different constitutions are infinite." It could well be this factual variety of response to the intake of dagga that may have something to do with the variety of impressions which have been uttered. Cannabis is reputed to cause sexual excitement, but there are many who deny this; if there is evidence of sexual excitement the psychological make-up of the smoker probably has much to do with it. The lack of inhibition induced by the drug's erotic charm and images may be conducive to this effect.

### SUMMARY

This is a review of practically all the factors both real and unreal which appear to motivate the opinions and actions of many enquirers and authorities who are concerned with the growing world menace of drug addiction, but with dagga in particular. The conclusions arrived at by special investigators and committees about the effects of dagga on the human being are that, in the main, they are detrimental to man, physically, mentally, and morally; that if it does not produce psychotic states it does produce very definite moral deterioration. If these conclusions are accepted on the evidence available by controlling governmental authority they could well find critics who also, on the evidence available, could declare that the conclusions are too rigid and even exclusive of facts which should be seriously considered before any legislative action is introduced.

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## DAGGA AND DRIVING\*

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This communication is concerned with a topic that has not yet been publicly discussed or expressed. It is the outcome of inquiry into the problems pertaining to the indulgence in dagga by our so-called permissive society which has erupted all over the world, bearing in mind the indigenous characteristics and culture of the different regions.

In *The Times* of 24 July 1967 a conglomerate group of scientists, doctors and intellectual types asserted that 'the law against marihuana is immoral in principle and unworkable in practice'. This is one of the various declarations which have been uttered in recent years for the abrogation of much of the law and the associated ideas against the taking of cannabis or dagga.

In the summary of the report of the Advisory Committee on Drug Dependence<sup>1</sup> it was stated that 'cannabis is a potent drug having as wide a capacity as alcohol to alter mood, judgement and functional ability', and *The Lancet*,<sup>2</sup> citing this summary, agreed that it is a dangerous drug in that particular respect.

The purpose of this paper is to stress the considerable danger inherent in that 'alteration of mood, judgement and functional ability', and the driving of a motor vehicle. I know of no conviction for dangerous driving while 'under the influence' of dagga, but the reasons for this are pretty obvious. It is difficult enough to bring in a verdict of dangerous driving while under the influence

of alcohol, without thrusting this infinitely more difficult proof upon the shoulders of the public prosecutor. Nevertheless, the possibility, even probability, of such a combination of circumstances justifies its consideration.

It is not my wish to mention the pros and cons of dagga smoking, but some of the effects of dagga smoking upon human beings need to be described in order to appreciate their relationship with the act of driving a motor car. With all pious moralizing put aside, the grave nature of this relationship will disclose itself. Let it be acknowledged openly that the drug is able to excite unmixed pleasure when used moderately. Johnston<sup>3,4</sup> described its use as producing 'an increase of pleasure'; it is 'the exciter of desire, the cementer of friendship, the laughter-mover, and the causer of the reeling gait'. That was written 115 years ago. More detailed impressions have been forthcoming since his time and the sensory perceptions which are most commonly experienced and which have a direct bearing upon my topic are those which Thomas de Quincey so admirably expressed to convey his sensations after eating opium: time lengthens to infinity and space swells to immensity. These altered perceptions are very real to the dagga smoker of almost any type of character or temperament. Exaggeration is the cardinal manifestation of most of the perceptive illusions when they are experienced. But exaggeration also expresses itself in the overt behaviour pattern which is derived from the basic character and temperament of the user of dagga. This is important in that the drug removes the veneer of con-

<sup>\*</sup>Date received: 26 November 1969.

ditioned civilized behaviour of an individual and exposes true character and temperament. If one be meek and mild the influence is to exaggerate this characteristic to inane bonhomie and fatuous friendliness. But if aggressiveness be the foundation-stone of his character which also evokes hostility, then guarrelsome and contentious is likely to be his pattern of behaviour. To the simple, primitive herdsman with his flock of sheep a pleasure derived has been the apparent large increase of his flock; whereas to the desert-dweller the pool of muddy water at the bottom of the wahdi has appeared to his magnifying eyes as the

The prolongation of seconds into minutes, minutes into hours, and hours into days is a remarkable but unexplained subjective cerebral phenomenon. Certainly, short periods of time are extended without any relationship with the actual passage of time, and such a disassociation of subjective awareness of time and actual time when the driver is under the influence of dagga, could be life-taking. There seems to be all the time in the world to carry out the particular manoeuvre indicated by the emergent circumstances in which the driver finds himself, but in fact there are only a few seconds. This fact with its attendant hazards speaks for itself.

The other subjective and vivid awareness of a prolongation and expansion of spatial dimensions can bring with it attendant danger. Two optical sensory fallacies, opposite in their direction, may occur but not in the same person during one episode of intoxication. One is the false impression of near objectives being seen very clearly at a far distance, and the other is exactly the reverse impression-objects far away are like those pinpointed by the cine-camera and 'zoomed' within a second or two to within a few feet of the viewer. Whichever optical illusion is excited by the drug, the dangers involving the drugged driver also speak for themselves.

There are one or two important factors related to the use of dagga in the circumstances under discussion, and these are pharmacological facts. If the dagga is taken as smoke, the effects, if they are to be produced in the particular individual (for much depends on the personality of the smoker and the quality of the dagga), will show themselves in a few minutes. If this be the case and the quantity inhaled from a 'good' dagga cigarette is enough, it will be able to continue exciting the senses for as long as 9 hours.4 How an individual will respond to the intake of dagga in this manner is unpredictable at the start, and even afterwards his behaviour may be modified by his mood and state of health. It is unusual for 2 or more smokers to respond similarly to the same cigarette.

It is not uncommon for the effects of alcohol and dagga to be compared, but this comparison can be faulted. The likeness is superficial only. Alcohol induces a contraction of the personality and is essentially a depressant and not a stimulant, whereas dagga is curiously enough both stimulant and depressant but in different areas. Dagga does produce drowsiness and even sleep if the smoker be left undisturbed, but it is also capable of astonishing augmentation of physical strength. What is known about the time of onset and the duration of these pleasurable sensations is significant where driving a car is concerned. To drink alcohol to the blood-level of carelessness is not necessarily a long undertaking and if this is followed by the drinker driving a car, then he does so with all his senses blunted as well as a degree of defective muscular co-ordination. Alcohol per se does not stimulate agreeable sensory perception, which dagga does, but by removing inhibitions it apparently expands the drinker's personality. Dagga in moderation need not inco-ordinate the neuromuscular system; but it does falsify impressions to render them enjoyable, and this is where dagga and the driver become a dangerous combination. But dagga plus alcohol in the driver is even worse.

Although the taking of dagga, in South Africa almost always by smoking, is an illegal act in this country, the control of the drugs is extremely inadequate—if legal prosecutions and convictions running into many thousands per annum are any indication (see below)—and it has become 'permissive' among the White 'élite' male youth of this country, whereas not so long ago it was only the 'poor whites' and non-Whites who were dagga smokers. Nowadays not only is it 'permissive', but among our younger citizens you are simply not 'with it' if you are not sociable enough to join in such delightful group activities! Any young man of 18 or so years of age, able to vote and drive a car, could, if he would, tell of friends or associates of his who indulge in the weed. High schools, colleges and universities have their habitués.

### CONCLUSION

I have no recent figures for prosecutions and convictions for the crime of being in the possession of dagga, but 21 years ago the breakdown of convictions for this crime for the whole of the Union as it then was, was as follows: Whites 185, Coloureds 2 950, Bantu 10 676 and Asiatics 205. It is most likely that the culprits were those resident in or near urban areas. There is no valid reason to believe that any diminution in the number of prosecutions and convictions-which 2 groups of civil offenders are practically identical—has taken place over these 21 years, and there is every reason to believe that with a rapidly growing population of all ethnic groups, together with a rise in the general standards of living, at a time when there is a strong drive for leniency or even condonation of erstwhile misdeeds, the incidence of dagga smoking has increased enormously. As the pedlars might say, 'It's been good for trade'. Cannabis addicts regard the smoking of hemp as a 'way of life'.

## SUMMARY

An attempt has been made to draw attention to a very probable lethal factor which could well be emerging onto our motor highways and prevalent mainly among our youth rising to manhood. This is the so-called 'permissive' smoking, although illegal, of dagga, marihuana, hashish, 'pot', 'grass' call it what you will. No solution to this probable problem is proposed; it is felt that an awareness of such a threatening situation will go some way towards its mitigation. An unloaded gun is no more lethal than a walking-stick. A 'loaded' driver of a motor car is dangerous indeed.

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