

## NORTH AMERICA

# A Sledgehammer for Nuts

If history is little more than the record of the follies of mankind, then the study recently completed by the University of Colorado must rank as a historical document (*Scientific Study of Unidentified Flying Objects*, Ed. Daniel S. Gillmor. Bantam Books, 1969, \$1.95). The chief purpose of the study, it seems, was to "attempt to learn from UFO reports anything that could be considered as adding to scientific knowledge", or, which is nearly the same, to determine whether flying saucers are real. To this end Dr Edward Condon and his staff spent 18 months and more than \$300,000 in studying the more notable of the past and present cases brought to their attention.

Five per cent of the American population over 21 years of age believe that they themselves have seen a flying saucer, according to a Gallup poll conducted in 1966. The abstracts of the cases studied by the Colorado team poignantly epitomize a mental underworld the extent of whose survival in a highly educated population of the present century could hardly have been expected. "Case 32. The death of a horse was popularly believed to be related to UFO sightings, but professional investigations disclosed nothing unusual in the condition of the carcass." No significant conclusions could be derived from numerous reports of UFO sightings. "Case 20. Reports of 'beeping' sounds emanating apparently from invisible aerial sources were identified with the calls of small owls. Case 19. A project investigator was at the site of a predicted UFO landing. The landing did not occur."

In case 45 several people saw an illuminated object drifting across the night sky, the principal witness declaring that it was 75 feet long with twelve lights brighter than car headlamps. The object was found to be a plastic hot air balloon constructed by a local schoolboy. Case 12, that of a witness whose car had been interfered with by a UFO while she was driving alone at night, put the Colorado investigators to considerable trouble. An engineer at a major national laboratory was persuaded to assess the magnetic field strength that will affect an internal combustion engine. The magnetic signature of the witness's car showed that it had not experienced a field of this strength. Case 38 afforded a fistful of more than 800 sightings over a small town, but the investigators could find no evidence to support claims of manned saucers, footprints and saucer "nests".

It is true that not all cases were so easily soluble; case 46, for example, which occurred in 1950, is "one of the few UFO reports in which all factors investigated appear to be consistent with the assertion that an extraordinary flying object, silvery, metallic, disc shaped, tens of metres in diameter, and evidently artificial, flew within sight of two witnesses". The

photographs, which could be, but cannot be proved to be, fabrications, reveal a saucer shaped object with a mast placed slightly askew and off-centre.

The salient feature of the report is its almost obsessional attention to detail. No flight of fancy soars so high that it cannot be brought down to earth by the weight of modern scientific technique, no suggestion is too absurd to be taken as a hypothesis that is correct until falsified. For example, proponents of flying saucers, aware that Mars and Venus are uninhabitable, have deduced that these objects emanate from the planet Clarion whose orbit and mass are identical with Earth's but whose position, exactly half a revolution behind Earth, is permanently obscured by the Sun. It is typical of the Colorado project that this splendidly poetic conception was put to test by a computer calculation of the perturbations that Clarion would produce in the orbit of Venus. The predicted perturbations have not been observed; therefore Clarion does not exist. Similar exercises could doubtless be conducted on such beliefs as that the Earth is flat, or that water can be transmuted into wine, with equal effect on the believers.

It is true that in several instances the Colorado project seems to have lost its sense of proportion, whilst 942 pages seems an excessive length at which to examine the question of UFOs. But the project's aim was that justice should be done and clearly be seen to be done, and it would be unfair to criticize Dr Condon and his staff for doing their job too well. Yet at the same time it is not immediately obvious why the job had to be done at all. Will a single flying saucer buff alter his credo as a result of it? Will the five million Americans who believe they have seen flying saucers diligently peruse the report to discover for which of many possible reasons they were mistaken? Was it really likely that anything of real scientific value would emerge from the report? Or could it be that several members of Congress or of the United States Air Force, which supported the project, really believed in flying saucers?

Dr Condon explains in the preface that the physical aspects of the UFO phenomenon were given priority over the behavioural aspects. Most people who sight flying saucers, he says, are of no psychiatric interest. This may well be true but it seems a pity, nonetheless, that the considerable sociological interest of the phenomenon was left unexplored. Strange objects have been seen in the sky throughout recorded history. What is new about UFOs is that they tend to be saucer shaped and are endowed with pseudoscientific instead of supernatural interpretations. They no longer blazon forth the death of princes but herald the interest taken in mankind by extragalactic intelligences. This,

to be sure, is an interesting metamorphosis but its explanation lies in the province of historians and sociologists. It is hardly surprising that the contribution made by the Colorado scientists to the problem is worth little more than what a panel of theologians would have to say about current cosmological theories of the universe. We conclude, Dr Condon says, "that further extensive studies of UFOs probably cannot be justified in the expectation that science will be advanced thereby".

A firmer grasp of historical perspective by the project's sponsors might have attenuated the compulsion to reaffirm so foregone a conclusion. But perhaps the Colorado project, like the Apollo project, is a case of the means justifying the end and the end being

justified by spin-off. After all, a great deal of incidental information has been collected in the course of the project about anomalous propagation effects and the malfunctioning of complex lens systems, while Project Blue Book, the Air Force's compilation of UFO sightings which was the forerunner to the Colorado project, has already provided astronomers with useful data for estimating social bias in the observation of meteorites.

The Colorado project is a monumental achievement, but one of perhaps misapplied ingenuity. It would doubtless be inapt to compare it with earlier centuries' attempts to calculate how many angels could balance on the point of a pin; it is more like taking a sledgehammer to crack a nut, except that the nuts will be quite immune to its impact.

## Drugs on Prescription

IN the same year that the Sainsbury Committee's recommendations for broad changes in British policy towards drugs were published, the Task Force on Prescription Drugs was established in the United States under Mr John Gardner—then Secretary of Health, Education and Welfare—to study the problems of including the cost of out-of-hospital (prescription) drugs under Medicare. The task force included Dr Philip R. Lee (Assistant Secretary for Health and Scientific Affairs), Dr Alice M. Rivlin (Assistant Secretary for Planning and Evaluation), Mr Robert M. Ball (Commissioner, Social and Rehabilitation Service), Mr Joseph H. Meyers (Deputy Administrator, Social and Rehabilitation Service), Mr Dean Coston (Executive Assistant to the Secretary), Mr. James F. Kelly (Assistant Secretary), Dr Herbert L. Ley, jun. (Commissioner, Food and Drug Administration), Dr William H. Stewart (Surgeon General, Public Health Service) and Dr Milton Silverman (Special Assistant to the Assistant Secretary for Health and Scientific Affairs. Since then the task force has published a number of background papers and interim reports in which recommendations are set out as to how the burden of drug costs for the elderly could be eased, and how the cost of drugs to the Federal and State Governments could be lowered. But the task force has also taken its mammoth assignment one step further; it has examined the activities of the Department of Health, Education and Welfare in the pharmaceutical field to determine what reorganization, if any, is required.

Medicare already covers almost all of the in-patient hospital expenses of the elderly, as well as a significant proportion of their expenses for physicians and other medical services. Nevertheless, as the task force has emphasized, drug expense represents the largest single personal health expenditure that the elderly must meet almost entirely from their own resources—present aid from private insurance, existing public programmes and tax relief is insufficient. In 1967, for example, prescription drugs accounted for 20 per cent of the health expenditure of older people, and in 1966 the average prescription cost for the elderly was \$3.91, compared with an average for the population as a whole of \$3.43.

As far as implementing the Medicare benefit is concerned, the task force maintains that, to start with at

least, it would be desirable to provide the benefit on a less-than-comprehensive basis. It has been estimated that comprehensive coverage would be \$1,600 million, exclusive of administrative costs. Less-than-comprehensive coverage would help to reduce both the cost and the numerous complex administrative problems of the scheme. Coverage would probably be provided under the hospital insurance (Part A) Medicare programme, for under this virtually all people aged 65 or more would be automatically eligible for the new benefit.

In order to limit the scope of the drug programme, the task force suggests that the number of drugs covered could be limited to those which are important for the treatment of serious chronic illness in the elderly. On this basis, and assuming that 1971 would be the first year of operation, it is estimated that benefit payments would amount to \$720 million for the first year, with reimbursement made for about 125 million prescriptions. Assuming a \$1 co-payment, the level cost of the new benefit would be 0.19 per cent of taxable payroll. Alternatively, reliance could be placed on a "high-cost-sharing factor" whereby benefit would be paid only when a beneficiary's drug expenses exceeded a specified, relatively high amount. The cost of this proposal would be \$405 million in the first year of operation, and reimbursement would probably be made for about 100 million claims. The level cost of the proposal would be 0.14 per cent of taxable payroll. Another alternative—limiting benefits to those over a certain age, for example, 70 or 72—is considered unsuitable.

The task force suggests that responsibility for the drug benefit should rest with the Secretary of Health, Education and Welfare, with a primary delegation of authority to the Social Security Administration. At a lower level of administration, the task force concludes that it would be better if the vendor—that is, community, mail-order or hospital out-patient pharmacies—rather than the beneficiary initiated claims and was reimbursed by the programme. This would enable the Social Security Administration to take advantage of advances in electronic data processing capabilities, including equipment which would permit transmittal of claims information directly from the drugstores to the agency processing the claims.