urban crowding, bad housing, and destruction of fertile agricultural land would not be much greater with 64 million than 54 million. It acknowledges that increasing population exacerbates these problems, and rightly points out that attempts to tackle them should not be put off on the excuse that a population policy should come first. Such a policy can have little or no influence on them in the foreseeable future. But man's propensity for breeding, and now for surviving, leads to one of the gloomiest conclusions of the report: "We do not think the average family size is likely to fall to replacement level in the foreseeable future, unless there are marked changes in attitudes or in policies."

What are the "attitudes" that determine family size today, and how can they be changed in a country where individual freedom still counts for something? Little is known about them in a scientific way, and to remedy the dearth of academic work on demography the report recommends the setting up of a centre for population studies. It would be associated with a university and medical school and include "economics and other social sciences" in its field of study. Part of its research would be under Government contract and part independent, while its staff would also teach in the university. This proposal deserves serious thought and discussion, especially by the demographers who already exist, though the risk of reducing serious human issues to nebulous statistics needs to be recognized. The first step therefore is for the Government to show its serious intent by going further than defining its attitude to a population policy. It should set about developing one.