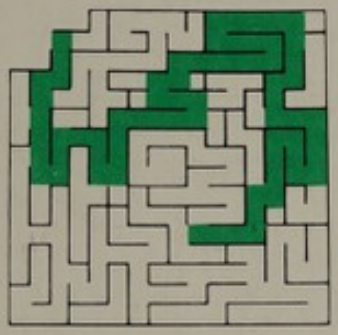
Cannabis : a discussion paper.

Royal Commission into the Non-Medical Use of Drugs
South Australia



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Royal Commission into the Non-Medical Use of Drugs
South Australia

CANNABIS

A discussion paper

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In this discussion paper, the term cannabis is used in two senses. In its general sense it refers to the cannabis plant and any preparations made from the plant, including the dried leaves and flowering tops, resinous material separated from the plant and refined oil (p. 100). In its specific sense the term refers to the dried preparations of the plant itself. This is distinct from cannabis resin, which refers to concentrated preparations of the resinous parts of the plant, or further refined material such as cannabis oil. The distinction may be important, particularly under the current law, but is not absolute. For example, the plant in its natural state contains resinous material and indeed cannabis in plant form may be of higher potency than resinous material derived from other plants (p. 100). The context will make clear in which sense the word is being used. We have preferred the term 'cannabis' to 'marijuana', which usually refers to the dried preparations of the plant, although the two are often regarded as interchangeable.

INTRODUCTION

The Commission has been appointed by the Government of South Australia to inquire into the non-medical use of narcotic, analgesic, sedative and psychotropic drugs or substances of dependence, not including nicotine or alcohol. The precise terms of reference are set out in Appendix B to this paper (p. 132).

In April, 1977, we issued a small booklet entitled *Some Questions*. This booklet asked questions on matters on which we felt we needed advice, information and opinions. Following publication of *Some Questions*, we received a large number of submissions and conducted an extensive program of hearings, public meetings and informal discussions. In January, 1978, we published a book entitled *Some Responses* which summarised the submissions and evidence presented to us. A list of submissions received by us appears in Appendix B to that book and a schedule of public meetings conducted appears in Appendix C to the book. In addition we have established a research program to investigate in detail certain issues arising out of our terms of reference.

The purpose of this document is to set out our tentative views on the regulation of cannabis use, a matter covered by our terms of reference. This paper is the second in a series of discussion papers which are designed to stimulate discussion on important topics within our terms of reference. The first paper, *Education*, was published in June, 1978. *It is important to stress that the opinions expressed in this paper are not our final opinions* and indeed the paper puts forward policy alternatives without choosing between them. Our recommendations will be put forward in our final report. We shall reassess the issues concerning cannabis in the light of comments we receive on the paper, further consultation within the community and the results of our research program. We therefore invite comments, critical or otherwise, on the matters discussed in this paper. We also intend to discuss the propositions contained in the paper with interested individuals, groups and organisations. Comments on the paper should be addressed to the Secretary, Royal Commission into the Non-Medical Use of Drugs, G.P.O. Box 221, Adelaide, S.A., 5001. The telephone number of the Commission is (08) 212.4521.

1 : CANNABIS—A MATTER OF VALUES

Most official reports on the regulation of cannabis begin by tracing the history of the medical and non-medical use of the drug. Then they provide some pharmacological, botanical and physiological information about its effects. Matters of this kind are, of course, important, and we consider them elsewhere in this discussion paper. But the responses we have received in submissions and at hearings suggest that our first focus should be different. We need to ask why cannabis has aroused so much concern and attracted such strong disagreement even on what appear to be purely scientific and medical matters.

Although cannabis has been used as a social (and work) intoxicant for many centuries, its widespread use as a recreational drug in Western societies is more recent. Use and distribution are now subject to criminal sanctions in most countries and an elaborate system of international controls has been established. There is international concern for the dangers associated with cannabis and this is reflected in the many government-sponsored inquiries that have been set up to investigate its regulation. The curious thing is that, overwhelmingly, these inquiries, which started with the monumental *Report of Indian Hemp Drugs Commission 1893 - 1894* (examining the position in British India) have reached strikingly uniform conclusions on the effects of cannabis use.* The official reports of the last 40 years include *The Marihuana Problem in the City of New York* (1944) (the La Guardia Report); United Kingdom Advisory Committee on Drug Dependence, *Cannabis* (1968) (the Wootton Report); the Canadian Commission of Inquiry into the Non-Medical Use of Drugs, *Cannabis* (1972) (the Le Dain Report); First Report of the (United States) National Commission on Marihuana and Drug Abuse, *Marihuana—A Signal of Misunderstanding* (1972) (the Shafer Commission); and the Board of Health Committee on Drug Dependency and Drug Abuse in New Zealand, *Second Report* (1973).

In Australia several official reports have examined the same issues: Senate Select Committee, *Drug Trafficking and Drug Abuse* (1971); Senate Standing Committee on Social Welfare, *Drug Problems in Australia—An Intoxicated Society?* (1977); New South Wales Joint [Parliamentary] Committee, *Memorandum Upon Drugs* (1978). While these reports have emphasised different matters and, as one would expect, have put forward a variety of recommendations, the conclusions on the effects of cannabis have been similar. Typically they conclude that 'the long-term consumption of cannabis in *moderate* doses has no harmful effects' on the user,[1] but that heavy and sustained use carries some risks. The Shafer Commission's statement is typical:

> . . . there is little proven danger of physical or psychological harm from the experimental or intermittent use of the natural preparations of cannabis, including the resinous mixtures commonly used in [the United States]. The risk of harm lies instead in the heavy, long-term use of the drug, particularly of the most potent preparations.[2]

*An exception is a United States Senate Subcommittee Report, *The Marihuana - Hashish Epidemic and Its Impact on U.S. Security* (1974) (the Eastland Committee).

The reports have consistently rejected theories that cannabis is addictive or that its use leads to violent crime or insanity, or results in progression to other harmful drugs.[3]

These consistent findings point to one of the striking features of the cannabis debate—the gap between the evidence and widely held beliefs. Respondents, in submissions and at public meetings, often stated that far too little is known about the drug and its effects to warrant reconsideration of current legal prohibitions. This approach seems to overlook the enormous quantity of scientific information which is available concerning the drug and its effects on users. (This is not to deny that there are gaps in our knowledge.) Similarly, even a cursory glance at the modern history of cannabis shows a repeated pattern of widely believed myths which often fly in the face of the available evidence. It seems that as discredited beliefs (such as cannabis being an addictive narcotic causing violent crime and insanity) are rejected, they are replaced by new myths (for example, that even casual use carries serious health risks to the user). Nor are myths solely the preserve of opponents of cannabis; supporters are equally capable of extravagant claims (for example, the belief that cannabis, taken in any quantity or any strength, is entirely harmless). Why, then, has the cannabis debate generated such intense feelings? Why have the prohibitions survived the discrediting of many of the theories originally used to justify them? And why is there now an insistent wave of demands for reassessment of the position?

There are no easy answers to these questions. But it is apparent that the debate has been more concerned with values and community attitudes than with the objective ascertainment of facts. It follows that even the objective ascertainment of facts does not avoid the need, in forming social policy, to make value judgments which will determine how these facts are to be weighed.

In Australia there has been no detailed historical study of the regulation of drug use. However, in the United States, as in a number of European countries, considerable attention has been devoted to the events that led to the imposition of criminal penalties and, more recently, to the pressures for reassessment of those penalties. That experience is not directly applicable to Australia, which has had a different social and political history. Nevertheless the well-documented history in the United States illustrates quite clearly how the debate, at least in that country, has had less to do with a rational evaluation of the evidence than with the interplay of complex social forces.

In their book, *The Marihuana Conviction: A History of Marihuana Prohibition in the United States* (1974), which grew from the work of the Shafer Commission, Bonnie and Whitebread point to the factors contributing to the proposals at the turn of the century to impose criminal penalties on certain drug-related conduct which had not previously been illegal. Influential groups then believed in the need for government and law to protect the morals of the nation. Legislation was then (and indeed still is) thought by some to be an effective tool for achieving moral reform

or for maintaining moral standards. (In Chapter 7, p. 60, we discuss the use of the criminal law to enforce morality.) The reformers saw habit-forming drugs as sources of misery which had to be purged from the environment. Their energies were directed both to narcotics and to alcohol, but a community consensus was achieved only in relation to narcotics. This was largely because, as Bonnie and Whitebread argue, the use of narcotics could be identified with minority groups and, therefore, classified as an 'alien' practice. Opium smoking was Chinese. The use of cocaine was identified with southern Negroes. Morphine came to be associated with the underworld. The early prohibition of cannabis by the American States, which commenced about 1915, coincided with a period of high Mexican immigration. That drug was seen as a Mexican import and the States first to respond were those west of the Mississippi—those with high Mexican populations. The imposition of criminal penalties attracted little debate because cannabis was classified with opium as a *narcotic*.

It is now clear that cannabis is *not* a narcotic. While this misclassification was not necessarily deliberate, since pharmacology was then a poorly developed science, it was a powerful factor in ensuring the enactment of prohibitions. These were imposed by individual American States (the Federal prohibition in the Marihuana Tax Act did not occur until 1937) with practically no public debate and no worthwhile research into the characteristics of the drug or the effects of its use. Of course the classification of cannabis as a narcotic not only shaped official policy, but became enshrined in legislation, including international conventions. The classification has also influenced Australian law and judicial practice, as well as the debate on policy (p. 34).

The history of cannabis control in the United States has to take account of the 'pivotal' role of the Federal Bureau of Narcotics, whose representatives tended to become spokesmen on scientific matters relating to the drug.[4] During the 1930s and 1940s the Bureau was instrumental in presenting evidence at both national and international levels that cannabis was a dangerous narcotic, which caused violent crime and insanity among users. However, more interesting for present purposes are the theories advanced for the breakdown, beginning in the mid 1960s, of the consensus in the United States supporting stringent cannabis laws.

For those who prefer to see changes in community attitudes as reflecting rational adjustment to more complete information, it might be thought that the breakdown of the consensus occurred because of new scientific data undermining the assumptions that justified the legal prohibitions. It seems more accurate to suggest that the interest in new (and indeed old) research, and in further research possibilities, was stimulated by cracks in the consensus, rather than *vice versa*.

The Shafer Commission attributed the questioning of cannabis laws in part to changes in the characteristics of the cannabis-using population—from 'outsiders' such as Mexican immigrants and other groups on the fringes of society, to people within the political and social mainstream, particularly those who were white, middle class and

educated.[5] As long as users could be seen to be members of insulated ethnic minorities, the drug could be associated in the minds of opinion-makers and most voters with crime, idleness and other antisocial behaviour. Similarly, while users lacked political power, the anti-cannabis consensus in the United States could go largely unchallenged; without any such challenge there was little reason for medical and scientific researchers to reassess orthodox theories on the social and health effects of cannabis use.

By the mid 1960s, the use of cannabis had become more widespread in the United States. The users included groups, particularly within colleges and universities, who had access to public opinion processes. The lifestyles of these users often (but not always) cast doubt on the relationship between cannabis use and the grave social and medical problems which it was presumed to cause. Of course the changed pattern of cannabis use was not the only factor contributing to the reassessment of the controls imposed on cannabis. By this time many restrictions on private behaviour, imposed through the criminal law, were coming under critical scrutiny. Within the United States, according to some commentators, the preference for cultural homogeneity (in part the product of depression and war) was beginning to break down. All of these developments contributed to a reappraisal of the laws, with greater emphasis being placed on the costs of prohibition policies (which were said to waste law enforcement resources better used elsewhere), the dangers of arbitrary exercise of police power, and the unfortunate effects of criminal convictions on otherwise law-abiding citizens. The reappraisal has prompted much of the recent scientific and sociological research into cannabis which, intentionally or not, has led to a re-examination of the foundations on which stringent control policies had been erected.

The point of this excursus into United States history is not to draw precise parallels for Australia. Here the history of controls over cannabis use has been very different. It is quite true that the early drug legislation in Australia, aimed specifically at opium users, was inextricably interwoven with racist attitudes towards the Chinese population (for example, the legislation was directed to opium, the drug of the Chinese, and not to other widely used narcotics, such as morphine). But there is no similar explanation for the imposition of criminal sanctions on cannabis use. The interwar period, which was the formative time for Australian cannabis laws, saw the enactment of State and Federal legislation designed to conform to the demands of international bodies. The background to the legislation is briefly traced elsewhere in this paper (p. 33). It is clear that, unlike the United States, the Australian prohibitions on cannabis were not imposed in response to the activities of identifiable pressure groups. Legislators knew little of cannabis despite their support for the imposition of stringent controls; their lack of knowledge was not surprising since there was no significant experience with the drug in Australia. It was enough that international organisations had called for controls and that the calls had been heeded by the United Kingdom Parliament, whose attitudes in

this as in other matters were of paramount importance to Commonwealth and State legislators. The Australian prohibitions on cannabis were derivative in both inspiration and form.

Recent experience in Australia has perhaps more in common with the United States although again the comparisons should not be pushed too far. Within Australia in the late 1960s and early 1970s it was still possible, though probably not justifiable, for most people to regard cannabis use as behaviour largely confined to readily identifiable groups, such as radical students, 'hippie' drop-outs and opponents of the Vietnam War. As long as this perception remained, cannabis users could be seen as threatening the values widely accepted by mainstream groups in the community, particularly the stress placed on honest labour and the distaste for political extremism.

As we explain later, there is surprisingly little reliable evidence on patterns of cannabis use in Australia (p. 20). Nevertheless, there is evidence that cannabis use, mostly of an experimental or casual kind, has spread *and has been seen to spread* to a broader cross-section of Australian society, although users remain predominantly young. This diffusion of use makes it more difficult to sustain hypotheses that depend, explicitly or implicitly, on the assumption that users are on the fringes of society. It also helps to explain the official readiness to re-examine current policies with respect to cannabis (a readiness not always extended to other illegal drugs). Like the Shafer Commission in the United States, we think that it is no accident that we have been appointed with terms of reference that include a reappraisal of cannabis law, at a time when use of cannabis appears to be more widespread than it has ever been, apparently extending to groups who are respectable and hardworking and clearly do not threaten the values on which Australian society is based.

The above qualifications being borne in mind, the history of cannabis prohibition in the United States has certain lessons for those appraising current laws in Australia, if only because the interplay of social forces can be seen more clearly and has been documented more completely there than in this country. The experience suggests that legislative responses to drug use in general and cannabis use in particular may be affected more by such things as the social status of users and the values and perhaps prejudices of more politically powerful groups in the community than by a careful consideration of the evidence concerning the pharmacological properties of the drug and its effects on users. This is not to say that rational evaluation of the evidence is impossible, but rather that in formulating policy on the regulation of cannabis (and other drugs), facts and values become intertwined.

One commentator[6] has pointed out that the question of whether cannabis is evil or beneficial, or something in between, is inherently unanswerable, since the answer given depends on the person or group to whom the question is posed. What one group sees as self-evident harm or recklessness others see as beneficial or even necessary. For example, a regular cannabis user may see the drug as an aid to creativity and self-

awareness—perhaps the 'true' reality—while opponents of the drug may see its effects, at best, as an escape from reality and a relinquishing of the user's responsibility to the community. Many of those actively involved in the debate seek support for their preconceived views and there is a variety of published data and opinion from which to choose.

> A man is not opposed to the use or legalization of marijuana because [he thinks] it leads to the use of more dangerous drugs, because it causes crime, because it produces insanity and brain damage . . . He believes these things because he thinks the drug is evil.[7]

While this observation overstates the position, there is ample material in the evidence and submissions presented to us supporting the view that the cannabis debate 'provides the occasion for ideological expression'.[8] Organisations or individuals often presented definite opinions on the harmful or benign qualities of the drug, citing only those studies or views that supported the position dictated by their philosophical or doctrinal perspective.[9]

The factual information available on cannabis, including the identification of those issues on which relatively little is known, has been presented by a succession of official bodies. We have also assessed that information (p. 15). Ultimately, however, any policy decision—whether or not it involves changes in the current prohibitions on use—must depend on value judgments on such matters as the role of the criminal law in regulating private behaviour and the extent to which the community should tolerate chemically induced alterations of mood as a form of recreation. Later in this paper we attempt to set out some of the principles that should guide policy makers in this area (p. 66). The first step towards developing a sensible approach to the regulation of drug use must be to disentangle facts from values.

References

1. Advisory Committee on Drug Dependence (1968), *Cannabis* (the Wootton Report), H.M.S.O., London, pp. 8-9, endorsing the findings of the Indian Hemp Drugs Commission and the La Guardia Committee.
2. First Report of the National Commission on Marihuana and Drug Abuse (1972), *Marihuana: A Signal of Misunderstanding*, U.S. Govt. Printing Office, pp. 65-66.
3. A summary of the findings of major reports is set out in the report of the Senate Standing Committee on Social Welfare (1977), *Drug Problems in Australia: An Intoxicated Society?* A.G.P.S., pp. 148-153.
4. Bonnie, R. J., and Whitebread, C., (1974), *The Marihuana Conviction*, University of Virginia Press, chs. 7, 10.
5. *Marihuana: A Signal of Misunderstanding, op.cit.*, pp. 91 ff.
6. Goode, E., (1970) *The Marijuana Smokers*, Basic Books, ch. 3, 'Marijuana and the Politics of Reality'.
7. *Ibid.*, p. 58.
8. *Ibid.*, p. 58.
9. The phenomenon was noted by the Senate Standing Committee on Social Welfare: *Drug Problems in Australia: An Intoxicated Society, op. cit.*, p. 142.

2 : THE POLICY CHOICES

It is important at the outset to present the policy choices that are open to us in considering the regulation of cannabis. In this connection the work of major inquiries into the non-medical use of drugs in Australia and other countries, particularly within the last decade, has been of immense value. The reports of these bodies have defined the policy issues and clearly explained the options that are open to legislators. Unfortunately, these options have not always been understood by those involved in the debate and a great deal of confusion has occurred when possible changes to the law have been canvassed. In particular, our respondents used the terms 'decriminalisation' and 'legalisation', in submissions and public hearings, in a variety of senses. They were often unaware of the very important differences that exist between the various models of control that might be adopted.

We do not think that the terms 'decriminalisation' and 'legalisation' are helpful in discussing the policy choices which may be available, and indeed they can be positively misleading. The confusion in terminology would of itself be enough to warrant avoiding these terms, but the terms themselves also fail to describe adequately the range of options warranting consideration. The choice is not simply between a model which relies almost entirely on criminal sanctions to control cannabis use and one which abandons the use of those sanctions altogether. Nor is the criminal law the only technique that can be employed as a means of controlling social behaviour such as the distribution and non-medical use of drugs.

For these reasons we have used other terms to describe the policy choices. The reports of other bodies and our own inquiries suggest that there are five major choices, although others are theoretically possible. These choices range from the present total prohibition model, under which all distribution and use of cannabis is prohibited, to a free availability model in which cannabis would be marketed and consumed with few legal controls. The purpose of this chapter is to outline the choices briefly; those we think worthy of closer investigation are examined in detail later in this paper.

OPTION 1 - THE TOTAL PROHIBITION MODEL

The current policy towards cannabis use in South Australia and in all other Australian States and Territories can be described as total prohibition. A combination of State and Federal legislation prohibits the cultivation, importation, production, distribution, use or possession of cannabis or its derivatives. Any person dealing in the drug, even without commercial motives, is liable to heavy penalties especially if the substance involved is cannabis resin. A person in possession of or using relatively small quantities of the drug is subject to less severe sanctions, but is nonetheless subject to

arrest and prosecution, and on conviction acquires a criminal record. The total prohibition policy in Australia owes its origins to the international control system established in the interwar period and the form of international treaties has heavily influenced the domestic legislation.

The scope of the legislation implementing the total prohibition model is very broad. For example, both the Federal legislation (mainly concerned with importing drugs into Australia) and the State legislation (concerned with domestic transactions) include reverse onus provisions, under which accused persons found to be in possession of more than stipulated amounts of cannabis bear the burden of showing that they did not intend to deal in the drug. Such provisions are most unusual in the criminal law and reflect the concern of legislators over drug offences. The legislation undergoes frequent amendments, particularly affecting penalties, as legislators seek to respond to what is seen as a need to curtail the supply and use of illicit drugs, including cannabis.

Some aspects of the total prohibition model have been undergoing significant changes in recent years. The penalty provisions now distinguish more clearly between behaviour involving physically addictive drugs and that involving cannabis, although dealing in cannabis resin still attracts severe maximum penalties. The courts, particularly in South Australia, have altered their sentencing practices to allow for relatively lenient treatment of minor cannabis offenders, particularly those convicted of simple possession of small amounts of cannabis. Nevertheless, the basic thrust of the prohibition approach, which is to regard cannabis use as undesirable behaviour to be controlled by restricting both supply and consumption, remains intact.

Because of the importance of the total prohibition model this paper examines the model in some detail. Chapter 5 examines the Commonwealth and State legislation affecting cannabis and the interpretation it has received. Chapter 9 assesses the social costs and benefits of the policy as applied to cannabis.

OPTION 2 - THE PROHIBITION/'CIVIL PENALTY' MODEL

This approach, which has been labelled as 'decriminalisation' in the United States, mitigates the harshness of the prohibition model by reducing the penalties for possession of cannabis for personal use or, in some cases, for non-profit distribution. Penal sanctions are applied to the commercial dealer in cannabis, but sanctions for possession of small quantities of cannabis are reduced to small monetary penalties and infringements are usually described as 'civil violations' (broadly equivalent to certain motor traffic infringements for which 'tickets' may be issued). By early 1978, 10 American States had followed this general approach, basically in an attempt to overcome what was seen as the harsh and arbitrary nature of the cannabis laws as applied to users, and to reduce sharply the costs of enforcing those laws through the orthodox criminal justice system.

California's revised law, which came into force on 1 January, 1976, is a good example of legislation of this kind.[1] Before this legislation was introduced, possession of cannabis could constitute a felony, even for a first offender, carrying a maximum penalty of from one to ten years' jail. The new legislation (Senate Bill 95) makes possession of one ounce or less of cannabis a 'citable misdemeanour'. The maximum penalty stipulated is a fine of $100 and the legislation dispenses with the need for arrest and pre-trial custody of the offender, since a police officer need only issue a citation. Possession of more than one ounce, otherwise than for the purpose of sale, is a misdemeanour, subject to a fine of $500 and/or six months' jail. Senate Bill 95 also provides for automatic destruction of records two years after conviction. The Bill includes what is commonly called an 'accommodation' provision, whereby the delivery of less than one ounce of cannabis by way of gift or for no financial renumeration is treated in the same way as simple possession. Possession of concentrated forms of cannabis, such as resin, remains a felony or misdemeanour, with a maximum penalty of three years' imprisonment. Sale of any form of cannabis for profit carries very heavy penalties indeed.

The following table, updated from one prepared by the Senate Standing Committee on Social Welfare in 1977, shows the current state of the law in those American States which have moved to reduce penalties applied to possession of cannabis for personal use.[2] Approximately one-third of the population of the United States now lives in States that have adopted the civil penalty approach towards simple possession of small amounts of cannabis.

TABLE 2.1 : CANNABIS CIVIL PENALTY LAWS - UNITED STATES

State	Max. Fine Imposed	Max. Amount Possessed	Criminal or Civil Violation	Effective Date
Oregon	$100	1 oz	Civil	5-10-73
Colorado[a]	$100	1 oz, but if public display, 0-15 days imprisonment	Class 2 petty offence— no criminal record	1-7-75
Ohio[a]	$100	100 grams (approx. 3½ oz)	Minor misdemeanour— no criminal record	22-11-75
California[a]	$100	1 oz	Misdemeanour—no permanent criminal record	1-1-76
Alaska	$100	Any amount in private for personal use or 1 oz in public[b]	Civil	1-3-76
Maine	$200	Any amount for personal use	Civil	1-3-76

State	Max. Fine Imposed	Max. Amount Possessed	Criminal or Civil Violation	Effective Date
Minnesota[a]	$100	1½ oz	Civil	10-4-76
Mississippi[c]	$100 - $250	1 oz	Civil	1-7-77
North Carolina[c]	$100	1 oz	Civil	1-7-77
New York[c]	$100	25gm (7/8 oz)	Civil	29-7-77

a. Distribution of cannabis by gift, or for no remuneration, is treated in the same way as possession in four States: California (up to 1 oz), Colorado (up to 1 oz), Ohio (up to 20gm) and Minnesota (up to 1¼ oz).

b. There is a rebuttable presumption that possession of less than 1½ oz is for personal use and possession of more than 1½ oz is with intent to distribute.

c. Second and subsequent offences may incur more severe penalties.

In August, 1977, President Carter announced that he supported amendments to Federal law to eliminate criminal penalties in favour of a civil penalty for the possession of up to one ounce of cannabis. Legislation of this kind would be largely symbolic, as prosecutions under Federal law for possession of cannabis are rare. Late in 1977, the United States Senate Judiciary Committee approved, as part of the proposed Comprehensive Federal Criminal Code, a new cannabis provision creating what is technically called a 'criminal infraction', rather than a 'civil infraction'.[3] Under this proposal, possession of up to an ounce of cannabis would result in no arrest, no imprisonment, and a maximum $100 fine. For a first and second offence, the criminal record would be expunged upon payment of the fine. For subsequent offences the proposed fine is $100-$500 and a temporary record, automatically expunged after 12 months. Possession in excess of one ounce would be a misdemeanour punishable with a fine of up to $10 000 and/or one year's imprisonment.

The American experience with the prohibition/civil penalty model provided the impetus for the major recommendation of the 1977 report of the Australian Senate Committee on Social Welfare which, if adopted, would place possession of cannabis for personal use in the category of a 'civil penalty' rather than a criminal offence. This recommendation involves a number of propositions affecting possession of small amounts of cannabis for personal use (but not including concentrated forms of the drug):[4]

(a) The offence not be defined in law as a crime.
(b) The penalty be solely pecuniary and be enforceable by attachment of property, imprisonment, or such other means as may be determined.
(c) The penalty to be a fixed amount.
(d) The penalty be at approximately the same level (that is, $100 to $150) now being imposed by the courts in most States.
(e) Court appearance be required at the option of the defendant or in the event of non-payment of penalty.
(f) So far as may be consistent with any Criminal Investigation Bill which may be enacted, police be directed not to fingerprint or photograph defendants.

(g) No record of conviction kept by the courts or the police shall be used in subsequent proceedings or in relation to any application by the offender for employment.
(h) A conviction should not, of itself, disqualify a person for employment.

As yet this recommendation has not been acted upon by the Commonwealth or any State or Territory.

OPTION 3 - THE PARTIAL PROHIBITION MODEL

Proponents of this approach emphasise the distinction between dealing in cannabis and possession or cultivation for personal use, and argue for the removal of all penalties, civil or criminal, for the second class of activity. A rationale commonly offered is that the community should pursue a policy of discouraging cannabis use by penalising commercial cultivation or dealing, but that sanctions should not be applied where the law is effectively unenforceable, costly to administer and liable to abuse by law enforcement authorities. The apparent inconsistency in punishing the seller but not the buyer is justified on the ground that this has long been the case with other offences, such as prostitution and certain forms of gambling, and that a practical assessment of social costs and benefits of the total prohibition policy dictates the differential treatment.

The partial prohibition model has been recommended by the Shafer Commission in the United States and the Le Dain Commission in Canada, but not yet implemented in either country. The key recommendations of the Shafer Commission, intended to operate in relation to State laws, are these:[5]

Private Activities

- Possession in private of [cannabis]* for personal use would no longer be an offence.
- Distribution in private of small amounts of [cannabis] for no remuneration or insignificant remuneration not involving a profit would no longer be an offence.

Public Activities

- Possession in public of one ounce or under of [cannabis] would not be an offence, but the [cannabis] would be contraband subject to summary seizure and forfeiture.
- Possession in public of more than one ounce of [cannabis] would be a criminal offence punishable by a fine of $100.
- Distribution in public of small amounts of [cannabis] for no remuneration or insignificant remuneration not involving a profit would be a criminal offence punishable by a fine of $100.
- Public use of [cannabis] would be a criminal offence punishable by a fine of $100.

Existing Law

- Cultivation, sale or distribution for profit and possession with intent to sell would remain felonies.

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* The model proposed by the Shafer Commission applies the same principle to cannabis in all its forms—that is, the Commission rejected distinctions based on the potency of cannabis or the form of the drug. See *Marihuana: A Signal of Misunderstanding*, Appendix, Vol. II, pp. 1171 - 1173.

The Shafer Commission made no specific recommendations concerning the cultivation of cannabis for personal use, but it seems that their intention was to maintain the prohibition on such cultivation. On the other hand, the Le Dain Commission recommended that

- Cultivation of cannabis should be subject to the same penalties as trafficking, but it should not be a punishable offence unless it is cultivation for the purpose of trafficking.[6]

If the partial prohibition model were implemented, including the Le Dain Commission's recommendations on cultivation, cannabis users would be provided with a legal means of obtaining cannabis, as well as being legally free to use the drug in private. Partial prohibition is one of the two major policy alternatives we consider in detail later (p. 83), although in some respects our approach differs from both the Shafer and Le Dain Commissions.

OPTION 4 - REGULATORY MODEL

Some submissions, of which the most detailed was that of the Cannabis Research Foundation of Australia,[7] suggested the introduction of a regulatory scheme to permit and control the marketing of cannabis. The Foundation argued for the creation of a government agency, possibly called the Cannabis Control Board, which would oversee the lawful cultivation of cannabis and the sale of cannabis products either through licensed retailers or State-run outlets. The cultivation and sale of cannabis would take place under the authority of the Board and subject to restrictions imposed by it, particularly in relation to the potency of the drug (presumably measured by THC content*). On the model usually proposed, sale to minors would not be permitted, nor would licensed retailers be permitted to advertise their products. The main advantages of this approach are said to be that the establishment of a legitimate channel of supply and distribution would allow control over the quality and potency of the drug (buyers would know the cannabis is not adulterated and would be aware of the THC strength); that the illegal market in cannabis would be substantially reduced if not eliminated; that the production and distribution of cannabis could be taxed and consumption patterns adequately monitored; and that the costs of present law enforcement policies could be significantly reduced by legitimising the distribution and use of cannabis. This model, too, is considered in more detail later (p. 88).

OPTION 5 - THE FREE AVAILABILITY MODEL

Some submissions and contributors at public meetings assumed that a relaxation of existing controls on cannabis would necessarily make the drug freely available without significant legal controls. As has been seen the models most often canvassed do not go nearly this far. However, it is theoretically possible to argue in favour of the withdrawal of virtually all legal controls and, subject to the usual taxes, consumer safeguards and possibly age requirements for buyers, allow cannabis in all its forms to

*See Appendix, p. 98.

be produced, distributed, sold and advertised quite freely. In fact no submission specifically urged us to take this course.[8]

VARIATIONS WITHIN OPTIONS

The five major policy options identified above are each sufficiently broad to allow for a number of variations within each option. For example, several options distinguish between possession of cannabis for personal use or for non-profit distribution (which would attract low penalties or no penalties at all), and possession for the purpose of commercial dealing (which would incur relatively heavy penalties). As far as criminal prosecutions are concerned, this apparently simple distinction could be implemented legislatively in at least three ways: first, by providing that possession of greater than a specified quantity of cannabis shall be *prima facie* evidence of an intention to deal in the drug, with the accused having the burden of rebutting the presumption (an adaptation of the existing law in South Australia); secondly, by requiring the prosecution to prove beyond reasonable doubt that the accused intended to deal in the drug, without stipulating any precise 'trafficable quantity' or that possession of any particular amount should be evidence of an intention to deal; or, thirdly, by requiring the prosecution to prove beyond a reasonable doubt an intention to deal in the drug, but stipulating that possession of less than a prescribed quantity shall be a complete defence to the charge.

While the differences between these formulations may appear to be slight, the choice might make a considerable difference to enforcement practices and the conduct of prosecutions, thereby influencing the way in which cannabis is distributed and used. It is therefore important to recognise that a preference for one policy option still leaves open many detailed issues for consideration in the drafting of any legislation designed to implement that alternative.

References

1. The following description is based on a report from the National Governors' Conference, (1977) *Marihuana: A Study of State Policies and Penalties*, vol. 3, pp. 104 *ff*.
2. Report of the Senate Standing Committee on Social Welfare (1977), *Drug Problems in Australia - An Intoxicated Society?*, A.G.P.S., Canberra, p. 158.
3. Senate Bill - s.1437.
4. Report of the Senate Standing Committee on Social Welfare, *op. cit.*, p. 165.
5. First Report of the National Commission on Marihuana and Drug Abuse (1972), *Marihuana: A Signal of Misunderstanding*, U.S. Govt. Printing Office, pp. 153-154.
6. Commission of Inquiry into the Non-Medical Use of Drugs (1972), *Cannabis*, Information Canada, Ottawa, p. 302.
7. Submission no. 135.
8. A medical model for cannabis is also theoretically possible. On this approach a user could obtain supplies for recreational purposes, on prescription from a doctor. Since the vast majority of cannabis users cannot be regarded as sick, and since health costs in Australia are already regarded as excessive, this solution is neither feasible nor justifiable.

3 : WHAT DOES THE EVIDENCE SHOW?

We have said that more is known about cannabis than participants in the debate often have been prepared to recognise. The pharmacological, scientific and medical evidence is now sufficient, if not to answer all questions arising out of cannabis use, at least to enable us to make certain judgments about the effects of the drug and the dangers associated with use. In Appendix A (p. 98) we examine the evidence in more detail, although this examination is itself only a relatively brief survey of a vast body of evidence. In this chapter we summarise the evidence.

1. *Cannabis sativa* is a hardy plant, readily grown in the Australian climate. Many other drugs also come from naturally occurring plants. This does not alter the fact that it is a drug and its effects are due to the active ingredients of the plant, mainly $\triangle^9$-tetrahydrocannabinol (THC) (p. 98).

2. Cannabis is prepared and sold in a number of different forms depending on the country of origin and the manner of preparation—the dried plant, resin and oil. These preparations vary considerably in their potency because of the differing concentrations of the resin content in them and therefore the amount of THC (p. 100).

3. Cannabis is an old, not a new drug. Nevertheless, its use in Australia (and other post-industrial societies) is mostly new and most of the research into its pharmacology and effects dates from this recent period. There are many other psychotropic drugs which we also use (p. 98).

4. THC is a psychotropic drug, that is, its main action is on the higher centres of the brain and it acts to alter mood. It is a euphoriant, but its specific action is slightly unusual, being in part like a hallucinogen (that is, it alters sensory perception) and in part like a hypnosedative (that is, it produces relaxation and sedation) (p. 102). Its action is dose-related (that is, a larger dose has a stronger effect). In this respect it is like any other drug, and while the 'set and setting' in which the drug is used naturally influence the effect of a given dose, it seems highly likely that the main differences in action of the drug are due to differences in dose (p. 103). The drug's potency is always questionable in Australia because the drug is obtained illicitly. In addition potency varies because the drug comes in natural form rather than as a synthetic derivative.

5. A number of acute effects have been investigated. It seems that some of these can be explained in terms of unfavourable set or setting for use of the drug (p. 104), while others can be explained by the untoward effects of an unexpectedly high dose (p. 103). In addition, side effects may very occasionally be due to an excessive dose (p. 104). The lethal dose of THC is so high that death from overdose is extremely unlikely (p. 107).

6. Since cannabis is mainly smoked, its use may well be associated with respiratory disease (p. 126). It is also possible that cannabis may enhance the toxic effect of alcohol on the liver (p. 127).

7. The precise site of the action of cannabis on the brain is not known, but it appears to be distinct from that of the opiates. Unlike alcohol, cannabis has remarkably few sites of action in the body, other than the brain (p. 101).

8. A given dose of THC is distributed quickly to various tissues in the body, from which it is slowly released. When it reaches the liver, it is rapidly metabolised (broken down into related chemical substances). Lung and possibly other tissues, perhaps including the brain, may also metabolise THC. Thus, THC acts quickly but is eliminated rather slowly (p. 101).

9. By virtue of its action cannabis alters those cognitive and perceptual functions which, for example, are important in driving. The precise extent of the risks involved in driving (or performing similar activities) under the influence of cannabis is as yet unclear. However, this does constitute one major potential source of harm to cannabis users and to other people in the community (p. 117).

10. If cannabis is used together with alcohol, the effects of the two drugs are additive—that is, stronger than the effect of either by itself. This is the second main risk of occasional use, at present, and could be a greater risk should wider use occur (p. 119). Moreover, while cannabis appears, on present evidence, to be less toxic to body cells than alcohol or tobacco, this of itself is not completely reassuring since there will be few regular users who are not also users of alcohol and tobacco.

11. The most significant aspect of the pharmacology of THC is the simple fact that it is soluble in fat and relatively insoluble in water. Several things follow from this.

(a) Cannabis is usually smoked and this is convenient in the sense that THC is readily absorbed when inhaled, and so its mood-altering action starts rapidly, requiring only the time for the drug to circulate from lungs via the heart to the brain. When used in this way, the effects of the drug do not last a long time (p. 102).

(b) Other possible ways of using the drug are inconvenient. Eating cannabis provides unreliable absorption, slower onset of action and a more prolonged effect. Intravenous administration provides no advantage since a rapid onset of action can be obtained by smoking. In any event, intravenous administration is difficult except in experimental situations (p. 102).

(c) While the therapeutic or strictly medical potential of cannabis is being explored anew (having been known in the 1930s), one probable limitation to this lies in its unreliable absorption from the digestive tract. There are plenty of other 'pills' to provide relaxation. Special forms of the

drug (eye drops, asthma inhalations, etc.) may prove useful in the future after further research (p. 115).

(d) The very convenience of inhalation provides a third major disadvantage of the drug, in that its use does nothing to discourage the habit of smoking, with its attendant health hazards (p. 126).

(e) The fat solubility also suggests that THC may be stored in body tissues, notably brain cells. The possibility of brain damage must therefore be considered. The evidence here is inconclusive since such an effect, if it occurs, can be expected to be very uncommon. It has been shown that heavy long-term cannabis use can be compatible with good health and a conventional lifestyle. But on the other hand, only large-scale studies can properly exclude or establish the risk of brain damage from chronic cannabis use (p. 122).

12. Other chronic effects which have been discussed can be assessed as follows. A given dose of THC does have a slight effect on the electro-encephelograph which records electrical activity in the brain. This effect is short-lived and may be of no clinical significance. There is very little evidence that THC can produce long-term changes in mental functioning (p. 124).

THC does not appear to be teratogenic, that is, it has not been shown to cause abnormalities in the developing human foetus (p. 125). (However it should be stressed that drugs of any sort should be avoided in the first three months of pregnancy.) THC has some effect on artificially isolated body cells that belong to the immune system. There are conflicting reports on this matter, but there does not appear to be any clinical or epidemiological evidence that cannabis use increases susceptibility to infectious diseases.

14. The molecular structure of THC is unlike that of the opiate narcotics. While some degree of tolerance to the effects of cannabis may occur (p. 105), physical dependence, so readily demonstrable with the opiates, barbiturates and alcohol, has not been demonstrated in the situations in which the drug is usually taken. Psychological dependence upon the drug may occur to some extent but is of a very different order from that which occurs with opiates.

15. The relationship between the use of cannabis and other more dangerous drugs is more complex than suggested by any simple 'progression' theory. The great majority of cannabis users do not 'progress' to the use of narcotics. Heavy cannabis use is sometimes but not always associated with heavy use of other illicit drugs. While most users of narcotics also use cannabis or have done so at some time, this cannot be said to prove that use of the one causes use of the other. For those using a range of drugs, licit and illicit, the sequence in which such drugs are taken is not uniform. Social, cultural and personality factors are more important than initial use of cannabis in determining a pattern of drug dependence (p. 106).

16. In summary, cannabis contains a psychoactive substance, which is not a narcotic and which, in moderate doses, is a euphoriant. It is not an

addictive drug and in moderate doses causes no serious harm. However, it does have effects on skills such as those required for driving, and its action may be increased when taken in combination with other drugs. It is almost certainly harmful to some extent in high doses. It would therefore seem that the principal interest of the community lies in discouraging irresponsible use (for example, use in combination with alcohol, or with the driving a motor vehicle) and excessive use (for example, the regular, sustained use of high potency material). It is striking that in 1894 the Indian Hemp Drugs Commission stated its policy in very similar terms:

> The policy advocated is one of control and restriction, aimed at suppressing the excessive use and restraining the moderate use within due limits.[1]

A CAUTION

A statement of conclusions in this form does not resolve all the policy questions we face. The evidence we have received can be interpreted to support a range of social policies, depending on the perspective of the observer. Information, particularly in such a sensitive area as non-medical drug use, cannot be presented in a vacuum. The recipients of the information have their own values and priorities and they will evaluate the material in the light of those values and priorities.

This point was explained to us in a research report which discussed the giving of factual information on drugs in the context of attempts to change behaviour patterns.[2]

> The way people feel about an issue and related issues, as well as what people currently believe to be true, influences their response to new information . . .
>
> If information is presented which does not fit readily into the existing belief-attitude system a number of strategies may be used to deal with it. The information may be rejected as irrelevant or unimportant, distorted so that it fits existing preconceptions, or used as a stimulus to seek further information in an effort to decide whether to accept or reject it. The first two strategies are more likely to be used than the third . . .
>
> An example of the way in which the presentation of factual information alone is of limited value when influencing behaviour [is this]. If it was to be shown from a well-executed survey, that marijuana was in common use in Adelaide this would confirm the views of those supporting and condemning its use. Both groups would feel impelled to follow opposing actions based on the same information—one group seeking law reform of a law perceived to be unenforceable, and the other seeking increased penalties.

Similarly, those who regard the use of cannabis as an uplifting or enjoyable experience can interpret the evidence we have presented as supporting the conclusion that legal controls on cannabis should be relaxed. They could have drawn the same conclusion from nearly all the reported inquiries cited on p. 2. It is, after all, clear that cannabis is not as harmful as is often believed and the risk of excessive or irresponsible use may well be seen, within a free society, as insufficient to justify total prohibition of the drug. On the other hand, someone taking the view that a 'new' recreational drug which may have some harmful effects should not be accorded any

form of legal approval, would find ample material in the evidence we have presented to support his or her position.

Clearly cannabis cannot be shown to be completely harmless, and irresponsible or excessive use does carry some risks for the user and other people in the community. It is not necessary for a person holding this view to rely on unscientific or exaggerated evidence (although in the heat of the debate this has often happened). There is enough respectable evidence to warrant the view that cannabis may be harmful in certain circumstances, and this is sufficient, given a particular set of values, to warrant retention of the policy of total prohibition.

It follows that we must evaluate the conclusions we have reached on the evidence in the light of the values and attitudes we think are important. The fact that cannabis can be harmful in certain circumstances but is not as harmful as has often been thought, does not enable us to answer the social policy questions without further analysis. It is necessary to examine what is known about the extent and patterns of use, the means by which the community has sought to implement a policy of discouragement of use, and the costs and benefits of that approach. Since the major technique employed to control use is the application of sanctions to dealers and users, careful attention must be paid to the success of the criminal law in meeting its objectives and to whether different forms of control might be equally or more satisfactory.

References

1. *Report of the Indian Hemp Drugs Commission, 1893-1894*, Simla, p.359.
2. N. Kennedy (1978), 'The Non-Medical Use of Drugs Within the Community: Social and Educational Implications', research paper, Royal Commission into the Non-Medical Use of Drugs, S.A., unpublished.

4 : EXTENT OF CANNABIS USE

One of the more difficult aspects of our inquiry has been to gather evidence on the extent to which drugs are used for non-medical purposes, and the patterns of this use. Studies of the extent of use of cannabis, in particular, have been neglected in Australia. Although a number of surveys have investigated this question, the findings have often been inconclusive and sometimes contradictory.

If the effects of cannabis use were not the subject of wide debate in both professional and community groups, would the public or this Commission seek to know the extent of cannabis use? After all, precise information on the extent and patterns of use of other mood-altering drugs is not available and has seldom been sought. But, of course, use of these drugs has not widely been considered to be a problem. On the other hand, the question of control of cannabis use has been and continues to be a matter of controversy. This has generated a concern to determine the extent and patterns of use of cannabis, although the motives for acquiring this information may differ. Those opposed to current policies tend to look to empirical studies to provide evidence of the futility of an approach that relies on the criminal law to curb use. Others who regard cannabis use as harmful to the individual and to the community may see the studies as justifying the allocation of more law enforcement resources to control illicit drug use, or possibly as suggesting the need for greater emphasis on education and rehabilitation programmes for users.

From a policy-making perspective the information is important if for no other reason than to shed light on a contentious issue. If the information is reliable it does assist in judging the efficiency of a policy that uses the criminal law as an instrument of control, although as we explain elsewhere our own values must influence these judgments. Information on patterns of use also may be important in assessing the health concerns surrounding cannabis since these depend to some extent on the way in which it is used. Studies are particularly valuable if they clarify changes in use patterns over time. Too often law enforcement statistics, which show a fairly rapid increase in the number of apprehensions for cannabis and other drug offences, are used to support the proposition that use, and therefore the 'problem' is increasing. Police and court statistics, however, are affected by many factors other than variations in usage patterns, such as changes in enforcement policies, allocation of fewer or greater resources to the police and even changes in administrative practices with respect to prosecutions.

In this chapter we provide a critical assessment of studies conducted in Australia into the extent of cannabis use. Such an assessment is important since the information presented in the studies often requires careful interpretation, and conclusions need to be understood in relation to the inherent difficulties of research into the extent of drug use. While we are sometimes critical of methodology or the conclusions drawn in surveys, this

is not intended to detract from the quality of much of the work that has been carried out. Research in this area is particularly difficult and some studies, such as those of the New South Wales Health Commission, can properly be regarded as pioneering in this country.

DEFINITIONS OF USE

As in many other areas of social concern, research into the use of cannabis has been fragmentary. Although a number of studies have been carried out it is still difficult to obtain an overall picture of cannabis use patterns. One reason for this difficulty is the uncertainty which surrounds the definition of drug use in general. While most studies discuss the prevalence of drug use in a manner which allows some comparisons to be made, discussions of recency of use and the patterns of use are less easily compared because of different forms of questioning or different definitions of use. Before reviewing evidence on cannabis use it is necessary to discuss the categories of use which have been employed in Australian research.

The number of people who admit to having used or tried cannabis *at any time in the past* has frequently been reported as the rate of 'ever use'. This, however, is hardly a precise measure of past prevalence, because 'ever use'does not cover a definite period of time, whereas past prevalence should refer to a specific period of time. 'Ever use' cannot be an accurate measure of either how recently cannabis has been used or the intensity of use. It does, however, provide an estimate of how many persons are willing to admit participating in an unlawful activity, but this may be less a measure of drug use than a reflection of permissive attitudes towards cannabis in society. Hasleton[1] argues that changing attitudes may explain the reported increase of cannabis use. He suggests that the true number of 'ever users' may not have changed over recent years, but the number of persons willing to admit 'ever use' has increased because of more permissive attitudes towards cannabis. If Hasleton is correct the discussions of 'ever use' of cannabis over time are not very helpful. Reported 'ever use' can only be an indicator of the number of persons willing to admit to use of cannabis.

Another aspect of cannabis use often discussed in reports is 'current use'. The difficulties referred to with the notion of 'ever use' are compounded when one considers 'current use'. 'Current use' can mean use in the last day, week, month or longer, depending on research design. However, it does not tell us the number of new users within a particular time span, nor does it precisely measure the number of cannabis users—for example, some people who use cannabis regularly and intend to continue to do so, may not have used the drug within the specified time span. There has been a lack of clarity surrounding the nature of results on 'current use'. In fact, a precise measure of 'current use' may not be feasible or even necessary in understanding cannabis use.

After prevalence of use and recency of use the next question must concern patterns of use. Generally, investigations of patterns of use have been confined to discussions of frequency of use, that is, the number of

times cannabis has been used. Other researchers have also investigated the intensity of use by asking how many joints have been smoked, either in general or on particular occasions. This approach does not give a clear picture of the intensity of use because of variable potency and the common practice of sharing of joints. Neither frequency nor intensity gives a complete picture because patterns of use may be affected by inaccurate reporting and by the setting and mode of use.

A major reason for discussing patterns of use is to explore any distinction in the kinds of use which may occur. The extent of use of cannabis is not in itself sufficient to distinguish types of users. It has been postulated[2] that there is a typology of behaviour for cannabis use, four groups of users being identified: experimental, casual, regular and heavy. Some Australian researchers have used this approach in interpreting these results. However, the existence of these categories of use has not been established, but rather assumed. For example, an experimental user is usually assumed to have used on only one or two occasions, but could actually have used on many occasions, with experimental intent. Questionnaire designs have not adequately explored motivations for use and, therefore, no definite categories of users can be described from the available studies.

GENERAL POPULATION STUDIES

One of the earliest surveys of extent of drug use in Australia was by George[3] in the Sydney suburb of Manly in 1971. George sampled 659 persons between the ages of 14 and 65 years and completed interviews with 639 of them. The sample was drawn from electoral rolls and all persons living in the selected households were interviewed. The sampling method may have affected the results by inadvertently creating a number of groups of interviews rather than a random distribution. Interviews were conducted by trained interviewers in person-to-person situations.

Nearly 9% of all the persons sampled by George claimed that they had tried cannabis. Nearly 25% of the sample population between 19 and 25 years of age admitted to ever using cannabis. George apparently did not question her respondents about recency of use, but her report does provide some information on the patterns of use. Only half of the respondents who had reported ever using cannabis admitted continuing use of cannabis. Of this group of 25 persons, half claimed to use cannabis less than once per month and the others to use cannabis occasionally on a weekly or monthly basis. The results of George's Manly study suggest that in 1971 cannabis use was more prevalent among younger age groups than among older persons, and that few of the admitted users group continued to use cannabis and even fewer used it more than once a month.

George[4] duplicated the Manly study in 1973 in a western suburb of Sydney. Results showed a lower prevalence of cannabis use, although 'ever use' among those aged about 20 years was similar to that found in Manly.

An Australia-wide survey of drug use was carried out by the Roy Morgan Research Centre[5] in 1977. Morgan sampled 2207 persons aged 14 years and

over in August, 1977. The results of this poll show that 12% of respondents 14 years of age and over had ever used cannabis. Among specific age groups, 19% of respondents aged 14 to 19 years, 29% of respondents aged 20 to 29 years and only 9% of respondents aged 30 years or above had ever used cannabis. A similar poll had been conducted in 1973 and 'ever use' of cannabis among similar age groups had uniformly risen by 7% between that year and 1977.

Of the people sampled by the Morgan poll in 1977, only 3% admitted having last used cannabis within the month before the survey. A further 5% admitted last using cannabis between a month to a year before the survey and 4% admitted last using cannabis more than a year before the study.

The Morgan polls did not ask any questions about patterns of use of cannabis. The 1977 poll, however, did indicate that 12% of the population surveyed had ever used cannabis and that most of the admitted users had last used cannabis within the previous twelve months. Only one-quarter of the 25% of respondents between 14 and 34 years who admitted cannabis use had last used cannabis within a month of the survey.

Another general population study of cannabis use was carried out in 1977 by the Victorian Division of the Young Liberal Movement of Australia.[6] Members of the Young Liberal Movement interviewed 6411 persons between the ages of 13 and 30 years in the Melbourne area. The survey was a street poll and no details of locations or overall response rates are available. Despite problems of technique and sampling which occur with this type of survey, the results, although somewhat unreliable, are still of interest. Thirty-seven per cent of the people questioned admitted to ever using cannabis. 'Ever use' of cannabis by specific age groups was found to be 26% of 13 to 17 year olds, 42% of 18 to 21 year olds, 47% of 22 to 25 year olds and 37% of persons 26 to 30 years of age. These figures suggest that a substantial number of people have used cannabis at least on one occasion. Unfortunately, the survey provided no information on recency of use or patterns of use.

A study of drug use among women in Hobart was carried out by Carington-Smith in 1974.[7] Although not a total population study in the general sense, her study is worth considering because it concerns drug use patterns of a large section of an urban population. Carington-Smith interviewed 500 women between the ages of 18 and 60 years in the first half of 1974. Interviews were carried out by trained interviewers in a personal interview situation. A 10% refusal rate and the sampling problems of over or under representation of different age categories (discussed by Carington-Smith) must to some extent affect the reliability of the results, but they are still of interest.

Four per cent of the women sampled by Carington-Smith admitted using cannabis. Of these 20 women, 13 admitted using cannabis at the time of the study. Only three of the admitted recent users of cannabis reported using the substance once a month or more, the remainder using cannabis infrequently. The small number of admitted cannabis users in this study

make any conclusion doubtful. On the evidence, however cannabis use amongst Hobart women between 18 and 60 years of age appears to occur only infrequently.

The wide differences in the results obtained by these general population studies illustrate the difficulty that confronts any attempt to summarise the extent of cannabis use in Australia. The studies cited have used widely different techniques which undoubtedly have contributed to the widely different results. Which is the most correct? The Morgan poll is likely to be the most accurate of the studies mainly because of better sampling techniques and more experience in survey work. However, not enough is known about the methods used to assert this without qualification. Results of the other studies may be equally correct.

What can we learn from these general population studies? Taking into account Hasleton's hypothesis on permissiveness[8] and its relationship to admission of cannabis use, it would be reasonable to suggest that between 10% and 20% of the general population between the ages of 14 and 60 years may have used cannabis on at least one occasion. Carrying this proposition further, the studies of drug use carried out suggest that between 2% and 12% of the population may have used cannabis within the last month. Use of cannabis is, however, likely to be infrequent and on an occasional basis only. It is not yet possible to make any more specific claims about the use of cannabis amongst the general population because of a lack of adequate information. The wide range of results illustrates some of the problems researchers have had in categorising use.

One aspect of the general population studies which can be examined in more detail is drug use amongst young people. The population studies suggest a high prevalence of cannabis use amongst young people. There have been a number of drug use surveys in Australia which deal with young populations.

AT RISK SURVEYS

Survey of groups 'at risk' (the special population survey) has been by far the most popular technique employed in Australia in examining drug use. While there have been few studies surveying total populations, numerous Australian studies have examined special populations. This emphasis reflects the community and government concern with the 'drug problem', particularly as it relates to children, students and other vulnerable groups. There are also practical reasons for researchers to prefer special population surveys. In Australia the emphasis on surveys of particular populations has been connected with the report of the Senate Committee on Drug Trafficking and Drug Abuse (1971), which recommended funding for surveys in schools as part of its discussion of drug education programs. Special populations, such as tertiary or secondary school students, are also more readily accessible than general populations and, therefore, the costs of surveying them are very much less.

Perhaps the most surveyed population in Australia, in relation to drug use, has been secondary school students. Even here survey results are not available from all States, and even when they are available, they are often not comparable because of differences in methodology and the form of questioning of respondents.

In Sydney the Health Commission of New South Wales has conducted surveys on drug use and abuse among secondary school students in 1971 and 1973.[9] The surveys were of young people from secondary schools and art schools, technical college students, day matriculation students, nurses, psychiatric nurses, prisoners, probationers and delinquent youths. Some results of the studies are shown in Table 4.1. 'Ever use' of cannabis by some of the groups studied is high.

TABLE 4.1 : CANNABIS USE IN NEW SOUTH WALES, 1973[a]

Population	Ever used (%)	Given up (%)	Less than Monthly (%)	Monthly (%)	Weekly (%)	Most days (%)
Form 4 secondary students	14.8	4.9	3.3	3.1	2.4	1.0
Form 6 secondary students	19.2	5.8	5.1	4.8	3.0	0.5
Trade school students	39.4	10.8	7.4	7.4	11.3	2.7
Day matriculation students	45.3	11.9	12.2	10.3	9.5	1.3
Art school students	63.8	15.8	19.9	13.4	11.2	3.5
Nurses (general)	22.9	11.2	4.2	3.6	3.5	0.2
Nurses (psychiatric)	45.1	11.7	8.2	9.8	11.2	5.3

(a) from Health Commission of New South Wales (1976), *Trends in Marihuana Use in New South Wales 1971 to 1973*. Division of Health Services Research, Report No. 76/4, p. 36.

The results of the New South Wales Health Commission's study show that the extent of use was high among some youth groups, particularly trade school students, day matriculation students, art school students and psychiatric nurses. Admitted use by respondents among these groups exceeds 30% of the respective populations.

An interesting feature of the Health Commission findings is the universal drop off in cannabis use. Approximately 3 out of every 10 admitted users of cannabis in all population groups claim to have stopped using.

Table 4.2 shows percentages of current cannabis users in New South Wales as presented by the N.S.W. Health Commission. This table illustrates some of the difficulties of definition referred to earlier, in that the results require careful interpretation. In this study 'current users' included respondents who admitted ever using cannabis *and* who stated that they had not permanently given up use of the drug. Therefore, the accuracy of the table depends on the reliability of the respondents'

assessment of their user status. The information in the table is used by the Health Commission as a measure of the prevalence of cannabis use, but as such it must be regarded as somewhat imprecise. This is because the table is based on questions that do not specify a definite time period for use.

TABLE 4.2 : CURRENT CANNABIS USERS - NEW SOUTH WALES 1971, 1972 AND 1973[a]

	1971 (%)	1972 (%)	1973 (%)
Form 4	6.1	8.9	9.8
Form 6	7.1	10.9	13.5
Trade school	19.5	26.1	28.8
Day matriculation		29.7	33.3
Art school		41.5	48.0
Nurses (general)		9.6	11.5
Nurses (psychiatric)		33.6	34.6

(a) from *Trends in Marijuana Use in New South Wales 1971 to 1973, op cit.*, p. 34.

In discussion of results the New South Wales Health Commission concludes that although admitted use of cannabis has increased over the period of their surveys there has been no proportional increase in the numbers of heavy users of cannabis. They defined heavy users as 'those who smoked at least occasionally during the week . . . at least 3 joints or pipes on each occasion'.[10]

The New South Wales Health Commission studies show a relatively high prevalence of cannabis use amongst all the sampled populations. Their results suggest that approximately one-third of young persons who use cannabis have discontinued use of the substance. Unfortunately, the results cannot tell us whether those persons who discontinue using cannabis do so after one or two experimental encounters or after continued occasional use. Of those young people who admitted to continuing use of cannabis a high proportion used cannabis once a month or less. There are few admitted users who could be described as heavy users.

Other drug use research was carried out in Melbourne by Krupinski and Stoller in 1971[11] and later repeated by Graves in Ballarat in 1974.[12] Krupinski and Stoller sampled fifth form secondary school students, apprentices, students who left school before reaching fifth form, first and third year tertiary students, and student nurses. A further sample was taken from young persons under 23 years employed in various occupations. Unfortunately, the response rates obtained in this research limit the reliability of the results. The authors also acknowledge some sampling problems which must further affect the results. Table 4.3 shows some results from this study.

TABLE 4.3 : CANNABIS USE IN VICTORIA 1971[a]

	Non-user (%)	Once or twice (%)	3 - 4 occasions (%)	5 - 19 occasions (%)	20 - 49 occasions (%)	50 + occasions (%)	Not known (%)
Secondary	88.8	4.5	2.3	2.7	0.8	0.8	0.1
Tertiary	76.8	5.9	3.6	6.6	2.7	4.2	0.2
Working youth	83.9	3.9	2.3	3.3	2.3	3.9	0.4
Total	83.6	5.0	2.8	4.3	1.7	2.4	0.2

(a) from Graves, G. (1973), 'Epidemiology of drug use in Melbourne', in Krupinski and Stoller (eds), *Drug Use by the Young Population of Melbourne*, Mental Health Authority of Victoria, Special Publications no. 4, Melbourne, p. 27.

Results from the various populations sampled, as described above, were grouped into the three categories shown in Table 4.3. The secondary group consists of fifth form secondary students, apprentices and school leavers. The tertiary category combines results from students attending tertiary institutions and from student nurses. The sample of working youths makes up the third category.

Eleven per cent of the secondary group admitted to ever using cannabis; over half of these admitted users had used on less than four occasions. Admitted ever use in the tertiary category was higher, 23%, and more than half admitted use on more than four occasions. Sixteen per cent of the working youths admitted ever use and again over half admitted use on more than four occasions.

Results from Krupinski and Stoller's work show a similar prevalence of admitted use of cannabis as found later in New South Wales by the Health Commission's studies. The only finding relevant to recency of use is that half the admitted tertiary cannabis users reported use within the previous month. The patterns of use shown from this work suggest that nearly half of all admitted cannabis use was on four occasions or less and that most of the persons sampled had used cannabis on less than 20 occasions. Admitted use amongst the tertiary level population was higher and heavier than use amongst the other populations.

As mentioned, this study was repeated in Ballarat in 1974 to ascertain drug use patterns amongst the youth population of a non-metropolitan centre. The results were similar to those found in Melbourne.

Surveys of drug use among secondary school populations have also been carried out in Brisbane and Canberra. Turner and McClure[13] studied drug use amongst grade 6 and grade 12 students in Brisbane in 1974. Questionnaires were administered by a teacher to groups of students in a classroom situation. Over 3000 questionnaires were completed in this manner. Results of this study are shown in Table 4.4. Some students in all grades sampled admitted ever use of cannabis and some admitted current use.

TABLE 4.4 : CANNABIS USE AMONGST BRISBANE SCHOOL STUDENTS 1974[a]

	Proportion of Users in Various School Grades Sampled						
	Primary			Secondary			
	6	7	8	9	10	11	12
Ever used cannabis	2.2	2.2	2.6	3.8	6.3	11.0	17.6
Current use of cannabis	1.4	1.1	1.6	2.2	4.0	6.8	11.5

(a) from Turner, T. J. and McClure, L. (1975), *Alcohol and Drug Use by Queensland School Children*, Research Branch, Department of Education, Queensland, pp. 65, 68.

Turner and McClure report on admitted cannabis users' frequency of use. These results show that 20% of the admitted cannabis users used cannabis more than once or twice a week. Fifty per cent of admitted users claimed to use cannabis once a month or less. These results reveal something about the patterns of use of cannabis amongst the admitted users.

Irwin's study of Canberra secondary school students in 1974 similarly reports admitted cannabis use by secondary school students from different forms.[14] Table 4.5 shows the prevalence of drug use amongst the population surveyed by Irwin.

TABLE 4.5 : CANNABIS USE AMONGST CANBERRA SECONDARY STUDENTS 1974[a]

	Form One (%)	Form Two (%)	Form Three (%)	Form Four (%)	Form Five (%)	Form Six (%)
Boys	0.5	2.1	4.2	7.4	7.9	10.9
Girls	0.5	0.7	4.9	6.4	9.9	8.8

(a) from Irwin, R. P. (1976), *Drug Education Programs and the Adolescent in the Drug Phenomena Problem*, Australian National University Drug Education Project, Australian National University, Canberra, pp. 4.3, 4.4

Irwin's study does not provide much other material relevant to this report, although the study itself reports in depth on the use of a range of other drugs and the impact of drug education.

In light of comments made earlier, what can be learned from these studies of school age populations? In total they suggest that perhaps 10% of senior secondary school students have ever used cannabis. This proportion may be higher or lower in different school populations, depending upon the setting. Apart from prevalence, the studies of secondary students tell us

little. There is little information available about recency of cannabis use; what there is suggests that much of the cannabis use by secondary students is comparatively recent. The surveys of secondary school students show that much of the use of cannabis is occasional—on a monthly basis. There is no evidence to suggest widespread use of cannabis by secondary students on a daily or even a weekly basis. While it may be fair to hypothesise that many of the occasional users of cannabis, including those who claim to have stopped using, are experimental users, there is no direct evidence to support such a hypothesis. The lack of detailed information about recent use prevents any conclusion being drawn on that question.

One must take care when considering the results from surveys of school age populations in time series, which suggest an increase in use. It is likely that there are a number of factors outside experimental control in surveying, for example, form 4 secondary students for a number of years. Greater willingness to admit having tried cannabis may in part explain observed increase in respondents' use.*

Some of the studies discussed previously have dealt with youth populations past the secondary school level. These groups of post-secondary/tertiary/working youths warrant some separate discussion. Other drug use studies have been carried out in Australia which deal with these specific sections of the youth population.

Table 4.1, the results from the New South Wales Health Commission's survey, shows ever use of cannabis for some post-secondary populations.[15] Comparison of results of studies of cannabis use among post-secondary populations is even more difficult than comparisons of results from secondary school populations. The extremely wide differences in social and work settings of post-secondary students and the marked differences in institutional practices and pressures makes such comparison ill advised. Therefore, attention must again be focussed on individual studies and very broad conclusions drawn from them.

Krupinski and Stoller[16] found that 27% of post-secondary students in universities and colleges of advanced education had used cannabis and that 13% in nursing schools and teachers colleges in the Melbourne metropolitan area had used it. Twenty-one per cent of the tertiary students surveyed in Ballarat had ever used cannabis.

A small study of drug use amongst first year university students in 1970 by Mitchell *et al.*[17] found a far lower incidence of cannabis use. They found that only 14% of first year male students and 13% of first year female students had ever used cannabis.

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*Each new sample of form 4 students should be considered independently from previous samples, since each has its own internal characteristics which may affect the rate of drug use. Repeated surveys of this kind are often used to illustrate the epidemic nature of drug use. Such surveys generally do not directly provide information on *new* occurrences of drug use, and hence the epidemiological model has limited applicability.

A larger study of university students by Hasleton[18] in 1971 produced results similar to Mitchell's. Hasleton found that nearly 18% of his population had ever used cannabis. Of this proportion, Hasleton suggests that 5.4% could be described as 'experimenters' and 12.5% as 'users'. Users were defined as those who have used cannabis three or more times.

A more recent study by Brown, in 1976,[19] of law students in three universities found a much higher proportion of cannabis users than in earlier studies. Brown reports that 49% of his sample have ever used cannabis. His results, however, may not be as reliable as other studies.

The picture which emerges from studies of post-secondary school youths is that approximately 20% have ever used cannabis, but there is a wide range. It will be recalled that earlier it was suggested that perhaps 10% of senior secondary school students had ever used cannabis. If that suggestion is accurate then it could be expected that about half the older tertiary and working youth population gained their experience at a secondary school age. Of course, this cannot be proven from the studies that have been carried out. Hasleton[20] found a mean cannabis contact age of 18 years for males and 17.5 years for females amongst his tertiary student population. This suggests that cannabis contact is most often in the first year of university or immediately prior to entry to university. This finding supports the hypothesis suggested above.

CONCLUSIONS

Before we attempt to draw some general conclusions from the studies discussed in this chapter, it is important to stress that, for the most part, they cannot be properly compared with each other, and care must be taken in interpretation of results. There are several reasons for this.

First, no large-scale population survey of cannabis use has been undertaken in Australia. Consequently, there is a dearth of basic information on cannabis use upon which more detailed studies of particular populations can be based.

Secondly, discussion of the results of the surveys carried out must take account of any methodological limitations, some of which are inevitable. In the main, the questionnaires used have been self-administered and have often been quite lengthy and complex for secondary students to complete. Respondents have usually had the opportunity to refuse to participate, but this does not guarantee either honest responses or full comprehension of the questions being asked. Questions relating to use of a range of illicit or disapproved drugs may well frighten some respondents, or encourage others to shock the researchers who may be identified with school authorities.

Thirdly, statements about age trends by sex must also be considered cautiously, since girls and boys mature at different rates and, therefore, differences in drug use described may be due to what is called a cohort effect—that is, girls and boys moving through the sample at different rates—rather than to a real age difference. In addition, age differences

within school classes may confuse interpretation. Education Departments have moved away from relying almost exclusively on age for grading, because of different rates of maturation. Similarly, peer group influences, so much a part of drug use patterns at all ages, are particularly prone to variation at different stages of development. Interpreting trends by examining rates of use at different schools, or in different State school systems, cannot provide indications of diffusion of drug use within the school system. There are just too many unmeasured variables.

The impression gained from a review of studies in Australia is that cannabis has been widely used among some sections of the population, especially younger people. However, in determining the *kind of use* that has taken place the evidence is sketchy. While the number of people who have tried the drug may be quite high—over 40% of some special groups surveyed—there is no indication that heavy use of the drug (in the sense of frequent and sustained use) is widespread. Indeed such evidence as there is suggests that use is typically infrequent, many users having tried cannabis on only one or two occasions. In addition, many reported users claim to have stopped further use. The evidence indicates an increase in recent years in the number of people who have ever used cannabis, although part of the apparent increase suggested by some studies may be attributable to a greater willingness of respondents to admit illicit drug use. The evidence does not permit any firm conclusions to be drawn as to whether regular or heavy use of cannabis has increased to the same extent*.

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* This Commission has conducted a survey of the extent of drug use, including cannabis, sampling the population of the Adelaide metropolitan area. One object of the survey is to remedy the absence of a general population study of the extent of cannabis use in South Australia, although, of course, we cannot avoid all the methodological problems referred to in this chapter. The results of this survey will be reported in a separate research publication.

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5 : THE LAW - TOTAL PROHIBITION AND THE CRIMINAL LAW

We have described as total prohibition the present policy regarding cannabis. This policy relies heavily on the criminal law to control the importation, cultivation, distribution and use of the drug. In order to understand the development of the policy of total prohibition, and the operation of the policy within South Australia, it is necessary to describe the legal controls in some detail.

Two major themes emerge from an examination of the forces that have shaped the modern law in Australia.[1] The first is the effect that international treaties have had on legislative policies adopted within this country. The second is the extent to which misconceptions about cannabis, particularly its relationship with the narcotics, have influenced the form in the governing legislation. While many amendments to the legislation have been passed during the last decade, the task of rationalising the law has not been made any easier by the overlapping authority of the Commonwealth and the States in this field. Indeed the problems posed by federalism loom large in any reassessment of Australian drug laws.

Broadly speaking, Australian legislation controlling the use and supply of prohibited drugs through the criminal law has gone through three phases. **The first phase**, which commenced around the turn of the century, was the application of criminal penalties to certain activities related to drugs, particularly the supply of opium, which had not previously attracted legal sanctions. Typically this legislation, like early drug laws in the United States, was aimed at readily identifiable ethnic groups, notably the Chinese and Aboriginals. The paradigm example is the first legislation designed specifically to limit narcotics use in South Australia (then including the Northern Territory). The Opium Act 1895, s. 3 provided that

> [a]ny person who shall sell, barter, exchange or give . . . any opium to any aboriginal native of Australia or half-caste of that race, other than as medicine, shall be liable to imprisonment for any period not more than twelve months.

The Opium Act Amendment Act 1905 went further and penalised dealing in opium otherwise than as a medicine, the manufacture of opium and the conduct of 'any house or place used for the purpose of opium smoking'. This coincided with the first Commonwealth initiatives in the field. In 1905 a regulation under the Customs Act 1901 prohibited the importation of opium suitable for smoking and imposed restraints on the importation of opium in a form suitable for medicinal purposes. These measures had much to do with the fact that opium smoking was seen principally as an activity of the Chinese population.

The second phase, commencing in the late 1920s, saw the implementation within Australia of the substance of Conventions designed to control the international traffic in certain drugs and to encourage domestic

restrictions on the supply and use of those drugs. The first multilateral convention on the international drug trade was the 1912 Hague Convention for the 'Suppression of the Abuse of Opium and Other Drugs'. This grew out of the Shanghai International Opium Conference of 1909 and was attended by most of the European powers, together with the United States, China, Japan, Siam and Persia. Ultimately this Convention led to the United Kingdom Parliament passing the Dangerous Drugs Act 1920, which later proved to be influential in shaping Australian domestic legislation. The 1925 Geneva Convention on Opium and Other Narcotic Drugs, which among other things placed the first international controls on the production and distribution of cannabis, perhaps exercised more direct influence on Australian law. The convention prompted legislation imposing domestic restrictions on the supply and use of cannabis, although the reaction of Australian legislatures was far from immediate and the controls were usually imposed within the framework of general legislation relating to narcotic and psychotropic drugs.

The 1925 convention is crucial to an understanding of the background to contemporary legislation dealing with cannabis. It required contracting parties to enact effective laws to limit exclusively to medical and scientific purposes the manufacture, import, sale, distribution, export and use of cannabis in the form used for medical purposes at the time.[2] The convention also dealt with controls on the export and trafficking of other forms of 'Indian hemp', defined to include

> the dried flowering or fruiting tops of the pistillate plant Cannabis Sativa L. from which the resin has not been extracted, under whatever name they may be designated in commerce.[3]

Similar controls were also placed on the resin obtained from Indian hemp. The controls imposed by the convention did not result from a comprehensive examination of the pharmacological properties of cannabis or of its effects on human beings in different cultures.[4] Indeed the question of cannabis control was originally not on the agenda of the Second Opium Conference which preceded the 1925 convention, although some moves had been made earlier to the League of Nations Advisory Committee on Traffic in Opium and Dangerous Drugs that the issue warranted further investigation. The item was included at the insistence of the Egyptian delegation who condemned cannabis vehemently, arguing among other things that hashish was 'the principal cause of most cases of insanity occurring in Egypt'. This led to an Advisory Committee recommendation, prepared without detailed scientific inquiry, that broad controls should be introduced, although these were somewhat modified at the drafting stage. The language of the convention made it clear that cannabis was to be regarded as a narcotic and this misclassification was reinforced by the 1936 Geneva Convention, which required signatories to impose domestic controls on the preparation, possession and distribution of narcotic drugs, defined to include all drugs to which the 1925 Geneva Convention was applicable.[5] This identification of cannabis as a narcotic, while perhaps

understandable from an historical perspective, has had important consequences in the approach to the legal regulation of cannabis in Western countries.

The first State controls on cannabis were imposed by the Victorian Poisons Act 1928, Part III, which dealt primarily with opium and other narcotics and followed the pattern of the United Kingdom Dangerous Drugs Acts. The Victorian Act penalised the unauthorised possession of certain drugs, including Indian hemp and the resin obtained from Indian hemp. South Australia was the next State to deal with cannabis, in the Dangerous Drugs Act 1934, although the legislation did not actually come into force until 1937. This Act was far more comprehensive than earlier South Australian legislation (which had been largely confined to opium) and a number of general provisions were borrowed from both the New South Wales[6] and the United Kingdom drug legislation. It is clear from the Parliamentary debates that a principal purpose of the Bill was to implement the provisions of the various international conventions dealing with drugs.[7] The 1934 legislation, subject to considerable amendment over the years, continues to constitute the basic framework for the control of narcotic and psychotropic drugs in South Australia, at least by means of the criminal law. One of the key provisions of the Act imposed penalties for unauthorised dealing in or possession of any drug to which the Act applied, including 'Indian hemp' which was defined in the same manner as in the 1925 convention. The legislation conferred power to make regulations to control the use of drugs for medical purposes, and regulations were in fact made authorising preparation of extracts of the drug for medical purposes and requiring doctors and chemists to keep appropriate records. The Act also dealt with other matters relevant to the criminal penalties associated with cannabis such as police powers of search, entry, seizure and arrest.

New South Wales extended the scope of its general drug legislation to embrace cannabis in 1935[8] and Queensland enacted legislation to similar effect in 1937.[9] The other States were slower to act, Western Australia extending its legislation to 'Cannabis Indica (commonly known as marihuana)' in 1950[10] and Tasmania entering the field as late as 1959.[11] Action by the Commonwealth actually predated State legislation, although this was confined to adding cannabis to the list of prohibited imports and exports pursuant to powers conferred by the Customs Act.[12] After 1926, Indian hemp (defined as in the 1925 convention), extract and tincture of Indian hemp and the resin obtained from Indian hemp could be imported only upon the issue of a licence from the Collector of Customs, a prohibition which became absolute in 1956. The 1926 proclamation applying the Customs Act to cannabis appears to have been prompted by the 1925 convention and by the United Kingdom legislation which followed.

The third phase of legislation to control narcotic and psychotropic drugs has been the most recent. Following the introduction of legislation based on international conventions, there was relatively little change in the basic statutory framework until the mid 1960s. At that time the States began to overhaul their drug laws and the Commonwealth became much more

actively involved in the field, both by ratifying new conventions[13] and by revising the provisions of the Customs Act.[14] In part these legislative moves reflected the implementation of treaty obligations incurred under the Single Convention on Narcotic Drugs 1961. The moves also reflected a greater awareness of the need for uniformity in State legislation. Even more important was the upsurge in drug-related criminal prosecutions in the 1960s, which directed the attention of courts and legislatures to apparent loopholes and anomalies in the governing legislation. Consequently this third phase has been characterised by intense legislative activity, designed to meet treaty obligations and to adjust penalties in accordance with what are seen as the changing needs of the community and the rapid expansion of the 'drug problem'. Distinctions have been drawn between offences related to cannabis and those related to other drugs, and particularly severe penalties have been introduced for supplying drugs.

During this period the National Standing Control Committee on Drugs of Dependence has been an important influence. This body is an independent committee comprising representatives from State and Commonwealth Health Departments and law enforcement agencies, whose primary function since its inception in 1969 has been to recommend uniform penalties and legislation for improper drug use and dealings. During this phase South Australia renamed its basic legislation the Narcotic and Psychotropic Drugs Act and also incorporated major revisions to the Act, which has been frequently amended since.

CURRENT LEGISLATION

International treaties do not of themselves have the force of law in Australia. Consequently the law in each Australian State relating to prohibited drugs, and specifically to cannabis, is found in a combination of Commonwealth and State legislation. The Commonwealth's intervention in this field traditionally has been through the Customs Act 1901, the legislation being enacted pursuant to the Commonwealth's power to make laws with respect to 'trade and commerce with other countries'.[15] Recent legislation ratifying drug conventions has not substantially altered the pattern of Federal control, although the terms of the conventions have influenced the shape of amendments to the Customs Act. The division of authority between the Commonwealth and the States has been described as follows by the South Australian Supreme Court:

> Putting the matter very broadly, the Commonwealth Act aims at controlling the movement of drugs into the country; the State Act is concerned with what is done by, or happens to, people in South Australia after drugs have reached here, or have been manufactured or produced here.[16]

The South Australian legislation, the Narcotic and Psychotropic Drugs Act 1934-1978, creates a multiplicity of overlapping offences relating to cannabis, including cultivation, sale, supply, possession and consumption of the drug. There are similarities in the approach of Commonwealth and State Acts, but there are also significant differences, as there are in the legislation of other States.

COMMONWEALTH LEGISLATION

The key provision of the Customs Act is s.233B, since it is specifically concerned with 'prohibited imports that are narcotic goods'[17] and in effect imposes more severe penalties for drug related offences than for other infringements of the Act. The term is defined to mean goods consisting of a 'narcotic substance', and this phrase is in turn defined to include any substance specified in column 1 of Schedule VI to the Act.[18] Column 1 includes cannabis, cannabis resin and cannabinoids, thus retaining, as a matter of drafting, the link between cannabis and the narcotics derived from international conventions.[19] S.233B creates several offences, of which the most important are these:

> 233B. (1) Any person who —
>
> (a) . . .
>
> (b) imports, or attempts to import, into Australia any prohibited [drugs] . . ., or
>
> (c) without reasonable excuse (proof whereof shall lie upon him) has in his possession any prohibited [drugs] which have been imported into Australia in contravention of this Act, or
>
> (ca) without reasonable excuse (proof whereof shall lie upon him) has in his possession any prohibited [drugs] which are reasonably suspected of having been imported into Australia in contravention of this Act . . ., or
>
> (d) aids, abets, counsels, or procures, or is in any way knowingly concerned in, the importation into Australia of any prohibited [drugs] . . .
>
> shall be guilty of an offence.

The Act makes special provision as to the onus of proof in prosecutions for certain offences under s.233B. Thus in a prosecution for the offence of possession of prohibited imports (s.233B(1) (c))

> it is not necessary for the prosecution to prove that the person knew that the goods in his possession had been [illegally] imported into Australia, . . . but it is a defence if the person proves that he did not know that the goods in his possession had been [illegally] imported into Australia (s.233B(1A)).

Similarly on a prosecution for the offence of possessing goods reasonably suspected of having been imported (s.233B(1) (ca))

> it is a defence if the person proves that the goods were not imported into Australia or were not [illegally] imported into Australia (s.233B(1B)).

The penalties for contravening s.233B are set down in s.235, introduced into the legislation in 1967 and much revised since. The 1967 amendments made no specific provision for importing for sale or commercial gain and simply imposed a general maximum penalty of $4000 or 10 years' imprisonment. In 1971, a new concept was introduced in that a distinction was drawn between offences involving more than 'trafficable quantities' of narcotic goods and those involving less. This concept has been retained in the 1977 amendments, but a distinction is now also drawn between trafficking in cannabis and in other drugs. The section provides that where the offence involves not less than the trafficable quantity of a 'narcotic substance' the maximum penalty is a fine of $100 000 or imprisonment for 25 years or both, unless the narcotic substance is cannabis, in which case

the maximum penalty is a fine of $4000 or imprisonment for 10 years or both. For any other offence the maximum penalty is a fine of $2000 or imprisonment for two years or both.[22] The more severe penalties do not apply, even though the trafficable quantity is exceeded, if the Court is satisfied that the offence was not committed for any purpose related to the sale of or other commercial dealing in the narcotic goods.[23]

The 'trafficable quantity' of each narcotic substance is specified in a Schedule to the Act.[24] The Schedule, which was revised in 1977, distinguishes between several forms of cannabis. The trafficable quantity for cannabis itself, as defined in the Act, is 100 gm. The Act defines cannabis very broadly to mean

> a cannabis plant (that is, a plant of the genus *cannabis*)[25] whether living or dead, and includes, in any form, any flowering or fruiting tops, leaves, seeds, stalks or any other part of a cannabis plant or cannabis plants and any mixture [thereof] *but does not include cannabis resin or cannabis fibre*[26] (Italics added)

The trafficable quantity for cannabis resin is 20.0 gm and for cannabinoids 2.0 gm. The term 'cannabis resin' is defined to mean

> A substance that consists wholly or substantially of resin (whether crude, purified or in any other form) obtained from a cannabis plant or cannabis plants.[27]

The distinction between cannabis and cannabis resin is important not only because the trafficable quantity for each is different, but because the maximum penalty for offences related to cannabis is less than the penalty for those involving cannabis resin.[28]

In assessing the possible penalties two other sections must be borne in mind. Section 240 provides that if any penalty specified in the Act is less than three times the value of the prohibited goods, the maximum penalty is thrice the value of the goods. The section gives no indication as to how the value is to be assessed (there may be a vast difference between the so-called 'wholesale' and 'street' values), but in relation to large shipments the maximum pecuniary penalty may be very high indeed.[29] The Act provides a minimum pecuniary penalty of one twentieth of the maximum pecuniary penalty specified for each offence.[30]Thus the minimum penalty for possession of imported cannabis in its various forms is $100 and for importing cannabis (other than resin) $200. Importing cannabis resin now attracts a minimum pecuniary penalty of $5000. All penalties are in addition to broad forfeiture provisions in the legislation.[31]

Two major points should be noted about the Customs Act, which presents some serious problems of statutory interpretation. First, the onus of proof is sometimes placed on the accused rather than on the Crown, which is not normal in criminal prosecutions. In particular, paragraphs (c) and (ca) of s.233B(1) commence with the words 'without reasonable excuse (proof whereof shall be upon him)'. These words, coupled with the special onus of proof provisions of s.233B(1A) and (1B), have been interpreted to mean that in cases involving possession of prohibited imports the prosecution

is *not* required to prove beyond reasonable doubt that the accused knew or had reason to suspect that the goods in his possession were prohibited imports. It is enough to prove that the accused had exclusive physical control of a substance that was *in fact* a prohibited import, such as cannabis. If the accused claims that he did not know that he was in possession of the cannabis (for example, if he contends that he did not know cannabis was hidden in the picture frame he had collected from the Post Office[32]) the burden is on him to establish his innocence, but he need do so only on the balance of probabilities.[33]

Some submissions to us were critical of this departure from basic common law principles[34], arguing that an accused person is subjected to an unfair disadvantage and that the approach is difficult to apply in practice. The courts tend to explain the 'reverse onus' on the ground that drug offences are serious and proof of the accused's actual intention may be hard to establish. However, there are many other areas of criminal law in which the proof of intention presents as many problems to the prosecution. The reverse onus of proof also appears in relation to penalty, in that a person found guilty of possessing more than the trafficable quantity of cannabis, or other prohibited imports, bears the burden of proving on the balance of probabilities that the offence was not committed for a purpose related to commercial dealing in the goods.[35]

The second point to observe is that there has been some difference in approach by the various State appellate courts (which exercise 'Federal jurisdiction' in Customs Act prosecutions) as to the appropriate approach to the question of penalty in cases involving cannabis. The harshest view has been taken by the New South Wales Court of Criminal Appeal in *R.* v *Peel*.[36] In that case the court rejected any distinction between cannabis and other 'narcotic substances' for the purposes of sentencing. The court pointed out that the Commonwealth had accepted the general attitude expressed by the Single Convention on Narcotic Drugs, namely that cannabis should be categorised with heroin as warranting special efforts to suppress the illicit traffic. It was not for the courts to determine whether a drug should be classified as a narcotic, as this had been done by Parliament.

> The fundamental consideration is rather the degree by which, having regard to the maximum penalties provided by the Act in question, the respondent's conduct would offend against the legislative objective of suppressing the illicit traffic in the prohibited drug.[37]

The court did acknowledge that evidence that a narcotic drug was particularly destructive might increase the penalty, but an argument based on the alleged innocuousness of cannabis would not succeed in mitigating the penalty. Thus the court imposed a sentence of imprisonment of three years, with a non-parole period of nine months, for a first offender aged 22 who was to be paid $1000 for importing hashish with a 'street value' of $7000 to $9000.[38] As noted earlier, the 1977 amendments to the Customs Act have introduced some distinctions between the penalties applicable to offences

involving cannabis and those involving other drugs, and this may cause some revision of the sentencing policy of the New South Wales Court of Appeal.

The South Australian Supreme Court has faced something of a dilemma in stating principles applicable to importing offences under the Customs Act. This is because in prosecutions under the State legislation the nature and composition of the drug involved in the offence has been regarded as a crucial factor and indeed the onus has been placed on the prosecution, once the issue is raised, to demonstrate that the particular drug is more harmful than others.[39]

In *R.* v *Jackson*[40] the South Australian Full Court took a midway course between the relatively harsh New South Wales approach and the more lenient South Australian State approach. The Court decided that, while cannabis could not be regarded as harmless, the prosecution had the burden of leading evidence on the question and in the absence of evidence the benefit of any reasonable doubt should be given to the accused. However, the Court acknowledged the need, in interpreting the Federal legislation, to pay due regard to the approach of other State courts on the same matters. Consequently, since the essential element of Customs Act offences was 'the planned operation of smuggling narcotic drugs, with a view to profit', the precise character of the drug was not as important as in charges under State legislation which concentrated on the consequences of consuming or administering the drug.

The basic structure of Federal controls over cannabis achieved through the Customs Act has not been substantially altered by two recent Commonwealth Acts designed to ratify and in part implement the two major international conventions on drugs. The Narcotic Drugs Act 1967, which enacts certain measures in accordance with the Single Convention on Narcotic Drugs 1961, is mainly concerned with the licensing of drug manufacturers and imposing restrictions on the passage of drugs through Australia. The conditions imposed on the manufacture, handling and labelling of drugs do not affect the legal regulation of cannabis since the term 'manufacture of a drug' does not include the separation of cannabis or cannabis resin from the cannabis plant.[41] Similarly, although the Psychotropic Substances Act 1976 ratifies the Convention on Psychotropic Substances 1971, the legislation adds little to the domestic Federal controls already imposed on cannabis.

SOUTH AUSTRALIA

State legislation establishes two major categories of drug-related offences. The first is concerned with the supply of prohibited drugs and extends to the preparation or manufacture of such drugs, the cultivation of prohibited plants and the sale or supply of, or trade in prohibited drugs (including possession for the purpose of trading). The second category of offences concerns personal possession and use of drugs and includes the offences of self-administration and consumption, as well as the possession of

paraphernalia for use in connection with such activities. Unlike the Commonwealth legislation, which rests on the overseas trade power and in some respects the external affairs power, the limit of State legislation is essentially geographical—that is, the legislation applies to acts committed within the State. The major legislation, the Narcotic and Psychotropic Drugs Act 1934-1978, has been described not so much as a patchwork quilt but as a 'repatched patchwork quilt'.[42]

The Act specifically states that it applies to 'Indian hemp' and 'hashish'.[43] Indian hemp is defined to mean

> a plant, or any part of a plant, of the genus Cannabis (except fibrous material containing no resin) whether dehydrated or not (but does not include hashish).[44]

Hashish is defined separately to mean

> any resinous or other extract, derivative or concentrate obtained from Indian hemp, whether crude, adulterated or refined and whether dehydrated or not.

In addition, the term 'prohibited plant', which is important for the cultivation offence, includes any plant of the genus Cannabis. As in the Commonwealth Act, the reference to *Cannabis sativa* L. has been omitted to avoid any argument based on the proposition that there are several varieties of cannabis of which *Cannabis sativa* L. is only one.[45] Synthetic tetrahydrocannabinol (THC) is covered by the Act because of a proclamation made under s.4(3).

The possession offences are created by s.5(1) of the Act:

> 5.(1) A person who —
> (a) knowingly has in his possession any drug to which this Act applies;
> (b) smokes, consumes or administers to himself, or permits any other person to administer to him, any [such drug];
> (c) has in his possession any pipes, syringes or other utensils or any appliance or thing for use in connection with the preparation, smoking or administration of any [such drug],

shall be guilty of a minor indictable offence.[46] The penalty for such an offence is a maximum fine of $2000, imprisonment for two years or both,[47] but the penalty is in addition to broad forfeiture provisions in the Act.[48] Charges relating to possession offences are heard by courts of summary jurisdiction (magistrates' courts), unless in a particular case the magistrate decides or the defendant elects to have the charge tried on indictment.[49] If this happens, the District Criminal Court hears the charge, but the same maximum penalties apply. These arrangements apply to other 'minor indictable offences' created by the Narcotic and Psychotropic Drugs Act.[51]

The supply offences are created by s.5(2):

> 5(2) A person who —
> (a) produces, prepares or manufactures a drug to which this Act applies;
> (b) cultivates a prohibited plant knowing it to be a prohibited plant;
> (c) sells, gives, supplies or administers, or offers to sell, give, supply or administer any drug to which this Act applies to any other person or otherwise deals or trades in any such drug;

(d) has in his possession any [such drug] for any of the purposes set out in paragraph (c) . . .
shall be guilty of an indictable offence.

The Act adopts a 'reverse onus' approach to the offence under s.5(2) (d), in that a person who knowingly has in his possession more than a prescribed quantity of a prohibited drug is deemed to have that drug in his possession for the purpose of trading in it, unless the contrary is proved.[51] The quantities prescribed for the purposes of this provision have recently been increased and are the same as those stipulated under the Customs Act:

Indian hemp	100.0 gm
Indian hemp resin	20.0 gm
Cannabinoids	2.0 gm[52]

The Act defines selling and trading very broadly and includes, for example, the purchase of cannabis on behalf of a group with the intention of distributing it on a non-profit basis,[53] so that the supply offences are by no means confined to commercial trading and indeed extend to small-scale gratuitous dealings.

The penalties for the supply offences vary according to the drug or plant involved in the commission of the offence. If the drug or plant is Indian hemp the maximum penalty is a fine of $4000, imprisonment for ten years or both. In the case of other drugs, the maximum penalty is $100 000, imprisonment for 25 years or both.[54] Because Indian hemp resin is excluded from the definition of Indian hemp, supply offences involving the resin attract the substantially higher maximum penalties provided for the other drugs.

From May, 1977, following the decision of the South Australian Supreme Court in *R.* v *Manos, ex parte Normandale*,[55] until August, 1977, when the Act was amended, a supply charge could be finally disposed of in the magistrates court as a minor indictable offence provided that the accused person agreed and the magistrate decided that it was a case that should be dealt with in a summary way. The maximum penalty that could be imposed was a $200 fine or two years' imprisonment or both, the same penalty as for a possession offence. This meant that the less serious supply offences could be dealt with in magistrates courts. Now, following the amendments to the Act in August, 1977, all supply offences, including cultivating Indian hemp, have to be tried on indictment in either the District Criminal Court or the Supreme Court. Charges involving the supply of any quantity of Indian hemp resin can be heard only in the Supreme Court.[56]

There are two major differences between the approach to drug offences under the South Australian Narcotic and Psychotropic Drugs Act and that taken under the Customs Act. The first concerns the possession offences. The South Australian Act states that it is an offence for a person *knowingly* to have in his possession any drug to which the Act applies.[57] The term 'knowingly' does not appear in the Customs Act nor in the drug legislation of the other States. Its appearance in the South Australian Act is important,

since the use of the word eliminates an argument that the onus is on the defendant, once it is shown that he had actual custody of Indian hemp or resin, to prove that he did not know that he had a drug in his possession or that he believed the substance was something other than a prohibited drug. This, it will be recalled, is broadly the position in prosecutions under the Customs Act.

In South Australia, on the other hand, the Crown must prove beyond reasonable doubt, not only that the accused had actual possession of the drug, but that he knew the substance possessed was Indian hemp or resin, as the case may be.[58] This approach does not remove all the difficulties associated with the possession offences. For example, it is not always easy to decide whether the accused had exclusive physical control over containers in which drugs are found.[59] Nevertheless, the South Australian formulation overcomes some of the major objections to the way in which possession offences are usually drafted. The word 'knowingly' also appears in the reverse onus clause of the South Australian Act, which deems a person to be in possession of a drug for the purpose of trading, unless the contrary is proved, where he knowingly has in his possession more than the prescribed quantity of the drug.[60] The South Australian Chief Justice has stated that there are

> strong grounds for thinking that, before the sub-section can be invoked and the onus reversed, the knowledge must extend not only to the possession of the drug but to the possession of the requisite quantity of the drug.[61]

This approach ameliorates the harshness of the reverse onus clause and contrasts sharply with the position under the Customs Act. It does not dispose completely of objections to the reverse onus clause itself. These are based on the proposition that, while it may be proper to require an accused person in possession of more than the prescribed quantity of goods to adduce evidence of his intention, the Crown should always bear the burden of proving beyond reasonable doubt that the accused intended to trade in the drug. In addition, it has been suggested to us that the deeming provision is ineffective as an aid to the prosecution in drug cases, in that convictions are no easier to obtain in practice.

The second major difference in approach concerns the sentencing of offenders, although this should not be exaggerated given the nature of the sentencing process. Sentencing is a relatively undeveloped area of law, in the sense that courts have found it difficult to state guidelines with any precision and commentators in Australia have not yet explored the principles in depth. Indeed South Australia is unusual in that the official reports of cases heard by the Supreme Court quite often include judgments concerned with the sentencing of offenders. (These judgments may be delivered either after a trial in the Supreme Court or on appeal from sentences imposed by lower courts.) In other States official reports tend to overlook sentencing issues in favour of cases dealing with 'substantive' law.

A further complication is that the courts almost invariably stress the need, in considering appropriate penalties for offenders, to judge each case

in the light of its peculiar circumstances and therefore to avoid the mechanical application of earlier precedents. In *R.* v *Beresford*,[62] a leading case under the Narcotic and Psychotropic Drugs Act, the Full Court referred to the factors that are particularly important in drug offences. These include the type of drug involved; its strength and likely effects; whether the drug was supplied to others and, if so, whether it was supplied for reward or on social occasions only; the magnitude of any illegal operation to manufacture, import or supply the drug; whether the offender attempted to induce others to use the drug; the nature of the offender's own use of drugs; whether the offence was an impulsive act or the result of a deliberate course of action; and, most important, the age, character, antecedents (including previous record) and health of the offender. On occasions, the Supreme Court has compared the sentences given in previous drug cases that fall into the same general category as the one under consideration,[63] but it is always stressed that these comparisons can provide only a general guide.[64] Consequently the character and background of the offender, and the circumstances of his offence, are crucial in each case.

With these matters in mind, it remains true that the South Australian courts, when sentencing offenders under the State legislation, have adopted different principles to those applied in cases arising under the Customs Act. In particular, as noted earlier, the South Australian courts have been prepared to assume that the nature and effect of drugs covered by the Narcotic and Psychotropic Drugs Act vary greatly and that cannabis should be regarded as the least harmful of the drugs. In *R.* v *Beresford* the Court stated that a judge could not assess the evil or harm caused by drug taking or distribution

> until there are placed before him adequate details of the composition and strength of the drug in question and an authoritative and reliable description of its likely effects . . . It seems to us that it is the responsibility of the prosecution, in the first instance, to lead such evidence as is in their possession . . .[65]

This led to the calling of medical evidence in many cases on the effects of cannabis in order to guide the judge in sentencing. In one case the judge summarised the evidence as follows:

> The overall picture, therefore, is that marihuana, or Indian Hemp, is comparable with alcoholic drink or smoking tobacco. It is at least a potential danger to its users, but not to the same degree as the so-called hard drugs, which are addictive, and commonly lead the user to need larger and larger doses with the almost certain consequence of mental and physical disability and even death.[66]

Evidence of this kind consistently presented to the courts finally prompted the Full Court to 'qualify the apparent rigidity of the proposition laid down in *Beresford's* case' and to accept, without the necessity for calling evidence in each case, that cannabis is the least harmful of the drugs covered by the Act.[67]

In addition to distinguishing cannabis from other drugs, the courts have drawn distinctions between the kinds of offenders that to some extent, cut

across the classification used in the legislation itself. A commonly cited passage from *R.* v *Beresford* summarises the position:

> There are two purposes in this type of legislation. The first is to punish wicked people who attempt to corrupt others by sale or persuasion, or who, by their activities increase the general supply of the drug. The second is to protect citizens in the community from commencing to use the drug, or from continuing to use it. There is no clear dividing line to be drawn in most cases between the two purposes. A seller may be an addict, selling the drug in order to obtain funds to gain further supplies. An occasional user of a non-addictive drug . . . may seek to persuade others to try it . . .
> A fine, a bond under the Offenders Probation Act, a fine and a bond, or a suspended sentence will often be the right sentence to carry out the legislative intention. A lumping together of all offenders as wicked people who must all go to prison will not.[68]

The higher courts' emphasis on rehabilitation and the insistence on realistic assessment of offences and offenders has led to a generally lenient view being taken of offenders whose connection with drugs is for no purpose other than personal use, or at least for no significant financial reward.[69] Coupled with the courts' view of the effects of cannabis, the way has been opened to a broad, but not necessarily universal policy of imposing penalties other than imprisonment for cannabis-related offences, provided the motives of the offender are not purely commercial.

COMPARATIVE LEGISLATION

The law in other Australian States is similar, although far from identical to that in South Australia. The following table sets out the major provisions and penalties in force under State and, where appropriate, Commonwealth legislation.

5.1—COMPARATIVE CANNABIS LEGISLATION

Cultivation	Production and Manufacture	Possession, Use, Implements
South Australia Cultivation, knowing cannabis to be a prohibited plant—s.5(2) (b) *Penalty:* $4000 and/or 10 years' imprisonment	Production, preparation or manufacture — s.5(2) (a). *Penalty*: For cannabis $4000 and/or 10 years' imprisonment For cannabis resin, $100 000 and/or 25 years' imprisonment	Knowingly in possession, use, administration or possession of any implement — s.5(1) *Penalty*: $2000 and/or 2 years' imprisonment
New South Wales Cultivation, dealing and possession of a prohibited plant — s.33A(1)	Manufacture — s.21(a)	Possession, possession of implement, use or frequenting places of use — s.21(1) (b), (f), (g)
Penalty: $2000 and/or 2 years' imprisonment (summary procedure). $25 000 and/or 10 years' imprisonment (on indictment)	*Penalty*: $2000 and/or 2 years' imprisonment	*Penalty*: $2000 and/or 2 years' imprisonment

Cultivation	Production and Manufacture	Possession, Use, Implements
Victoria		
Cultivation - Health Act 1958 - 1977 s.365(3) *Penalty*: $4000 and/or 10 years' imprisonment	Preparation and manufacture— s.32 *Penalty*: For cannabis, $4000 and/or 10 years' imprisonment. For cannabis resin, $100 000 and/or 15 years' imprisonment	Possession and smoking — ss.27(1), 31(1) *Penalty*: $500 and/or 12 months' imprisonment
Queensland		
Cultivation or attempted cultivation — s.130(2) (b)	Production, preparation or manufacture — s.130.(2) (a)	Possession, procuring, possession of implement — s.130(1)
Penalty: $2000 and/or 2 years' imprisonment (summary procedure); $100 000 and/or imprisonment for life (on indictment)	*Penalty*: $2000 and/or 2 years' imprisonment (summary procedure); $100 000 and/or imprisonment for life (on indictment)	*Penalty*: $2000 and/or 2 years' imprisonment
Western Australia		
Cultivation, sale, purchase, possession — Poisons Act 1964 s.41A(3)	Manufacture or preparation— s.94B(1) (a)	Possession, use or presence in a place of use — s.94(B) (2)(a)
Penalty: $2000 and/or 3 years' imprisonment	*Penalty*: $3000 and/or 3 years' imprisonment	*Penalty*: $2000 and/or 2 years' imprisonment
	Manufacture or preparation with intent to sell — s.94B (2) (c) *Penalty*: For cannabis, $4000 and/or 10 years' imprisonment	
	For cannabis resin, $100 000 and/or 25 years' imprisonment	
Tasmania		
Cultivation — s.52	Manufacture, refining or preparation — s.55(1) (b)	Possession or use — s.55(1) (c), (d)
Penalty: $4000 and/or 2 years' imprisonment	*Penalty*: $3000 and/or 2 years' imprisonment	*Penalty*: $3000 and/or 2 years' imprisonment
		Possession of prohibited plant — s.49(1) *Penalty*: $3000 and/or 2 years' imprisonment

Sale, Supply, Trafficking	Possession with intent to sell	Occupier Offences	Importation
South Australia			
Sale, gift, supply or administration — s.5(2) (c)	Knowingly in possession of more than prescribed quantity — s.5(4) *Amounts*: cannabis 100gm, cannabis resin 20gm, cannabinoids 2gm	Owner, lessee, occupier or manager, permitting cultivation, production, trafficking, use — s.5(2) (e)	
Penalty: For cannabis, $4000 and/or 10 years' imprisonment; for cannabis resin, $100 000 and/or 25 years' imprisonment	*Penalty*: As for supply	*Penalty*: For cannabis $4000 and/or 10 years' imprisonment; for cannabis resin, $100 000 and/or 25 years' imprisonment	
New South Wales			
Supply, sale — s.21(1)(a)	Possession of more than prescribed quantity — s.45A(4) *Amounts*: cannabis 25gm, cannabis resin or THC ½gm	Occupier, owner, lessee or manager permitting use for smoking, sale or distribution s.21(1) (c),(d),(e) Occupier, owner or lessee permitting cultivation — s.33A(1) (d)	

Sale, Supply, Trafficking	Possession with intent to sell	Occupier Offences	Importation
New South Wales			
Penalty:$2000 and/or 2 years' imprisonment (summary procedure); on indictment, for cannabis, $25 000 and/or 10 years' imprisonment; for cannabis resin $50 000 and/or 15 years' imprisonment	*Penalty*: As for supply	*Penalty*: $2000 and/or 2 years' imprisonment (summary procedure); on indictment for cannabis (only) $25 000 and/or 10 years' imprisonment	
Victoria			
Sale, dealing or trafficking—s.32(1),(2)	Possession of more than prescribed quantity — s.32(5) *Amounts*: Cannabis 100gm, cannabis resin 20gm, cannabinoids 2gm		
Penalty: For cannabis leaf, $4000 and/or 10 years' imprisonment; for cannabis resin, $100 000 and/or 15 years' imprisonment	*Penalty*: As for supply		
Queensland			
Sale, gift, supply or procure — s.130(2) (c)	Possession of more than prescribed quantity — s.130J *Amounts*: Cannabis, Indian hemp and THC, 40 cigarettes, Indian hemp excluding resin 25gm, Indian hemp resin 5gm	Owner, occupier or manager permitting production, preparation, manufacture, sale, supply, distribution, use or cultivation — s.130(2) (e)	
Penalty: $2000 and/or 2 years' imprisonment (summary procedure); $100 000 and/or imprisonment for life (on indictment)	*Penalty*: As for supply	*Penalty*: $2000 and/or 2 years' imprisonment (summary procedure); $100 000 and/or imprisonment for life (on indictment)	
Western Australia			
Sale or supply — s.94B(2) (b)	Possession of prescribed quantity or more — s.94B(6) *Amounts*: Cannabis 25gm or 40 cigarettes, cannabis resin 5gm, THC ½gm	Occupier, owner or manager, permits smoking, sale or distribution — s.94B(1) (c),(d),(e)	
Penalty: For cannabis $4000 and/ or 10 years' imprisonment; for cannabis resin, $100 000 and/or 25 years' imprisonment	*Penalty*: As for supply	*Penalty*: $3000 and/or 3 years' imprisonment	
Tasmania			
Sale, supply or trafficking — s.47(3) (a),(b)	Possession of more than permissible quantity — s.47(7). *Amounts:* Cannabis 25gm or 40 cigarettes, cannabis resin 5gm		Importation or bringing *into the State* - s.55(1) (a)
Penalty: $4000 and/or 10 years' imprisonment	*Penalty*: As for sale and supply of narcotic substances		*Penalty*: $3000 and/or 2 years' imprisonment
Commonwealth	Possession of more than the trafficable quantity of prohibited imports — s.235(1)(c)		

Sale, Supply, Trafficking	Possession with intent to sell	Occupier Offences	Importation
Commonwealth	*Amounts:* Cannabis 100gm, cannabis resin 20gm, cannabinoids 2gm *Penalty*: For cannabis leaf $4000 and/or 10 years' imprisonment; for cannabis resin and cannabinoids $100 000 and/or 25 years' imprisonment		Importation or possession of a prohibited import - s.233B(1) *Penalty*: where less than the prescribed quantity $2000 and/or 2 years' imprisonment. Where equal to or greater than it, $4000 and/or 10 years imprisonment (cannabis) or $100 000 and/or 25 years' imprisonment (cannabis resin and cannabis oil)

Notes
(1) Unless otherwise specified the sections in the Table refer to the following legislation, South Australia : Narcotic and Psychotropic Drugs Act 1934-1978, New South Wales : Poisons Act 1966, Victoria : Poisons Act 1962, Queensland : Health Acts 1937-1976, Western Australia : Police Act 1892-1976, Tasmania : Poisons Act 1971, Commonwealth : Customs Act 1901.

(2) In the Australian Capital Territory the maximum penalty for possession of less than 25gm of cannabis is a fine of $100: Public Health (Prohibited Drugs) Ordinance 1975 s.4(2). In the N.T. (Prohibited Drugs Ordinance 1977), the penalty for possession or occupier offences is $500 fine for a first offence, $1000 fine for a second offence and $2000 fine for a subsequent offence. The Legislative Assembly rejected imprisonment as an alternative penalty.

INTERNATIONAL TREATY OBLIGATIONS

Australia is a party to the two major international agreements for the control of narcotic and psychotropic drugs, the Single Convention on Narcotic Drugs 1961 and the Convention on Psychotropic Substances 1971. The Conventions impose obligations on signatories relating to the international traffic in narcotic and psychotropic drugs and to domestic controls governing the production and distribution of those drugs. Neither convention is directly binding on the State of South Australia, in the sense that only the *Commonwealth* is a party to the treaties and therefore only the Commonwealth incurs obligations under international law. Moreover, under Australian law no treaty of itself directly alters domestic law; this occurs only when specific legislation is passed to implement the treaty obligations. Nevertheless, Australia's treaty obligations under international law may be very important in determining what changes should be made by a State to its legislative scheme for the control of drugs. This is particularly so when the State controls can fairly be regarded as meeting part of the Commonwealth's treaty obligations, in that they avoid the need for the Commonwealth itself to consider imposing its own controls over certain domestic activities such as cultivation, distribution or use of cannabis.

The 1961 Single Convention, which was designed to replace a number of earlier international agreements on drugs, aims to limit use of certain specific drugs to medical and scientific purposes. The convention classifies drugs into four Schedules. Certain controls, relating principally to manufacture, importation, distribution and trade, are imposed on the substances

listed in Schedule 1, which includes the major opiate narcotics, cocaine and cannabis. Even stricter controls are required for the small number of substances listed in Schedule IV, of which the most important are heroin, cannabis and cannabis resin. These are subject to all the controls applicable to Schedule 1 drugs as well as others specified in the convention. In addition each signatory is to 'adopt any special measures of control which in its opinion are necessary having regard to the particularly dangerous properties of a drug' included in Schedule IV.[71]

For the purposes of international controls, then, cannabis is placed in the same category as those substances which are seen as the most dangerous narcotics. The major provisions of the convention imposing obligations on signatories to control the cultivation, distribution and use of cannabis are these:

> Subject to the provisions of this Convention [the Parties shall] limit exclusively to medical and scientific purposes the production, manufacture, export, import, distribution of, trade in, use and possession of [substances in Schedule 1] (Art.4. para 1(c)).
>
> The Parties shall not permit the possession of [substances in Schedule 1] except under legal authority. (Art.33).
>
> Subject to its constitutional limitations, each Party shall adopt such measures as will ensure that cultivation, production, manufacture, . . . possession, [and] sale . . . contrary to the provisions of this Convention, and any other action which in the opinion of such Party may be contrary to the provisions of this Convention, shall be punishable offences when committed intentionally, and that serious offences shall be liable to adequate punishment particularly by imprisonment or other penalties of deprivation of liberty. (Art.36, para 1).
>
> Whenever the prevailing conditions in the country or a territory of a Party render the prohibition of the cultivation of . . . the cannabis plant the most suitable measure, in its opinion, for protecting the public health and welfare and preventing the diversion of drugs into the illicit traffic, the Party concerned shall prohibit cultivation. (Art.22).

There is some doubt about the precise meaning of the obligations imposed on signatories, particularly insofar as possession and cultivation for personal use are concerned. The most commonly accepted interpretation is that the Convention does not *require* signatories to make either use or possession for personal use punishable offences, although the creation or retention of such offences would be consistent with the treaty. This is because 'use' is not specifically covered by Article 36 and the term 'possession', in that Article and elsewhere, can be read as confined to possession for the purpose of dealing. On this view the obligations created by Article 4 can be satisfied by programs designed to limit use which rely on techniques other than criminal sanctions (such as education). The Shafer Commission in the United States adopted this approach, but its summary of the position reflects the ambiguity of the terms of the treaty. The Commission's summary is as follows:

> (1) A party to the Convention may not affirmatively authorize the possession of cannabis for recreational or any other non-scientific or non-medical use.
>
> (2) Even so, a party need not impose any sanction, civil or criminal, penalizing possession for personal use.

(3) It is arguable, however, that the Convention does require its parties at least to confiscate cannabis and cannabis resin possessed for non-medical or non-scientific purposes and to prohibit cultivation for such purposes.[72]

The correctness of this interpretation is unlikely to be tested before an international tribunal but the issue could be raised before the Australian High Court if the Commonwealth, pursuant to its power to enact laws with respect to external affairs, decided to enforce *through Federal legislation* the domestic controls on cannabis envisaged in the treaty. Such a decision would raise significant constitutional questions as well as the issue of the Commonwealth's obligations under the convention.[73]

The Convention on Psychotropic Substances 1971 is relevant to the present discussion because it applies to tetrahydrocannabinol (THC). While the Convention requires parties to impose a variety of controls on the drugs specified in the treaty (including hallucinogens, amphetamines and barbiturates) so as to confine their use to medical or scientific purposes, it is even less precise than the Single Convention in relation to whether signatories must impose criminal sanctions for possession or personal use. It would seem that the convention intends to allow parties greater flexibility in deciding whether or not conduct should be made a criminal offence.[74]

Whatever the precise obligations under international law created by the two conventions, there can be little doubt that the existing status of cannabis under the Single Convention is inappropriate and should be reconsidered. This of course is a matter beyond our terms of reference, although it is contemplated by the terms of reference of the current Australian Royal Commission of Inquiry into Drugs. If Australia were to support a proposal to reclassify cannabis within international conventions, there are a number of approaches that might be considered. These include withdrawing cannabis from the Single Convention and placing it in a separate Schedule to the Convention on Psychotropic Substances so as to permit parties 'maximum domestic flexibility' in determining the appropriate controls that should be imposed on cultivation, distribution and use.[75]

CONCLUSION

The legal framework for the control of cannabis use in South Australia is designed to implement a policy of total prohibition in the sense that cultivation, importation, production, distribution and use are all subject to criminal penalties. The controls are imposed by Federal and State legislation, reflecting the broad division of powers under the Australian Constitution, although the Commonwealth possibly could 'intrude' further into the State arena by enacting legislation to control domestic activities related to drugs in compliance with obligations imposed by international conventions. Neither the Federal nor the State legislation appears to rest on a clearly defined philosophy, nor is the legislation remarkable for its clarity. This is reflected in the patchwork nature of the legislation, which undergoes frequent amendment as attempts are made to control the drug

'problem', usually through the imposition of more severe penalties. Moreover the law displays an ambivalent attitude towards cannabis-related offences. Maximum penalties remain severe especially for supplying (which includes non-commercial dispositions) and indeed the legislative classifications still reflect the link embodied in international conventions between cannabis and the narcotics. The inclusion of unusual reverse onus clauses in the legislation also indicates a stringent approach to drug-related offences and is a departure from accepted principles of criminal law. On the other hand, the South Australian courts in formulating sentencing policies have adopted a relatively lenient approach towards minor cannabis offenders, recognising explicitly that cannabis is less harmful than other drugs covered by the penal legislation. The ambivalence of the current law supports the need for a reassessment of the controls imposed on the distribution and use of cannabis through the criminal law.

References

1. We have commissioned a research project into the historical background to Australian drug laws, a field which appears to have received virtually no attention in this country.
2. Art.5. This form of cannabis was referred to as any 'galenical preparation (extract and tincture) of Indian hemp'.
3. Art.1. The present Single Convention on Narcotic Drugs 1961 defines 'cannabis' in similar terms to mean the flowering or fruiting tops of the cannabis plant from which the resin has not been extracted. Art.1.(1). The definitions in the Australian legislation are broader.
4. For details see Bruun, K., Pan, L. and Rexed, I. (1975), *The Gentlemen's Club: International Control of Drugs and Alcohol*, Univ. Chicago Press, Chicago and London, ch. 13. See also the Report of the Advisory Committee on Drug Dependence (1968), *Cannabis*, H.M.S.O., Appendix 2 ('History of the development of international control').
5. Convention for the Suppression of the Illicit Traffic in Dangerous Drugs 1936, Arts. 1, 2, 5.
6. The Police Offences Amendment (Drugs) Act 1927, Part VI.
7. The State Attorney-General, Mr S. W. Jeffries, in introducing the Bill, referred to the fact that the Commonwealth was a party to several conventions and stated that

   [i]t is therefore necessary, in order that the Commonwealth may fulfil the commitments, that the various State parliaments should supplement the Commonwealth provisions [under the Customs Act].

   Parliamentary Debates, South Australia, 23 August 1934, Vol.1, p.736.
8. By a proclamation under the Police Offences Amendment (Drugs) Act (N.S.W.), s.18(2).
9. Health Act 1937 (Qld), s.130.
10. By a proclamation under the Police Offences (Drugs) Act (W.A.) 1928.
11. Dangerous Drugs Act (Tas.) 1959.
12. Customs (Prohibited Imports) Proclamation 1926, made under the Customs Act 1901, s.50(1). The prohibition was also extended to exports at the same time.
13. See the Narcotic Drugs Act 1967, ratifying the Single Convention on Narcotic Drugs 1961, and the Psychotropic Substances Act 1976, ratifying the Convention on Psychotropic Substances 1971.
14. Particularly by the Customs Act 1967 and the Customs Act (No.2) 1971.

15. Constitution, s.51(i). See generally R. Brown , 'Federal Drug-Control Laws: Present and Future' (1977), 8 Fed.L.Rev.435, pp. 437 - 445.
16. *R.* v *Jackson* (1972) 4 S.A.S.R. 81, p. 84.
17. S.233B(2). The forerunner to s.233B was inserted into the Customs Act in 1910, but the section was recast and confined to 'narcotic goods' in 1967 and further amended in 1971.
18. S.4(1).
19. The Single Convention on Narcotic Drugs 1961 does not classify cannabis *as* a narcotic, but it is included with heroin in Schedule IV to the Convention as a particularly dangerous drug. This approach was criticised by the Senate Select Committee in its report, *Drug Trafficking and Drug Abuse* (1971), A.G.P.S., p. 58.
20. The constitutional validity of the legislative scheme was upheld as an exercise of the overseas trade power in *Milicevic* v *Campbell* (1975) 132 C.L.R. 307.
21. S.235(2) (c) (ii).
22. S.235(2) (d).
23. S.235(3). Where proceedings are brought before a court of summary jurisdiction, the maximum penalty for any offence is a $2000 fine or imprisonment for two years, but both defendant and prosecutor must consent to the matter being heard summarily 235(4), (6).
24. Schedule VI, column 2.
25. The word *sativa* was omitted in 1976 from the definition of cannabis plant, to avoid argument based on the proposition that *Cannabis sativa* is only one species of cannabis and that the prosecution must always prove the precise species of cannabis seized in each case. As it happens, this argument was rejected by the High Court after the amendment was passed: *Yager* v *The Queen* (1977) 51 A.L.J.R. 367.
26. S.4(1).
27. S.4(1).
28. See s.235(2) (c).
29. It appears that s.240 applies to drug cases: *R.* v *Le Cerf* (1976) 13 S.A.S.R. 237.
30. S.243.
31. See ss.239, 229, 230.
32. Compare *R.* v *Bush* [1975] 1 N.S.W.L.R. 298.
33. This is the effect of *R.* v *Bush* [1975] N.S.W.L.R. 298, reaffirmed in *R.* v *Rawcliffe* [1977] 1 N.S.W.L.R. 219. Compare *Warner* v *Metropolitan Police Commissioner* [1969] 2 A.C. 256; *Sweet* v *Parsley* [1970] A.C. 132. It is not absolutely clear that the South Australian Supreme Court would adopt this position.
34. For example submission no.176 (J. Willis and W. Lane, Dept of Legal Studies, La Trobe University), pp. 18 - 19.
35. S.235 (3).
36. [1971] 1 N.S.W.L.R. 247.
37. [1971] 1 N.S.W.L.R. 247, p. 262.
38. As to other State policies in Customs Act prosecutions see *R.* v *Piercey* [1971] V.R. 647; *Douglas* v *R.* [1976] A.C.L.D. 447.
39. *R.* v *Beresford* (1972) 2 S.A.S.R. 446. The Court is entitled to assume, without evidence, that Indian hemp is the least harmful of the drugs covered by the Narcotic and Psychotropic Drugs Act: *R.* v *Tideman* (1976) 14 S.A.S.R. 130. See below, n. 67.
40. (1972) 4 S.A.S.R. 81.
41. Narcotic Drugs Act 1967, s.4(2)
42. *R.* v *Manos, ex parte Normandale* (1977) 16 S.A.S.R. 78.

43. S.4(1) (b).
44. S.3.
45. See n.25 above; *Dimitriou* v *Samuels* (1975) 10 S.A.S.R. 331.
46. S.5(2) (e) creates the offence of permitting premises to be used for the preparation, consumption or distribution of prohibited drugs. It is a defence to prove that the defendant did not know that the substance to which the charge relates was a prohibited drug: s5(3a). The Wootton Committee in the United Kingdom recommended that an offence of this character should be repealed, except for premises open to the public: Report by the Advisory Committee on Drug Dependence (1968), *Cannabis*, H.M.S.O., pp. 29 - 30.
47. S.14(1).
48. S.14(1a).
49. Justices Act 1921 - 1977, s.122.
50. Such as obtaining a prohibited drug or a prescription for a prohibited drug by means of a false representation, wilfully obstructing a Police Officer exercising powers of search and seizure under the Act, attempting to commit an offence under the Act or advertising a willingness to supply a prohibited drug. For these offences see ss.8,9(2), 10, 13, 14(3), 14a(1).
51. S.5(4).
52. Narcotic and Psychotropic Drugs Regulations 1978, reg.51. The regulation uses the term 'Indian hemp resin' in place of 'hashish'.
53. See *R.* v *Tideman* (1976)14 S.A.S.R. 130; *Falconer* v *Pedersen* [1974] V.R.185 (gratuitous transfer constitutes trafficking for the purpose of the Victorian Poisons Act).
54. S.5(2a).
55. (1977) 16 S.A.S.R. 78.
56. See Local and District Criminal Courts Act 1926 - 1974. ss.4(1), 328(2).
57. S.5(1) (a).
58. It is probably enough to secure a conviction to prove that the accused mistakenly believed the substance to be another prohibited drug (such as heroin) rather than cannabis.
59. *R.* v *Boyce* (1976) 15 S.A.S.R. 40; *R.* v *Van Swol* [1975] V.R. 61.
60. S.5(4).
61. *R.* v *Boyce* (1976) 15 S.A.S.R. 40, p. 47, per Bray C.J.
62. (1972) 2 S.A.S.R. 446.
63. In *R.* v *Stephens* (1975) 13 S.A.S.R. 145, for example, the court considered a schedule showing the penalties imposed in the District Criminal Court for drug offences of various kinds over the preceding twelve months. See also *R.* v *Barber* (1976) 14 S.A.S.R. 388.
64. *R.* v *Gronert* (1975) 13 S.A.S.R. 189.
65. (1972) 2 S.A.S.R. 446, pp. 449 - 450.
66. *R.* v *Phillips* (1971) 3 S.A.S.R. 85, p. 87.
67. *R.* v *Tideman* (1976) 14 S.A.S.R. 130, p. 134.
68. (1972) 2 S.A.S.R. 446, p. 451.
69. See *Dimitrou* v *Samuels* (1975) 10 S.A.S.R. 331 (a heroin case). Compare *R.* v *Tideman* (1976) 14 S.A.S.R. 130 (a case of possession of cannabis for distribution among friends but not for sale to the public).
70. For legislation implementing the treaty obligations see the Narcotic Drugs Act 1967 (Cth) and the Psychotropic Substances Act 1976 (Cth).
71. Art. 2, para 5(a). The Convention provides for the inclusion of new drugs in Schedule IV by the Commission on Narcotic Drugs in accordance with the recommendations of the World Health Organisation. The major criterion for inclusion in Schedule IV is that the

drug 'is particularly liable to abuse and . . . that such liability is not offset by substantial therapeutic advantages' (Art 3, para5).

72. Report of the National Commission on Marihuana and Drug Abuse (1972), *Marihuana: A Signal of Misunderstanding*, Appendix (Technical Papers) U.S. Govt. Printing Office, p. 532.
73. See R. Brown, n.15 above, pp. 451 - 456.
74. See Arts.5, 7, 22.
75. *Marihuana: A Signal of Misunderstanding*, *op. cit.*, p. 546.

6 : COURT STATISTICS

The legal framework outlined in the previous chapter does not of itself show how the laws are enforced in practice. There is remarkably little published information available in Australia on prosecutions under Federal and State legislation relating to illicit drugs. The Commonwealth Police publish annual Drug Abuse Reports, which provide some details of drug offences reported to the Australian Crime Centre by State Police Forces. However, these statistics are somewhat unreliable, as reporting is voluntary and the quality of information supplied to the Centre varies.

The latest year for which Commonwealth statistics have been published is 1976. In that year 15 689 drug charges involving cannabis were laid throughout Australia under State and Commonwealth legislation and of these 13.8% involved concentrated forms of the drug. Table 6.1 shows the type of cannabis involved in drug charges, as reported to the Australian Crime Intelligence Centre, for the period 1973 to 1976. Table 6.2 shows the type of charges laid in respect of cannabis offences for the same period. The table indicates that in 1976 about 86% of all charges involving cannabis related to possession, use or administration of the drug.

More complete and reliable statistics are available for South Australia and New South Wales. The New South Wales Bureau of Crime Statistics and Research has published regular reports on drug prosecutions determined by the courts in the State.[1] There is as yet no similar body functioning in South Australia (although one is planned), but we have commissioned a research project designed to obtain, from a study of court records, reliable statistics on drug prosecutions within the State over the 3-year period from mid 1974 to mid 1977.

The South Australian court records project shows that the number of adults charged with cannabis-related offences increased rapidly between 1975 and 1977: during 1975, 332 people were charged with cannabis-related offences; from January to June, 1977, 707 people were charged. All but a few of these persons were charged with offences under State law, importation charges being uncommon in South Australia since the State has no international airport and is not generally a first port of call for shipping. In interpreting the increase in the number of persons charged with drug offences, it should be noted that the South Australian Police Drug Squad expanded in strength from 14 officers in 1974 to 21 in 1977. While the Drug Squad does not conduct all drug investigations (suburban and country units and uniformed officers handle some less serious matters), the increase in the number of persons charged has occurred in conjunction with a significant expansion of the Drug Squad. An increase in the number of persons charged is not necessarily an indication of increased availability or use of drugs.

In the first half of 1977, over 90% of all *persons charged with drug offences* before South Australian courts were charged with cannabis-related offences. In the same period nearly 94% of all *drug charges* concerned cannabis (Table 6.3). The proportion of drug charges involving cannabis was higher in 1977 than in preceding years, perhaps reflecting different enforcement practices. Although prosecutions involving narcotics or other illicit drugs may on average take more of the court's time, the great bulk of court resources devoted to drug prosecutions in South Australia concerns cannabis cases. The pattern is broadly the same in New South Wales, although the proportion of drug offenders convicted of cannabis-related offences is somewhat less. In that State in 1976, 78.9% of all persons convicted of drug offences (3907 out of 4950) were convicted in relation to their use of or dealings in cannabis.[2]

In evidence the South Australian Police Department stated that the Drug Squad concentrates its resources on detecting dealers in or suppliers of cannabis rather than on users of the drug.[3] Despite this, the court statistics show that the major proportion of cannabis charges heard by the courts concern simple possession and use of the drug. Table 6.4 shows that in 1977 nearly 92% of cannabis offences dealt with by the courts were for possession or use of the drug. This proportion has remained relatively stable over several years, although in 1977 it increased slightly.

Court statistics cannot, of course, be used as a precise indicator of the forms of activities of the Drug Squad. The total number of persons charged with dealing and supply offences has increased. It is possible, too, that increased awareness of and capacity to identify cannabis on the part of police officers in general has been responsible for the increase in the proportion of non-dealing offences before the courts. Officers outside the Drug Squad are responsible for initiating many prosecutions for minor drug offences.

The position in South Australia is not unique. In New South Wales only 5.8% of all cannabis convictions in Courts of Petty Sessions in 1976 were classified as 'push' offences (such as selling and distributing), while the balance were classified as 'use' offences.[4]

The penalties imposed by South Australian courts for cannabis offences have changed in recent years in line with the guidelines put forward by the appellate courts (discussed in Chapter 5). Table 6.5 shows that fewer offences for simple possession and use now result in imprisonment or suspended sentence for the offender, and indeed imprisonment as such has not often been imposed for these offences in the last three years. The penalty for simple possession or use is likely to be a fine or a good behaviour bond; where a bond is imposed a conviction is often not recorded. In 1977, 68% of cannabis possession and use offences resulted in a fine, indicating that a pecuniary penalty is the most common sanction applied to those convicted of the possession or use of cannabis. In 1977, the fines for these offences were mostly within the range of $50.00 to $150.00.

Table 6.5 shows that terms of imprisonment and suspended sentences are imposed more frequently for dealing in and supplying cannabis. In fact, a higher proportion of persons convicted of these offences were imprisoned in 1977 than has occured in previous years and about half of those convicted received either imprisonment or a suspended sentence of imprisonment. Proving these offences apparently presents difficulties, for many charges do not lead to a conviction—in 1976 and 1977 approximately 20% of dealing charges were dismissed or not proceeded with.

Again the position regarding penalties in New South Wales is broadly in line with that in South Australia. In 1976, 68% of the 3639 offenders convicted of use or possession of cannabis in Courts of Petty Sessions were fined; only 3.6% received custodial sentences.[5] However, of those convicted of 'push' offences, 29% received custodial sentences; this figures rises to 34.5% when the sentences imposed by higher courts in State prosecutions is taken into account.[6] Thus in both States a fine is the most common penalty for simple possession of cannabis, while custodial sentences of imprisonment (usually suspended in South Australia) are commonly imposed for dealing in the drug.

TABLE 6.1: NUMBER OF CHARGES INVOLVING SPECIFIC TYPES OF CANNABIS[a]

	1976[b]		1975[c]		1974[d]		1973[e]	
Plants	778	(5.0%)	575	(4.4%)	296	(4.1%)	235	(4.9%)
Seeds	1 180	(7.5%)	1 015	(7.8%)	118	(1.6%)	206	(4.3%)
Marihuana	11 563	(73.7%)	10 821	(83.2%)	6 528	(91.0%)	4 235	(87.6%)
Hashish	1 278	(8.2%)	497	(3.8%)	118	(2.6%)	130	(2.7%)
Cannabinol	144	(0.9%)	70	(0.5%)	23	(0.3%)	8	(0.2%)
Liquid hash	69	(0.4%)	30	(0.2%)	23	(0.3%)	19	(0.4%)
'Buddha sticks'	667	(4.3%)						

(a) from Commonwealth Police, *Drug Abuse in Australia: A Statistical Survey*, Australian Crime Intelligence Centre.

(b) Technical Report No. 9, 1978.

(c) Technical Report No. 8, 1976.

(d) Technical Report No. 7, 1975.

(e) Technical Report No. 6, 1974

TABLE 6.2 : NATURE OF CHARGES INVOLVING CANNABIS, AUSTRALIA, 1973 TO 1976[a]

Charge	1976[b]		1975[c]		1974[d]		1973[e]	
Possess	9 143	(58.3%)	7 518	(57.8%)	4 125	(57.5%)	2 642	(54.7%)
Import	149	(0.9%)	68	(0.5%)	152	(2.1%)	138	(2.9%)
Use administer	4 379	(27.9%)	3 809	(29.3%)	1 964	(27.4%)	1 391	(28.8%)
Traffic	766	(4.9%)	686	(5.3%)	342	(4.8%)	243	(5.0%)
Other	1 252	(8.0%)	927	(7.1%)	593	(8.3%)	419	(8.7%)

(a) from Commonwealth Police, *Drug Abuse in Australia: A Statistical Survey*, Australian Crime Intelligence Centre.
(b) Technical Report No. 9, 1978.
(c) Technical Report No. 8, 1976.
(d) Technical Report No. 7, 1975.
(e) Technical Report No. 6, 1974.

TABLE 6.3 : SUBSTANCE INVOLVED IN ALL OFFENCES IN COMPLETED DRUG CASES,[a] SOUTH AUSTRALIA, 1974 TO 1977[b]

	1977[c]		1976		1975		1974[d]	
Cannabis	1084	(93.5%)	769	(81.9%)	585	(82.9%)	145	(79.7%)
Opiates	63	(5.4%)	90	(9.6%)	77	(10.9%)	14	(7.6%)
Other	12	(1.0%)	80	(8.5%)	44	(6.2%)	23	(12.6%)

(a) Courts of summary and higher jurisdiction.
(b) from Heine, W., *Research Report on Court Statistics*, South Australian Royal Commission into the Non-Medical Use of Drugs, 1978 (in the press).
(c) Figures for 1977 are for the half year January to June.
(d) Figures for 1974 are for the half year July to December.

TABLE 6.4 : TYPE OF CANNABIS OFFENCE, FIRST OFFENCE CHARGED IN COMPLETED DRUG CASES,[a] SOUTH AUSTRALIA, 1974 TO 1977[b]

	1977[c]		1976		1975		1974[d]	
'Supply'	58	8.2%	62	12.9%	42	12.7%	10	11.0%
'Use'	649	91.8%	419	87.1%	290	87.3%	51	89.0%

(a) Courts of higher and summary jurisdiction.
(b) from Heine, W., *Research Report on Court Statistics*, South Australian Royal Commission into the Non-Medical Use of Drugs, 1978 (in the press).
(c) Figures for 1977 are for the half year January to June.
(d) Figures for 1974 are for the half year July to December.

TABLE 6.5 : ACTION TAKEN BY COURT IN COMPLETED DRUG CASES, CANNABIS OFFENCES[a], SOUTH AUSTRALIA, 1974 TO 1977[b]

	1977[c]		1976		1975		1974[d]	
	Push	Use	Push	Use	Push	Use	Push	Use
	(Percentages)							
Warned or placed on a bond without conviction	1.9	11.6	2.0	12.4	-	4.4	-	3.7
Convicted								
Fine	36.5	68.4	26.5	61.2	28.1	61.0	37.5	76.3
Bond	-	3.9	-	3.1	3.1	5.8	-	5.0
Suspended Sentence	32.7	2.8	44.9	7.6	53.1	7.5	12.5	6.3
Imprisonment	7.7	1.7	6.1	2.4	3.1	4.1	12.5	-
No Penalty	-	1.4	-	1.2	-	4.1	-	1.3
Dismissed not prosecuted	21.2	10.2	20.5	12.1	12.6	13.1	37.5	7.3

(a) Courts of higher and summary jurisdiction.

(b) from Heine, W., *Research Report on Court Statistics*, South Australian Royal Commission into the Non-Medical Use of Drugs, 1978 (in the press).

(c) Figures for 1977 are for the half year January to June.

(d) Figures for 1974 are for the half year July to December.

References

1. The most recent is *Court Statistics 1976*, Statistical Report 8, Series 2 (1977), Section 6, 'Drug offences'.
2. *Ibid.*, tables 6.2, 6.11, 6.16
3. S.A. Police Department, submission no. 107, p. 33.
4. *Ibid.*, table 6.3. Some cases were disposed of by higher courts, but these would not significantly affect the percentages.
5. *Ibid.*, table 6.6
6. *Ibid.*, table 6.8

7 : LAW AND THE ENFORCEMENT OF MORALITY

We refer elsewhere in this discussion paper to the striking fact that so many official inquiries have recently been launched at national levels into policy questions raised by the non-medical use of drugs. This re-examination of the issues suggests that the policy questions cannot be resolved simply by the application of a single, consistent philosophical principle. If there were such a principle, presumably it would have been articulated, accepted and implemented by now. We think that the acceptable answers to the policy questions can be expected to vary from time to time depending on such factors as the social and legal structure of the particular community and the values espoused by major groups within the community. In addition there are lessons to be learnt from the historical experience with drug use and with formal and informal mechanisms for its control. If anything is clear, it is that the nature and impact of these forces change over time and vary from community to community. What is accepted unhesitatingly as sound social policy at one time may come under close and critical scrutiny by the same community within a very short period.

Nevertheless some people argue or assume that it is possible to formulate a basic and lasting philosophical principle to determine the proper role of the State in regulating the distribution and non-medical use of drugs. Since criminal sanctions have been employed in Australia as the principal technique for the control of cannabis use (but not always for other drugs), attention has been focussed on this means of control. It is certainly not uncommon for participants in the cannabis debate to argue that the retention or withdrawal of criminal sanctions, as the case may be, follows inexorably from fundamental philosophical principles.

Some people who seek the relaxation of legal controls on cannabis, for example, characterise drug use as private behaviour and rely on the elegant contentions of John Stuart Mill, in his essay *On Liberty*, to exclude such behaviour from the reach of the criminal law. In that essay, which does not specifically refer to drugs other than in passing references to drunkenness and poisons, Mill explores the 'nature and limits of the power which can be legitimately exercised by society over the individual'.[1] Disturbed by the threat to liberty he sees as posed by governmental interference, he asserts

> . . . one very simple principle, as entitled to govern absolutely the dealings of society with the individual in the way of compulsion and control, whether the means used be physical force in the form of legal penalties, or the moral coercion of public opinion. That principle is, that the sole end for which mankind are warranted, individually or collectively, in interfering with the liberty of action of any of their number, is self-protection. That the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others. *His own good, either physical or moral, is not a sufficient warrant.* He cannot rightfully be compelled to do or forbear because it will be better for him to do so, because it will make

him happier, because, in the opinions of others, to do so would be wise, or even right. These are good reasons for remonstrating with him, or reasoning with him, or entreating him, but not for compelling him, or visiting him with any evil in case he do otherwise. To justify that, the conduct from which it is desired to deter him must be calculated to produce evil to some one else. The only part of the conduct of any one, for which he is amenable to society, is that which concerns others. In the part which merely concerns himself, his independence is, of right, absolute. Over himself, over his own body and mind, the individual is sovereign.[2] (Our italics)

One body of opinion contends that Mill's principle should be accepted as the basis for social policy in this field and that his principle, if accepted, dictates the removal of criminal penalties currently imposed on the cultivation, distribution or use of cannabis. On the other hand, some of those who support the retention of criminal penalties completely reject this approach. They argue that an important, if not the primary function of the criminal law is to enforce the moral standards accepted by the majority of the community. This group tends to assume not only that current moral opinion in South Australia firmly disapproves of the use of cannabis and other illicit drugs, but also that the existence of this body of opinion in itself justifies the continued application of criminal sanctions to users of and dealers in cannabis. On this approach the difficulties encountered in enforcing the law may constitute a good reason for stepping up enforcement efforts, but not for reassessing the role of the criminal law in this field.

The more thoughtful submissions to us recognised the dangers of too simple an analysis of the philosophical issues and in particular of a belief that policy questions can be resolved more or less automatically by applying a single, overriding, principle. The South Australian Council for Civil Liberties, while stating that its basic stand was derived from the 'libertarian' ethic, readily acknowledged the difficulty of applying Mill's distinction between self-regarding conduct and conduct harmful to others to the formulation of drug policy.[3] The difficulty has been stressed often in the modern debate which has raged concerning the proper scope of the criminal law and the relationship between law and morals. It has been pointed out that the harm (if any) inflicted on an individual through his non-medical use of drugs cannot be viewed in isolation from its effects on the rest of the community. In 1972 the Le Dain Commission in Canada observed that many

> would stress the effect which harmful drug use frequently has on the members of the user's family in emotional disturbance, family relations and discharge of one's family responsibilities, as well as the effect which it has on others in the community who must assume some responsibility for dealing with the consequences to the user and the members of his family . . . . They would also stress the general effect of harmful drug use on the motivation and productive capacity required to maintain the institutions and life of the society.[4]

Modern followers of Mill are also apt to concede more force to what is often described as the 'paternalistic' justification for legal restrictions on private

conduct than Mill is himself prepared to accept. Mill argues, for example, that a person should not be prevented from buying a poison, despite possible harmful consequences arising from use; he should merely be warned of the danger, 'not forcibly prevented from exposing himself to it'. But as doubts have grown about the assumption that adults are always capable of free and wise decisions in their own interests, especially in a technologically complex age, it has been more readily accepted that the law can and should attempt to prevent people inflicting at least serious harm on themselves.[5] The S.A.C.C.L. submission makes the colourful concession that

> . . . a drug which gave a single night of ecstasy followed by permanent paralysis would have most liberationists bolting to the paternalist camp.[6]

The doctrine of paternalism has attracted the comment that it tears the heart out of Mill's doctrine.[7] Whether or not this is so, the fact that some of Mill's supporters have been moved to modify his thesis shows just how insistent are demands that the criminal law, in appropriate cases, should attempt to protect people from inflicting harm on themselves.[8] In addition the libertarian thesis, if applied to drug use, must take into account certain qualifications put forward by Mill himself. The most important of these is that the doctrine is intended to apply 'only to human beings in the maturity of their faculties'. It follows that, on Mill's analysis, children and young people must be protected against their own actions. As the Le Dain Commission points out,[9] this is a most important qualification, since psychotropic drugs, including cannabis, are widely used by young people in Australia (which is not to say that non-medical drug use is predominantly an activity of the young).

Just as care must be taken not to assume that Mill's thesis resolves all questions of social policy, so the thesis that the criminal law is an appropriate means of enforcing morality does not overcome all difficulties. In modern times the approach most at variance with Mill's is often thought to be that of the English jurist, Lord Devlin, now published in his collection of essays *The Enforcement of Morals*.[10] The controversy surrounding his views has been complicated by the fact that they are, in some respects, ambiguously expressed. The ambiguity is illustrated by a key passage in his argument:

> it is not possible to set theoretical limits to the power of the State to legislate against immorality. *It is not possible to settle in advance exceptions to the general rule or to define inflexibly areas of morality into which the law is in no circumstances to be allowed to enter.* Society is entitled by means of its laws to protect itself from dangers, whether from within or without. . . [A]n established morality is as necessary as good government to the welfare of society. Societies disintegrate from within more frequently than they are broken up by external pressures. There is disintegration when no common morality is observed and history shows that the loosening of moral bonds is often the first stage of disintegration, so that society is justified in taking the same steps to preserve its moral code as it does to preserve its government and other essential institutions.

The suppression of vice is as much the law's business as the suppression of subversive activities; it is no more possible to define a sphere of private morality than it is to define one of private subversive activity.[11]

(Our italics)

Commentators have identified at least two possible interpretations of Lord Devlin's argument. The first, described by his critic Professor H. L. A. Hart as the 'moderate thesis'[12] states that a shared common morality is required for the preservation of society and that deviations from this common morality can be penalised as an assertion of society's right to prevent social disintegration. **It follows from this that the mere fact that the imposition of a penalty can be regarded as the enforcement of morality does not render the penalty improper.** Put this way; the argument does not generate great conflict, since few would dispute society's right to safeguard what is essential to its existence. The question then becomes whether the particular conduct under consideration (homosexuality, euthanasia, use of mood-altering drugs) constitutes such a threat to the very existence of society that controls are warranted. An answer to this question clearly requires the gathering of empirical information and the exercise of judgment as to whether behaviour constitutes a danger, actual or potential, to society. In this sense the moderate thesis of Lord Devlin assesses behaviour according to the harm it can inflict on the community as a whole.

The second interpretation is that the mere fact that a great majority of the community firmly believes that an act is immoral is enough *of itself* to warrant (or perhaps compel) the prohibition of that act, regardless of whether it causes harm to others or to society or indeed regardless of how frequently the act is performed. This thesis poses difficulties. If unqualified, it suggests that current social convictions must become frozen by legal enforcement, since any deviation is punishable. In fact, as Devlin acknowledges, moral views do change, often rapidly, without necessarily disrupting the fabric of society. This form of the thesis also suggests that the views of the majority determine both morality and law, whether the views have a principled basis, or rest simply on prejudice or erroneous assumptions of fact. (Devlin talks of the moral judgments of society being determined by the reactions of the 'reasonable' or 'right-minded' man, but it is not clear how far these qualifications would modify the impact of strongly held majority opinions.) The 'extreme thesis' is hardly appropriate to a community which values individual freedom and privacy and the encouragement of an expression of diverse opinions on political and philosophical issues.

In the end, it seems that Lord Devlin does not opt for the extreme thesis, since he acknowledges that there is a clash between public and private interests and that no rigid statements can be made about how the balance should be struck. Whether morality should be enforced by law depends on a judgment in each case, with consideration of such values as the need to tolerate the maximum individual freedom consistent with the integrity of

society and the importance of respecting privacy as far as possible. He agrees, also, that the limits of tolerance shift.

> The line that divides the criminal law from the moral is not determinable by the application of any clear-cut principle. It is like a line that divides land and sea, a coastline of irregularities and indentations.[13]

It is interesting to note, too, that the submission from the Festival of Light and Community Standards Organization,[14] which might perhaps be expected to adopt the 'extreme thesis', does not simply argue that use of cannabis should remain subject to criminal sanctions because a majority of the community disapprove of such use. The submission, while stating that it supports 'the absolute moral standards of the Judaeo-Christian ethic' (without specifying those standards), concentrates on the harmful effects of cannabis to the user and to the community as a whole. On their view therefore the policy questions relating to cannabis must involve an assessment of the capacity of the drug to cause harm.

The main purpose of this chapter, then, is to suggest that there is no easy answer on principle to the questions of social policy posed by the use of cannabis. Those questions posed by reliance on the criminal law to control the non-medical use of drugs present special difficulties. The answers will not be found either in extreme libertarianism or in moral absolutism. As the Le Dain Commission observed,

> it is not particularly helpful in this case to attempt to set theoretical limits to the application of the criminal law. The criminal law may properly be applied, as a matter of principle, to restrict the availability of harmful substances, to prevent persons from causing harm to himself or to others by the use of such substances, and to prevent the harm caused to society by such use. In every case the test must be a practical one: we must weigh the potential for harm, individual and social, of the conduct in question against the harm, individual and social, which is caused by the application of the criminal law, and ask ourselves whether, on balance, the intervention is justified. Put another way, the use of the criminal law in any particular case should be justified on an evaluation and weighing of its benefits and costs.[15]

We would add one very important point which has not figured prominently in the debate over law and morality. The fact that certain behaviour, such as the private non-medical use of drugs, offends the 'morality' of a majority of the population is not of itself a sufficient reason to prohibit that behaviour through the imposition of criminal sanctions. It may be, however, that the offence to morality rests in part on rational concerns for the well-being of the person engaging in certain behaviour (in this case, the drug user) and for the well-being of the community as a whole. An official response designed to control the behaviour may be required, but that response need not rest wholly or even primarily on the application of criminal sanctions. Just as there may be ways of keeping behaviour in check short of prohibiting it altogether, so there are techniques other than criminal sanctions which are often used to reflect the community's concern about the behaviour or, in appropriate cases, its disapproval of the behaviour.

Ultimately we have to consider what specific policies should be pursued in South Australia with respect to the cultivation, distribution and use of cannabis, including the techniques that should be employed to implement that policy. We have earlier stated briefly the concerns that justifiably exist concerning the use of cannabis (p. 15). More significantly, we need to state principles which will assist in formulating a detailed policy to regulate cannabis use. It is important to identify the principles that influence us, since they inevitably affect our assessment of the costs and benefits of current policies and of the alternatives worthy of consideration. This should allow anyone concerned to evaluate our analysis, to discuss these values and assumptions and to ascertain whether any suggested approach is consistent with them.

References

1. Mill, J. S., *On Liberty*, Everyman ed., p. 65.
2. *Ibid.*, pp. 72 - 73.
3. South Australian Council for Civil Liberties, submission no. 100, p. 16.
4. Commission of Inquiry Into the Non-Medical Use of Drugs (1972), *Cannabis*, Ottawa, pp. 278 - 279. Compare Mill's observation:

   in the frequent case of a man who causes grief to his family by addiction to bad habits, he deserves reproach for his unkindness or ingratitude . . . Whoever fails in the consideration generally due to the interests and feelings of others . . . is a subject of moral disapprobation for that failure, but not for the cause of it, not for the errors, merely personal to himself, which may have remotely led to it.
   On Liberty, *op. cit.*, p. 138
5. Hart, H. L. A., (1963), *Law, Liberty and Morality*, Oxford University Press, pp. 30 - 34.
6. Submission no. 100, *op. cit.*, p. 21
7. The modification adopted by Hart earned the riposte by Lord Devlin, his principal antagonist, in the modern debate on law and morality, that,

   What, alas, I did not foresee was that some of the crew who sail under Mill's flag of liberty would mutiny and run paternalism up the mast.
   Devlin, P., (1965), *The Enforcement of Morals*, Oxford University Press, p. 132.
8. Compare the approach of G. Dworkin, that paternalistic interferences may be justified, but 'only to preserve a wider range of freedom for the individual in question'. He argues as follows:

   Some of the decisions we make are of such a character that they produce changes which are in one or another way irreversible. Situations are created in which it is difficult or impossible to return to anything like the initial stage at which the decision was made. In particular, some of these changes will make it impossible to continue to make reasoned choices in the future. I am thinking specifically of decisions which involve taking drugs that are physically or psychologically addictive and those which are destructive of one's mental and physical capacities.
   Dworkin, G., (1971), 'Paternalism', in Wasserstrom, R. (ed.), *Morality and the Law*, Wadsworth, p. 122.
9. *Cannabis*, *op. cit.*, p. 276.
10. Devlin, *op. cit.*
11. *Ibid.*, pp. 12 - 14.
12. Hart, *op. cit.*, pp. 48 - 52.
13. Devlin, *op. cit.*, pp. 21 - 22.
14. Submission no. 101.
15. *Cannabis*, *op. cit.*, pp. 282 - 283.

8 : GUIDING PRINCIPLES AND VALUES

In Chapter 3, we summarised the pharmacological and medical evidence as to the effects of cannabis and identified the major concerns arising from use of the drug. In the light of this summary some general principles can be stated to assist in the formulation of specific policies for the regulation of the use and distribution of the drug. In part, as we have discussed, these principles depend not only on an objective assessment of the evidence but on values which are not capable of empirical proof. Some have implications ranging far beyond the regulation of cannabis use, and are dealt with in other discussion papers, notably *Education*. In putting the principles forward we caution that they cannot resolve all policy questions without the exercise of further judgment. One principle may conflict with another—for example, the goal of destruction of the illicit market may be attainable through setting up a legal market, but only at the cost of some increase in cannabis use—and the potential conflict cannot be overcome by simply ranking the principles in order of priority. Even so, a statement of guiding principles is required before any tentative recommendations can be stated.

THE NEED FOR REALISTIC GOALS

The objectives sought by measures designed to regulate the use of cannabis should be realistic. If they are not, community expectations will be created which cannot be met, the forms of control established will be regarded as ineffective and the process of framing policy will become distorted. For example ,we do not think it is entirely practical to state, as the Senate Standing Committee on Social Welfare does,[1] that the community's goal should be not only to reduce significantly the use of cannabis but if possible, *ultimately to discontinue its use*. If the historical experience with cannabis shows anything, it is that discontinuance of all kinds of use (experimental, occasional, regular or heavy) cannot be expected to flow from any single policy or combination of policies that would be acceptable in a democratic community. Some suggest it might be possible to eliminate the drug almost completely, but if reliance were placed on legal sanctions, this would require such a massive allocation of resources to enforcement authorities and the granting of such broad powers of investigation that the fundamental character of Australian society would be changed.

In any case, there is no evidence that Draconian penalties would work, especially where use is already well established. This is not to say that the patterns of use of cannabis cannot alter. Fashions in recreational drugs as in other matters vary, but the reasons for the variation may be complex. For example, the rate of illicit use of amphetamines and LSD in Australia appears to have fallen significantly in the past decade, but this seems to have been less related to patterns of law enforcement than to the

widespread acceptance by users that these drugs do indeed produce harmful effects. Since users of cannabis generally do not share this view of their drug of choice, it is doubtful whether any rapid decline in use can be expected even if use remains illegal. The recognition that there is a limit to what can be attained through formal means of social control may have important consequences, particularly in assessing the role that the criminal law should be asked to play in regulating conduct.

THE NEED TO CONFRONT POLICY DECISIONS

The debate concerning cannabis and indeed that relating to drug policy in general often produces the assertion that not enough scientific information is available to justify recommending changes in existing policy. Certainly that view was expressed in submissions and at the hearings. But in our view policy makers should face up to the decisions required on cannabis and not postpone judgment more or less indefinitely on the excuse that not enough is yet known about the long-term effects of the drug. There is clearly a need for further research into some of the health implications of cannabis use and matters such as methods for measuring cannabinoids in the body. This does not mean, however, that present knowledge is insufficient for the purposes of decision-making.

The notion, again put forward by the Senate Standing Committee on Social Welfare,[2] that Australia alone could or should generate a research program which would provide a complete data base for the formulation of a national policy on cannabis within five years rests, in our view, on a misconception of the intensive nature of the research needed in the future. Enough is now known to consider whether a fresh approach is required and further delay amounts to a preference for one policy over another by default.

THE NEED TO RECOGNISE THE VALUES OF PRIVACY AND INDIVIDUAL FREEDOM

In Chapter 7, we discussed some of the questions posed by the use of the criminal law to regulate behaviour, particularly in order to enforce morality. We suggested, among other things, that while there were no easy answers to these questions, the balance between public and private interest should be struck after consideration of values such as the need to tolerate the maximum individual freedom consistent with the integrity of society and the importance of respecting privacy as far as possible. Policy makers should explicitly recognise these values and the consequential proposition that they should be overridden only when there are very strong reasons for doing so, such as the likelihood of serious harm to the individual or the community.

THE NEED TO DISTINGUISH BETWEEN DIFFERENT KINDS OF USE

The analysis earlier in this paper accepts that policy makers should consider the possible impact of cannabis use upon public health. But this requires a

distinction to be drawn between various kinds of cannabis use. This is because potential harm to the user or to others in the community depends on the nature and extent of use of the drug. Commentators often fail to distinguish types of use. It is, for example, one thing for a group of adults occasionally to share a joint in the privacy of their home; it is another for a young person to use a high potency preparation several times a day in a way that interferes substantially with his work or education. Between these two extremes there is a range of behaviour. Cannabis may be used lightly or heavily; it may be used seldom or often; and the motives for use may range from experimentation to relaxation or tension relief. It has been suggested that these three dimensions are closely correlated and that four main types of use occur: experimental, casual, regular and heavy.[3] It also may be helpful to distinguish between use of cannabis which is peripheral to the lifestyle of the user and use which is central to that lifestyle.

While these hypotheses about the use of drugs are not as yet proven, at least in Australia, the behaviour which is sought to be controlled is obviously complex. In formulating policy we think it should be acknowledged that it is possible to use cannabis in a way that presents no serious health risk to the user, or any risk of harm to others in the community. On the other hand, depending on the circumstances, the use of cannabis can harm the development of the user, present the possibility of a health risk and create other dangers, notably that of impaired driving performance. These are all matters of concern. In short, social policy should seek to discourage excessive use, and encourage responsible behaviour in connection with cannabis.

THE NEED TO ACKNOWLEDGE THE CHOICES FACING PEOPLE

Official policy should acknowledge that, for better or for worse, mood-altering drugs form part of the environment in which we live and that for most people a choice whether or not to use such drugs cannot be avoided. The fact that a drug like cannabis cannot be obtained lawfully does not necessarily eliminate the decision facing individuals, particularly young people, to use the drug or not and, if so, in what quantities. Cannabis appears to be readily available and widely used. Probably only a minority of children in South Australia will not have had the opportunity to smoke cannabis presented to them by the time they reach the age of 20. Social policy should therefore aim to encourage considered and informed judgments about the use of cannabis, rather than pretend that those judgments can be avoided by stringent enforcement of a total prohibition policy.

THE NEED FOR A GENERAL POLICY OF DISCOURAGEMENT

Notwithstanding the choice that many people will have to make in relation to cannabis, it is proper to base social policy on the general proposition that use of cannabis should be discouraged, recognising that the major objective

should be to avoid harm by limiting excessive or irresponsible use. It is important to stress that a policy of discouragement does not necessarily imply that criminal sanctions *must* be imposed on distributors or users of the drug. Such a policy could be consistent with the legal availability of the drug, and could be implemented by such techniques as restricting outlets, prohibiting advertising, imposing heavy taxation on consumption and systematically informing the community of the risks of excessive or irresponsible use.

THE NEED TO ATTACK THE ILLICIT MARKET

The existence of a substantial illicit market in cannabis, or indeed any other commodity, is a matter of serious concern. It is simply wrong that people who are willing to conduct commercial enterprises outside the legal economy are able to reap very large financial returns as the reward for their willingness to flout the law. By its nature such a market offers purchasers no protection from exploitation and no assurance as to the quality of the product being purchased. The affront to law-abiding members of the community is compounded by the fact that in practice the profits from the illicit market are largely untaxed. The financial rewards obtainable through participation in the illicit market create further problems, notably the danger of corruption of law enforcement authorities and the possibility that organised criminal networks will be attracted to the market. One aim of social policy, then, should be the elimination, as far as possible, of the illicit market in cannabis.

THE NEED TO RESPECT THE SENSIBILITIES OF NON-USERS

In Chapter 7, we examined some issues of principle raised by the attempt to subject private behaviour to criminal sanctions. There may be other sound reasons for distinguishing between private and public behaviour in determining the limits of permissible conduct and the proper reach of the criminal law. Public actions may cause direct offence to people exposed to those actions, while private conduct, since it is hidden from general scrutiny, does not have a similar impact (although some may claim to be offended by what they know is occuring in private even if they do not observe it). Recognising this, the criminal law has long penalised public behaviour where that same behaviour would escape penalties if undertaken in private. For example, acts of indecency, the display of pornographic material, soliciting for the purposes of prostitution and the use of offensive language are offences when committed in public, but are usually not unlawful when committed in private. The fact that public behaviour is offensive to some people does not of itself necessarily justify restrictions on that behaviour; it is always necessary to balance the freedom of the actor with that of the reluctant observer.[4] Nevertheless, the need to protect people from public behaviour they consider to be offensive may be properly taken into account in the formulation of policy on drug use,

particularly when attitudes and values within the community are in transition and sensibilities are especially acute. It does not follow, for example, that if the smoking of cannabis is to be permitted in private it must also be permitted in public. Indeed, while no one seriously suggests that the smoking of tobacco should be banned altogether, increasingly restrictions are being imposed on the consumption of tobacco in public places. The justification for this approach may be, in part, the need to safeguard the health or physical comfort of non-smokers, but it also may reflect a policy of protecting the sensibilities of non-smokers.

A similar policy with respect to cannabis may be warranted, because of the symbolic significance of cannabis use in relation to community values, and the debate it has aroused within the community. Similarly, where a person deliberately engages in conduct relating to cannabis which is intended to and does cause offence to others some would say that criminal sanctions should be applied to that person. The enforcement of such a law poses fewer problems than laws penalising private conduct, since the behaviour is public, can usually be readily detected and must involve a victim willing to complain. On the other hand, penalising public behaviour related to cannabis is not altogether free from enforcement difficulties (consider the task confronting police at a pop concert at which cannabis is freely smoked) and may present problems in drafting legislation.

References

1. Señate Standing Committee on Social Welfare (1977), *Drug Problems in Australia — An Intoxicated Society?*, A.G.P.S., Canberra, p. 162.
2. *Ibid.*, p. 145.
3. Nowlis, H., (1975), *Drugs Demystified*, Unesco Press.
4. Civil libertarians, for example, express concern about the breadth of the offensive behaviour offences (see Police Offences Act, 1953 - 1978, s.7 (S.A.)), because of the risk of discriminatory enforcement and the opportunity for abuse of the power by police. Again, public demonstrations may be singularly offensive to some or even most onlookers, but this has not generally been thought sufficient to justify banning them.

9 : COSTS AND BENEFITS OF TOTAL PROHIBITION

THE BENEFITS

In the formulation of a strategy for the control of cannabis use, the first question is whether the current policy of total prohibition should be modified. This requires an assessment of the costs and benefits of the current policy. Whatever the position in a theoretical world in which total prohibition could be perfectly enforced, the reality is that the enforcement of criminal sanctions against all dealers in or users of cannabis creates serious difficulties. The problem is to determine whether the price which has to be paid for the enforcement of a policy of total prohibition is less than the benefits of the policy.

It is not easy to state the objectives of the criminal law as applied to the control of cannabis. There is certainly no authoritative statement of goals which can serve as a yardstick to measure the effectiveness of the law. This is hardly surprising, given the haphazard manner in which the criminal prohibitions have emerged in Australia. The law may rest (or be justified) on the view that any use of cannabis, in whatever context and however short-lived, is dangerous to the user and the community and therefore to be prohibited. On the other hand, the law could be explained on the basis that a blanket prohibition on all supply or use of the drug is the only way of curtailing truly harmful behaviour—that is, heavy or irresponsible use. On this approach, the law is seeking to avoid harm to a relatively small group at the cost of restricting the freedom of a larger group of people who are capable of using the drug in a way that poses no threat to them or the community.

Despite the ambiguity of the objectives of the criminal law, it can be said that one major aim is to restrict consumption of the drug, first by limiting supplies (through penalties imposed on importation, cultivation and dealing), and secondly by discouraging consumption (through penalties imposed on use or possession for personal use). This aim is pursued, at least in part, by deterring potential dealers and users who risk the stigma of conviction and the imposition of penalties if detected. The penalties actually imposed on dealers are much harsher than those imposed on users, reflecting the perceived seriousness of each category of offence and the role played by the criminal law in punishing people who deliberately violate prohibitions, especially where their conduct is for their own commercial gain. As a secondary means of achieving its aim the law discourages convicted offenders from persisting with their conduct, relying for this purpose on the punishment imposed on them as a specific deterrent to repetition of their offences.

The law does not, however, work simply by deterring potential offenders. A policy of total prohibition, as implemented through the criminal law, has a symbolic function—that is, it symbolises the society's disapproval of the drug. This symbolic function may be very important since, as the Le Dain Commission observed,

> [m]any people obey the law simply because it is the law. With them, the law has moral authority, quite apart from any adverse consequences of violation. They obey the law out of a sense of moral obligation to do so.[1]

Of course it may be that people who are prepared to modify their conduct out of respect for the law are perhaps the least likely in the community to use drugs heavily or irresponsibly. For those who regard the law as misconceived or perhaps oppressive, the law will carry little moral authority.

As difficult as it is to assess the objectives of the criminal law, it is even more difficult to determine the extent to which it has been successful in attaining those objectives. It is certainly true that law enforcement activities by Federal and State authorities have curtailed supplies on occasions and that some individuals engaged in cultivation and dealing have been apprehended and punished. Despite increasing law enforcement activity, indicated by larger Drug Squads, substantial seizures of imported cannabis and discoveries of cannabis plantations,[2] the evidence does not suggest that supplies to users have been disrupted for long periods. This is not surprising. The market is supplied from a variety of sources, including 'home' cultivators who produce small quantities for themselves and their friends. The police acknowledge the difficulty of penetrating the organisations engaged in supplying cannabis illegally. Relatively small quantities of cannabis, particularly of high potency material, may satisfy users' needs for a substantial period, thus tiding them over temporary disruptions to the market. While the difficulty of obtaining supplies (as distinct from the illegality of the transaction) may discourage some people who would otherwise use the drug, there is little reason to think that this would force heavy users to change their pattern of use.

In determining the impact of the criminal law on users, care must be exercised in interpretation of the results of surveys, as we explain in Chapter 4. It is not easy to determine accurately current levels of use in the community, and certainly information on the number of people who have ever used cannabis (assuming their responses to be accurate) is not a reliable indicator of regular consumption. However, to the extent that the law is intended to prevent any use of cannabis at all, it is not proving effective. A significant proportion of the population, particularly younger people, has tried cannabis and has therefore not been deterred by the legal prohibition or the moral force of the law from doing so. The proportion of the population who have ever used cannabis is probably increasing. The major reason for the failure of the law to deter large numbers of people from trying the drug is that use of cannabis, if conducted in private, carries with it a very low risk of apprehension. Such conduct produces no 'victim' likely to complain and in the absence of the apparatus of a police state cannot readily be detected. It is difficult to be sure of the extent of heavy use of cannabis or how far the existence of the legal prohibitions have deterred users from heavy or irresponsible use. There must be considerable

doubt as to whether the law, through either its deterrent effect or its moral force, influences significant numbers of users to refrain from more sustained use of the drug.

Having said this, it does not follow that the policy of total prohibition has altogether failed to reduce consumption. The law undoubtedly has had some success in limiting the number of people who have tried the drug and this may have had some impact on heavy or irresponsible use. But any unquantifiable reduction in use must be balanced against the social costs of the policy of total prohibition.

THE COSTS

Selective Law Enforcement

The penalties for possession or use of cannabis are necessarily applied in a largely random fashion, contributing to a climate of disrespect for the law and grave doubts as to its effectiveness. Non-dealing users of cannabis are, as we have noted, most unlikely to be detected, unless they publicly display their consumption. The South Australian Police claim not to direct their enforcement activities towards users as such, usually laying charges of possession of cannabis or similar offences only when the matter comes to their notice in the course of other investigations, for example into traffic infringements. Yet the overwhelming majority of cannabis-related convictions concern use or possession of the drug rather than dealing offences. The South Australian Police submission stated that police officers often strongly suspect but cannot prove that some persons convicted of possession offences have dealt in the drug.[3]

However, retention of the less serious offences cannot be justified on this ground alone and, in any event, the penalties actually imposed for possession are hardly likely to deter commercial dealers. The evidence tends to support the view that those convicted of cannabis-related offences have different characteristics to those of the cannabis using population as a whole; those convicted seem to be of a lower socioeconomic status than users generally and are often males.[4] Evidence that law enforcement activity is directed against poorer or particularly vulnerable groups in the community is by no means confined to drug offences, but it reinforces the impression that the cannabis laws are randomly and sporadically enforced. It is precisely this impression that detracts from the deterrent value and moral force of the law and therefore contributes to reducing the effectiveness of the total prohibition policy.

Impact on Convicted Users

Disrespect for the law has been generated by the stringency of the total prohibition policy, which authorises if not requires the imposition of relatively heavy penalties for even casual use of cannabis. Many submissions commented on what they saw as the hypocrisy of a policy which, on the one hand; ranks cannabis for certain purposes with the

physically addictive and therefore potentially harmful drugs, notably narcotics and, on the other, actually promotes the use of alcohol and tobacco, which on most counts must be regarded as potentially more harmful than cannabis.

In South Australia, perhaps more than other States, the courts have introduced sentencing practices which have ameliorated the harshest implications of the legislative policy (see Chapter 5, p. 44). The response of the courts is a notable example of judicial sensitivity to the need for modification of a legislative policy in the light of new information which casts doubt on the assumptions underlying that policy. Despite the flexibility of the courts, the impact of a conviction for a simple possession offence may be very serious for the offender. Overwhelmingly, persons convicted of such offences are young, and while the statistics presented earlier show that imprisonment is now rarely imposed, the consequences of conviction for such matters as employment, continuing secondary or tertiary studies[5] and punishment for subsequent offences may still be far-reaching. The stigma associated with a criminal record cannot be dismissed lightly.

Strain On Law Enforcement Resources

Another cost of the total prohibition policy, as applied to users of cannabis, is the strain it places on the resources of the police and the courts, for dubious returns. Many contend that these resources could be better employed if directed to other forms of criminal activity. The sheer economic burden of enforcing the cannabis laws was a powerful factor influencing the California legislature's decision in 1975 to move from a policy of total prohibition to one adopting a 'civil penalty' approach to possession offences. A careful study submitted to the California Senate Select Committee on Control of Marijuana made a conservative estimate that in *each* year from 1970 to 1972, over $10 000 000 had been spent in enforcing the cannabis laws. This figure took account of each stage of the criminal justice process and included not only police time, but that of prosecutors, judges and public defenders, and the cost of maintaining jails and other institutions for offenders.[6] South Australia is no doubt vastly different in many respects from California, but the cost of enforcing the cannabis laws and processing over 1000 prosecutions for non-dealing offences is nonetheless considerable. The opportunity therefore exists for substantial savings in law enforcement costs, or at least for some reallocation of law enforcement resources, if a different approach were to be taken to minor cannabis offences.

Dilemmas For Police

A policy of total prohibition poses special difficulties for the police which may increase the social costs of enforcement. We have seen that the police are responsible for enforcing laws directed at private behaviour, which does not involve a 'victim' likely to complain to the authorities. The laws relating to use or possession of small amounts of cannabis, in practice, are

largely unenforceable, as well as being regarded as misguided or even oppressive by the population at whom they are aimed. The police response is to acknowledge many of these difficulties but to contend that the position could be improved markedly by more extensive powers of investigation and increased resources.[7] Critics argue that to achieve anything other than purely random or fortuitous enforcement of minor cannabis offences the police are often tempted to exceed their lawful powers of investigation, search and arrest, and to deviate from the truth in presenting evidence in courts. In the United States much has been made of improper police practices allegedly connected with enforcement of the cannabis laws. These include unlawful searches, intrusive surveillance techniques, entrapment of offenders (inciting persons to commit offences they would not otherwise commit) and perjury designed to secure a high rate of convictions and to avoid judicial criticism of enforcement techniques.[8]

Some confidential submissions to us alleged that individual police officers resorted to some improprieties in South Australia, particularly in searching for drugs and in harassing drug users for information. Other submissions pointed out that the cannabis laws provide an opportunity for selective enforcement, the police being able to use the broad sweep of those laws to harass individuals of whom they disapprove on political and personal grounds. We have chosen not to investigate specific allegations of misconduct made to us, partly because of limited resources, partly because such an inquiry would divert attention from more important basic questions. Consequently we have been confined to evidence presented in submissions and at private and public hearings. Our general impression from this evidence is that, while individual police officers may sometimes commit improprieties, overall there is no systematic pattern of violation of the safeguards which limit permissible enforcement techniques.

Similarly, while the cannabis laws concerning use and possession may create an opportunity for selective enforcement, they are by no means unique in this respect and the evidence (which admittedly we have not pursued in depth) does not suggest systematic harassment of particular groups or individuals.

Nevertheless we think that the scope of the current law, the disfavour with which it is viewed by many and its widely acknowledged ineffectiveness create serious dilemmas for the police and limit their capacity to detect and prevent more serious criminal behaviour. In a sense the police concede the futility of much of the existing law by disclaiming the intention of devoting significant resources to possession offences. We think the police themselves may reap considerable benefits from being relieved of the obligation of enforcing what are widely seen as unpopular and ineffective laws directed at private behaviour.

We note here that some important general questions are raised by the enforcement of drug laws which transcend the particular problems of detecting cannabis offenders. For example, the difficulty encountered by the police in penetrating the marketing structures of illicit drugs (where organised structures exist) raise questions as to whether unconventional

techniques of investigation should be employed. Similarly, the powers of search, seizure and detention in relation to drugs, which in South Australia are conferred mainly by s.11 of the Narcotic and Psychotropic Drugs Act 1934 - 1978, may require some consideration. Questions arise, for example, as to whether search warrants should be limited to a particular day (as is now the case) and whether commissioned police officers have authority to issue the warrants (as is the current practice). Since these matters raise broad issues of principle, we defer consideration to another paper.

The Crime Tariff and the Illicit Market

As long as a demand for cannabis continues, a policy of total prohibition creates and protects an illegal market in the drug. The 'crime tariff' ensures a monopoly position for those who are willing to break the law in order to reap large profits available from commercial dealing.[9] There is a good deal of evidence to suggest that the marketing of cannabis is a relatively orderly process, usually characterised by regular supplies and stable prices, although the pattern can be changed by extraordinary events such as large-scale seizures or heavily publicised inquiries into dealing. There is a large measure of agreement on the price of various forms of cannabis in small quantities in the illicit market (Table 9.1). There are some differences in estimated prices of larger quantities of cannabis (Table 9.2).

TABLE 9.1 : ESTIMATED STREET PRICES FOR CANNABIS

DRUG	PRICE			
	S.A. Police Dept, 1977[a]	Aust. Narcotics Bureau, Nov. 1977[b]	Vic. Police Force, Feb. 1978[c]	*Australasian Weed*, May, 1977
Cannabis (per 28gm)				
locally cultivated	$25 - $30	$70	$30 - $35	$25 - $30
imported	$50 - $84	—	—	—
Thai or Buddha Sticks (1.5gm ea.)				
locally made	$10	—	$7 - $14	—
imported	$12	$10 - $15	$10 - $15	—
Hashish (Cannabis resin) (28gm)				
imported	$110 - $120	$100 - $150	$100 - $160	$80 - $125
Hash Oil (refined resin) (1gm)	$30	—	$45 - $60	—

(a) S.A. Police Dept, submission no. 107, p. 46.
(b) Australian Royal Commission of Inquiry into Drugs, transcript, 17 Nov. 1977, p. 60. It should be noted the Officer in Charge, Drug Section, Australian Crime Intelligence Centre estimated the average price of a dealer's ounce (30gm) at just over $31 (transcript, p. 240).
(c) Australian Royal Commission of Inquiry into Drugs, transcript, 6 Feb. 1978, p. 2766.

TABLE 9.2 : ESTIMATED PRICES FOR LARGE QUANTITIES OF CANNABIS

DRUG	PRICE			
	S.A. Police Dept, 1977[a]	Australian Narcotics Bureau Nov. 1977[b]	Victorian Police Dept, Feb. 1978[c]	*Australasian Weed*, May, 1977
Cannabis	$300 - $400 per kg from cultivators $600 per kg in amounts greater than 2.5kg from distributor	$200 - $400 per kg	$300 - $360 per 450gm (1 lb)	$160 - $300 per 450gm (1 lb)
Thai or Buddha Sticks	—	$2000 - $3000 per kg OR $700 - $1100 per 150gm	—	—
Hashish (cannabis resin)	—	$3000 to $3500 per kg	—	$900 - $1000 per 450gm (1 lb) Indian hash — prices vary according to origin
Hash Oil (refined resin)	—	$12 000 - $15 000 per kg	—	—

(a) S.A. Police Dept, submission no. 107, p. 3.
(b) Australian Royal Commission of Inquiry into Drugs, transcript, 17 Nov. 1977, p. 60.
(c) Australian Royal Commission of Inquiry into Drugs, transcript, 6 Feb. 1978, p. 2766.

Profits from large-scale dealing may be substantial, reflecting no doubt the risks of the enterprise, and the entrepreneurs are effectively immune from the taxation burden that others in the community are required to assume. Moreover, since cannabis cannot be acquired legally, otherwise law-abiding people who wish to use cannabis must enter the illicit markets or illegally produce their own supplies. Even locally produced low-potency preparations required for occasional recreational purposes cannot be obtained lawfully. It follows that users wishing to acquire cannabis sometimes deal with persons who are involved in substantial businesses in violation of the law and who can fairly be described as professional criminals, whether or not they are part of an organised criminal network as is often claimed. This is a cost of the existing law, in the sense that some users are brought into contact with criminal activity (although those users who rely on friends to obtain supplies do not themselves come into contact with dealers).

It is also often claimed that the illicit market carries the risk that cannabis users are exposed to other illicit drugs, specifically narcotics, stocked by the same suppliers, and that cannabis may be 'doctored' by the addition of 'hard' drugs. The latter claim is not supported by any forensic evidence—analysis of samples in court proceedings have not revealed any

evidence, for example, that narcotics have been added to cannabis (although purchasers often have reason to complain of low quality cannabis being supplied). The view that dealers stock a variety of drugs is often expressed, but difficult to evaluate because accurate information on the practices of the illicit market is not easy to obtain. The clandestine nature of the operations and the unreliability of the participants compounds the problem. Nevertheless, there is evidence to suggest both that the cannabis industry is rather more diversified than is commonly thought and that it is common to find dealers who supply only cannabis. This is not to say that some large-scale dealers do not 'stock' other drugs; after all, the prime requisite for such a dealer is a willingness to break the law and risk prosecution. However, if dealers do sell a variety of drugs, this does not mean that buyers can be readily persuaded to purchase other kinds of drugs. The causes of multiple drug use are much more complex than the marketing strategy of dealers.

Another claim often made is that drug dealers act in concert to manipulate the market, not only to maximise prices, but to force buyers to purchase other illicit drugs. This claim, too, would seem to be exaggerated. It rests on an assumption that the cannabis industry is so centrally controlled that it can be easily manipulated and that artificial shortages can be created. The commercial supply of cannabis is by no means the exclusive province of large-scale cultivators and distributors. For example, the cultivation of cannabis in small lots, to meet the needs of the cultivators and perhaps a circle of friends, is thought by some to account for a significant proportion of the total market. Moreover, the distribution network for cannabis is diffused and, close to the user, involves much small-scale distribution often not predominantly for commercial reasons. The nature of the market itself is such that it may attract persons not otherwise involved in criminal activity who wish to obtain swift and substantial rewards for a crop much in demand. It would seem, then, that while 'droughts' of cannabis occur they may have more to do with seasonal factors or special law enforcement activities than with the manipulation of the market.

Drug Education Programs

Finally, a policy of total prohibition of cannabis creates a dilemma for drug education programs. The entire question of drug education raises difficult issues, which we have attempted to explore in another discussion paper. The goals of drug education (if indeed there should ever be programs specifically concerned with drug use) are not easy to define and such matters as the techniques to be employed and target groups to reach are hotly debated. However, it seems to be generally agreed that a program which provides information seen to be inaccurate or incomplete, or which implicitly adopts values out of touch with those of the target population, is unlikely to encourage rational decisions on the use of drugs. If education programs accept, even implicitly, the factual assumptions or values on which the present cannabis policy is based, they risk losing the respect and

attention of their audiences and perhaps proving counterproductive. In fact, educators have usually tried to work around the problem by frankly appraising the benefits and drawbacks, including possible prosecution, associated with cannabis use. This approach cannot entirely solve the difficulty that the experience of many people, and particularly the young, does not accord with the assumptions underlying the existing policy.

CONCLUSION

The conclusion we have reached on our assessment of the evidence is that some modification of the policy of total prohibition is warranted. More evidence will accumulate before the Commission has run its course, particularly the data arising out of our survey of the extent of drug use, and this evidence will require careful consideration before final conclusions can be formulated. However, our evaluation of the public health aspects of cannabis use, the available information on patterns of use of the drug in Australia and our analysis of the costs and benefits of the total prohibition policy suggest the need for modification of the current approach. If cannabis were as harmful to the health of the user and to the well-being of the community as has sometimes been contended, it might be that the costs of the present policy could be justified on the basis that it reduces the rate of increase of some categories of use. But our view accords with that expressed by the Le Dain Commission in Canada in 1972.

> We do not believe that the known, probable and possible effects of cannabis, and the marginal effect which a prohibition against simple possession may have on availability, perception of harm, and demand, justify [the] costs of continuing to attempt to enforce it against greatly increasing numbers of users . . . The number of individuals involved, the difficulties of enforcement and the allocation of resources required to process the required number of cases are all too great to make a thorough-going enforcement of the law against simple possession practicable . . . A law which can only be enforced in a haphazard and accidental manner is an unjust law.[10]

This conclusion does not, in our opinion, rest entirely on the futility of endeavours to enforce the total prohibition policy. As discussed in Chapter 8 (p. 68), we are influenced by the need for the community to recognise clearly the choices that face many people in relation to the use of recreational drugs and to encourage rational and informed decisions, rather than pretend that the choices do not exist. In this connection, the argument that any change in current policy towards cannabis would amount to the introduction of a third problem, alongside alcohol and tobacco, misses the point. The use of cannabis (but not necessarily heavy use) is already widespread, particularly among younger groups in the community. More important, modification of the total prohibition policy does not 'introduce a new problem' but rather looks to techniques other than the criminal law to control use and to prevent harm to the individual and to the community. We have said that social policy should acknowledge that not all use of cannabis places the user or the community equally at

risk; a blanket policy of prohibition limits the opportunity to direct attention specifically to excessive or irresponsible use, the major causes for concern. A departure from that policy does not signify indiscriminate community approval of cannabis use; it simply accepts that approaches other than penal sanctions may be more likely to succeed in attaining sensible goals. If we are correct in this view, the question arises as to which of the policy choices outlined earlier should be adopted in place of a policy of total prohibition.

References

1. Commission of Inquiry into the Non-Medical Use of Drugs (1973), *Final Report*, Information Canada, p. 55.
2. Evidence before the Australian Royal Commission of Inquiry into Drugs indicates that in 1976 approximately 1226 kg of cannabis were seized by the Australian Narcotics Bureau as were 45 083gm of cannabis oil. The corresponding figures for the first 10 months of 1977 were 548 kg of cannabis and 37 150gm of cannabis oil— Australian Royal Commission of Inquiry into Drugs, transcript, 17 November, 1977, p. 34 (M.A. Besley, Secretary, Department of Business and Consumer Affairs).
3. South Australian Police Department, submission no. 107, p. 33; S.A. Police Association meeting, transcript, p. 7.
4. See Senate Standing Committee on Social Welfare (1977), *Drug Problems in Australia—An Intoxicated Society?* A.G.P.S., Canberra, pp. 135 - 140.
5. South Australian Education Department, submission no. 110 (additional material, *Schools and Drugs—Some Guidelines*, Ed. Dept. S.A., 1978).
6. For details see National Governors' Conference, Centre for Policy Analysis and Research (1977), *Marijuana: A Study of State Policies and Penalties*, March, vol. 3, pp. 150 - 153.
7. Submission no. 107, *op. cit.*, pp. 24, 30.
8. For a detailed, if somewhat biased account of these matters see Hellman, A. D. (1975), *Laws Against Marijuana: The Price We Pay*, University of Illinois Press, pp. 57 - 166.
9. The 'tariff' operates by protecting the participants in the illicit market from competition from those who are unwilling to conduct illegal activities.
10. Commission of Inquiry into the Non-Medical Use of Drugs (1972), *Cannabis*, Information Canada, p. 299.

10 : TWO POLICY ALTERNATIVES - PARTIAL PROHIBITION AND REGULATION

THE BACKGROUND

The major national inquiries conducted in Australia and overseas over the past decade have recommended approaches varying from the total prohibition/civil penalty model to the partial prohibition model. In retrospect it can be seen that the overseas inquiries, notably the Wootton Committee in Britain (1968),[1] the Le Dain Commission in Canada (1972)[2] and the Shafer Commission in the United States (1972),[3] reported after the attempt to control cannabis use through the imposition of relatively severe criminal penalties had reached a peak. This is important, because the setting in which an investigation takes place necessarily colours the nature of the inquiries made and the conclusions reached. Moreover, it must be remembered that the setting in which the cannabis laws operate, and indeed the operation of the laws themselves, may change very considerably within a short period. The statistics referred to in Chapter 6 (p. 59), for example, show that the South Australian courts have pursued recently a comparatively lenient policy towards persons charged with the use of possession of cannabis (otherwise than for the purpose of trafficking), and that sentences of imprisonment are rarely imposed on offenders.

Thus certain reforms which have been urged in other jurisdictions, such as the removal of imprisonment as a penalty for first offenders found guilty of possessing cannabis,[4] have been largely implemented in practice within South Australia by the actions of the courts. Consequently a Commission in South Australia considering the policies that might be applied to persons possessing or using small quantities of cannabis is operating in a rather different setting from one in a jurisdiction which imposes stringent penalties on such persons.

Two other preliminary observations should be made before detailed consideration of the two major policy alternatives we think worthy of careful analysis. First, as we have pointed out repeatedly, the debate over cannabis has had more to do with community values and attitudes towards users than with purely objective assessments of the scientific and sociological literature. Values and attitudes change over time, just as the body of information concerning the drug increases and as patterns of use change. In such a sensitive field as the regulation of drug use, no investigative body can sensibly put forward a blueprint designed to be implemented without modification or reassessment. Since values, attitudes and practices are in a constant state of change, it is both realistic and sensible to expect governments to monitor changes and to modify policy as circumstances warrant. Our approach necessarily reflects the setting in which we have functioned. No doubt it is different to the approach a South Australian Commission might have been expected to adopt a decade or two ago and it is likely to be different from the approach which might be taken a decade or two hence.

Secondly, any proposals for new policy involve, at least implicitly, predictions about future behaviour. Such predictions cannot be put forward with absolute certainty. Thus systematically monitoring the experience with a particular policy is an important part of the continuing process of reassessment required for rational decision-making. It is precisely this kind of systematic monitoring that has been lamentably lacking in Australia to date. In our final report we anticipate more may be said on this question.

THE TWO ALTERNATIVES

If a decision were taken to modify the policy of total prohibition, in accordance with the approach in the previous chapter, we think that the choice lies between two of the policy options discussed in Chapter 2 of this paper. These are the partial prohibition model and the regulatory model. The purpose of this paper is not to present a firm recommendation as to which model should be adopted in South Australia in the short term; there are substantial arguments for and against each alternative. In formulating a final view (final, that is, in terms of the life of this Commission), we shall be influenced by both the responses we receive to this discussion paper and the information that becomes available from the research studies we have instituted. Our goal here is to mark out the options for a changed policy and the framework within which any change should take place. Consequently we set out in some detail the basis on which each model might operate if implemented in South Australia.

Other Models

Before considering the details of the two models, we should explain why we do not at this stage consider in detail either the prohibition/civil penalty model or the free availability model. The first has been adopted extensively in the United States, but amounts to a relatively minor adjustment to the total prohibition model, once it is accepted (as it generally has been in South Australia) that people possessing cannabis for their own use should receive relatively lenient pecuniary penalties from the courts. It is true that the consequences for the 'offender' are less severe than they might be under the existing law, in that maximum penalties are lower and the secondary consequences of a criminal conviction are removed. Moreover, recommendations along the lines of those suggested by the Senate Standing Committee on Social Welfare in 1977 have the advantage of lessening the risk of arbitrary or random enforcement of the criminal law and of reducing the costs of law enforcement by the police and the courts. Yet private conduct relating to the use of cannabis remains subject to penalties and the ambivalence of such an approach can in the long run do little to improve respect for the law.

The notion of a civil penalty is not unknown in Australian law but in this context it is difficult to see the introduction of such penalties for the private use of cannabis as other than a half-way house to more principled

approaches. In short, the civil penalty model fails to pay sufficient regard to the need for a thorough re-evaluation of policy in the light of the available information concerning cannabis. This is not to deny that this approach may be attractive politically as a gradual move towards other policies. There are no doubt advantages in incremental steps. But we think the evidence warrants further moves along the lines we shall discuss.

At the other end of the spectrum the free availability model, quite apart from the practical problems of implementation, seems to us to be clearly unacceptable and indeed, was not specifically supported in any submission. Enough has been presented to show that controls should be imposed on the cultivation and distribution of cannabis, although reliance should not necessarily be placed primarily on the criminal law for this purpose. To remove all constraints, other than those generally applicable in the market economy, on the production, sale and advertising of cannabis would expose the community to some of the risks associated with the commercial exploitation of other recreational drugs. Doubts about the wisdom of such a policy have begun to produce changes in community attitudes and practices relating to the consumption of alcohol and tobacco. It would be anomalous, to say the least, if at the same time as these developments were taking place social policy should shift drastically from discouragement to what would be seen as positive encouragement of the use of cannabis.

PARTIAL PROHIBITION

The broad outline of this model has been canvassed earlier (p. 8). If such a model were to be introduced in South Australia, we envisage that it would operate in accordance with the following principles:

Cultivation, Sale, Distribution

- Subject to the qualifications set out below, cultivation, sale and distribution of cannabis in any form would remain criminal offences.

Qualifications

- Recognising that cannabis is often distributed among friends for no financial reward, 'gratuitous distribution' *in private* of cannabis would no longer be a criminal offence—that is, it would attract no legal penalties. For this purpose gratuitous distribution would include the supply by one person to another of small amounts[5] of cannabis (or seeds) which the supplier believes the recipient intends to use personally, *provided that the supplier makes no profit from the transaction*.

Both the supplier and the recipient would have to be over the age of 18 for the transaction to qualify as gratuitous distribution.

- Cultivation of cannabis on private property for personal use would not be a criminal offence. For this purpose, 'personal use' would extend to the reasonable use of other adults ordinarily residing in the same household as the person cultivating the cannabis.

Possession of Cannabis

- Simple possession of cannabis in any form would not be a criminal offence. On the other hand, possession with intent to sell or distribute for profit would remain a criminal offence. The issue remains as to how a distinction is to be drawn between simple possession and possession for the purpose of sale.

Use of Cannabis/Implements for Use

- Personal use of cannabis in any form would not be a criminal offence. Possession of paraphernalia or implements for the purpose of smoking or otherwise using cannabis likewise would not be a criminal offence.

Concentrated Forms of Cannabis

At this stage we leave open the question of whether a distinction should be drawn between cannabis (which is usually of lower potency—that is, THC strength) and cannabis in more concentrated resinous form such as hash, hash oil and purified forms of tetrahydrocannabinol (THC) (which is usually of higher potency). The Australian legislation has generally adopted the distinction for the purpose of specifying maximum penalties, but the Shafer Commission, for example, considered it unnecessary to draw the distinction within the partial prohibition model it proposed. If the distinction were to be adopted, the following principles could apply:

- The preparation or manufacture of cannabis in concentrated form would be a criminal offence. The maximum penalties would vary according to whether the preparation or manufacture was or was not for the purposes of sale or distribution for profit.
- Importation of concentrated forms of cannabis of course is a matter for the Commonwealth. Presumably if the partial prohibition model were implemented in South Australia, importation would continue to be an offence under the Customs Act 1901.
- Even if a distinction were drawn between various forms of cannabis, neither simple possession nor use of concentrated forms of cannabis would be a criminal offence. Possession with intent to sell or distribute for profit would be an offence.

Public Conduct

There is a serious question as to whether the use or display of cannabis in public should attract penalties and we reserve the question for further consideration. If it is thought necessary to preserve the sensibilities of non-users, the following principles could apply:

- use of cannabis in public places would be a criminal offence, subject to a pecuniary penalty.
- Any display of cannabis in a manner intended to cause and in fact causing offence to a member of the public (for example, a person deliberately flaunting cannabis in a public park to the annoyance of members of the public using the park) would be a criminal offence, subject to a pecuniary penalty.

- Gratuitous distribution of cannabis would be a criminal offence subject to a pecuniary penalty, if undertaken in public.

Medical Use of Cannabis

- The preparation, distribution, possession or use of cannabis in any form would not be an offence if undertaken for the purpose of *bona fide* medical treatment at the direction of and under the supervision of a qualified medical practitioner.

Advertising

- No advertisement designed to promote or encourage the use of cannabis, or the sale or use of any paraphernalia or implements in conjunction with cannabis, would be permitted. Nor would any advertisement or public representation that cannabis will be supplied by the advertiser or someone acting in conjunction with him be permitted.

Driving Under the Influence of Cannabis

- Penalties would be imposed on the driver of a motor vehicle who was in charge of that vehicle while his capacity to handle the vehicle was impaired because of the use of cannabis. Close attention should be paid to research designed to develop a reliable, inexpensive technique for detecting the presence of cannabis in the body of a person suspected of being under the influence of the drug.

Conformity with Guiding Principles

The partial prohibition policy seeks to meet the guiding principles, discussed earlier in this paper, in a variety of ways. A general policy discouraging cannabis use is implemented by provisions prohibiting the commercial cultivation, sale and distribution of cannabis as well as advertising in support of use. The criminal sanctions previously applied to simple possession and use are removed, not in order to signify approval of cannabis use, but in recognition of the costs of a total prohibition policy and the fact that it is largely ineffective as applied to personal possession or use. A similar justification applies to the removal of sanctions for gratuitous distribution of cannabis in private.

A policy of permitting cultivation for personal use recognises the difficulty of policing a prohibition on home cultivation, but goes somewhat further. It acknowledges that the use of cannabis is relatively widespread among otherwise law-abiding people and that it is undesirable to force such people into an illicit market in order to obtain supplies for their own use of low potency domestic material. For those who wish to use cannabis, a means of supply is now open which, although not free of some inconvenience, does not necessarily involve committing illegal acts. Since home cultivation for personal use, on this approach, can be undertaken without the risk of prosecution, it is possible that people who now buy their supplies on the illegal market might decide to cultivate their own supplies. To the

extent that this happens the operations of the illicit market will be undercut. The sensibilities of the non-cannabis using population could be preserved from direct assault by restrictions imposed on the public use of deliberately offensive display of cannabis.

We have left unresolved the question of whether a distinction should be drawn between cannabis in plant form and cannabis in more concentrated forms. The argument in favour of this distinction is that the law should attempt to discourage use of cannabis in concentrated form because of the risk of unpredictable effects on the user and the possible dangers associated with heavy use of high potency material. This policy could be pursued by prohibiting the preparation or manufacture of the concentrated forms, such as hash or hash oil, and their distribution, whether or not for profit. On the other hand it can be argued that the distinction is ultimately arbitrary in that the different forms of cannabis can vary considerably in potency. It is possible, for example, to produce cannabis in plant form of higher potency than some preparations of the resinous parts of plants. If legal sanctions were removed from cultivation of cannabis for personal use, it might be expected that some people would endeavour to cultivate high potency cannabis and do so without the need to actually produce resinous material. Moreover, the strength of the material used does not necessarily govern the nature of the user's response. High potency material may be used sparingly so as to produce, if anything, a less marked effect in the user than free use of lower strength cannabis.

A policy of partial prohibition has considerable advantages over a total prohibition policy but has drawbacks as well. The advantages include a more manageable enforcement role for the police, greater respect (or at least less disrespect) for the law and enforcement authorities, less hardship caused by the random or arbitrary application of criminal sanctions, the removal of impediments to more realistic education programs and perhaps easing of the path towards formation of a broadly based community consensus on the use of cannabis.

The drawbacks of the partial prohibition policy include the possibility of increased use of cannabis, the uncertainty that any significant impact will be made on the operations of the illicit market, the failure to generate any taxation revenue for the benefit of the community as a whole and the failure to provide any guarantee to the consumer of the quality and potency of the product being purchased. In addition the partial prohibition policy does not remove all law enforcement difficulties, since private non-gratuitous dealings and possession for commercial purposes remain criminal offences.

The prospect of some increase in the numbers of those who have tried but not continued to use cannabis is not necessarily a matter for concern. We would, however, be concerned about a marked increase in the levels of heavy and sustained use of cannabis. It has been suggested that there is a continuum of cannabis use in the sense that the proportion of current users who use the drug frequently or heavily remains constant. If this is so, it could be expected that the number of frequent or heavy users would

increase in parallel with any rise in the number of current users. There is no firm evidence to confirm or deny this hypothesis. It may be that partial prohibition will contribute to some increase in the proportion of the population who have used cannabis. It may also contribute to a shift in the patterns of use within the user population. But factors other than the law also would be involved in any such change. It is likely, for example, that patterns and extent of use would change without any alteration to the current prohibition policy.[6] In addition, while a policy of partial prohibition would make lawful conduct which is now illegal, in many respects it can be contended that the law is simply responding to changes of various kinds that have already occurred. For example, we agree with the Le Dain Commission that the removal of sanctions imposed on possession or use of cannabis is likely to have only a marginal impact on the enforcement of the policy of prohibiting commercial distribution and possibly may make it more efficient. To permit the cultivation of cannabis for personal use, given the ready availability of the drug under the system of total prohibition, is also unlikely to increase consumption levels significantly.

There are no studies, either in Australia or overseas, that confirm or deny the validity of these predictions. There have been surveys of cannabis use in Oregon, which in 1973 was the first State in the United States to adopt a prohibition/civil penalty approach to cannabis. The latest survey (of 802 adults), conducted in October, 1977,[7] showed that the proportion of people who had ever used cannabis increased from 19% in 1974 to 25% in 1977, and the proportion of current users increased from 9% in 1974 to 10% in 1977. The proportion of those aged 18 to 29 who had ever used cannabis increased from 46% to 62% in the same period, while in 1977 30% of this group was currently using the drug (comparisons for 1974 were not available for this last figure). Of the current users surveyed in 1977, 86% had either decreased or not changed their use over the preceding four years. The Oregon experience does not seem to depart significantly from national trends in the United States[8] and some increase in reported use was to be expected between 1974 and 1977, regardless of any change in the law. Of course the greatest care must be exercised in drawing conclusions from these figures for South Australia but the Oregon experience perhaps suggests that changes in the law can occur without drastic alterations in patterns of use.

Effect on the Illicit Market

While the partial prohibition policy, as developed in this paper, would provide cannabis users with the opportunity of obtaining low potency supplies from legal sources (through home cultivation and private gratuitous distribution), it cannot confidently be predicted that the great mass of users will desert the illicit market in favour of home cultivation. It is not difficult to grow several cannabis plants for the personal use of the cultivators or other members of the household. In addition home cultivation would have the advantage not only of being lawful but of producing the product very much cheaper than the illicit market. Despite

all this, the force of inertia is difficult to overcome and most users may still prefer to buy cannabis in a form ready to smoke from dealers, whether small or large scale. Others will simply be unable to cultivate their own supplies. At this stage an assessment of the impact of partial prohibition on the illicit market is speculative, but it may be unrealistic to expect more than a modest effect on the activities of dealers.

The position would be different if law enforcement authorities were markedly more successful in detecting dealers, but again this will not necessarily prove to be the case. It is possible, therefore, that under a policy of partial prohibition illicit supplies of cannabis will still be in demand and the untaxed profits of suppliers, perhaps curtailed a little, will continue. A buyer in the illicit market—and to some extent a person cultivating his own supplies—cannot be sure of the potency of the product, nor is there any means readily available to determine potency accurately. The evidence indicates considerable variation in the strength of cannabis, although most samples of non-resinous material analysed in South Australia have proved to be under 1% THC content. The policy of partial prohibition therefore does not overcome the problem of allowing the buyer to ascertain accurately the strength of the cannabis he has acquired. Similarly adulteration remains a possibility although, as pointed out elsewhere (p. 99), the evidence does not suggest that this poses any threat to users of cannabis in South Australia.

REGULATORY MODEL

No country similar to Australia has introduced a regulatory system for the control of cannabis, nor has any Commission of Inquiry to date recommended its introduction in place of a system of total prohibition. However, such a model was recommended by the Indian Hemp Drugs Commission in 1894 (although not in the context of a system of total prohibition), and has also been recommended in the dissenting report of a member of the Le Dain Commission.[9] The idea of a regulatory model has been canvassed by a number of commentators and in submissions to us, so that the broad outline of the approach is clear enough. A regulatory scheme might be introduced in accordance with the following principles:

Government Agency

- A government agency (the Cannabis Control Board has been suggested as a title) would be created to supervise the cultivation and marketing of cannabis within South Australia.

Commercial Cultivation

- Commercial cultivation of cannabis would be permitted, but only under licence from the Board. Sufficient licences would be granted to ensure that supplies meet anticipated demand and a system would need to be developed for the equitable distribution of licences among applicants. A licensee would be required to produce a stipulated quantity of cannabis in

accordance with such conditions as may be imposed by the Board relating to quality and strength. There is of course nothing unusual about a crop being grown under licence or growers being required to sell their entire crop to or at the direction of a marketing authority.[10] We point out that importation of cannabis into Australia is a matter for Commonwealth law and South Australia itself could not permit importation.

Retail Distribution

● Cannabis cultivated under licence would be processed under the authority of the Board and marketed through a limited number of approved retail outlets. It is sometimes suggested that these outlets could be run by the Board itself, but in South Australia it would seem more realistic to look to outlets licensed by the State in accordance with reasonably stringent criteria laid down in governing legislation. Many South Australian Acts establish licensing requirements for certain businesses or activities. The Licensing Act 1967 - 1978, for example, specifies the criteria for a number of licences, mostly relating to the sale of alcoholic liquor. Objections to the granting or renewal of licences may be made on various grounds, principally concerned with the character of the applicant and the economic, social and environmental impact of the (proposed) enterprise on the community in which it is to operate. Presumably similar requirements could be imposed on applicants for licences to sell cannabis. Retail liquor outlets would seem to be unsuitable for the sale of cannabis because of the undesirability of linking the sale or consumption of cannabis with alcohol.

Grading of Cannabis

● Cannabis sold at approved retail outlets would be clearly labelled according to THC strength and would be guaranteed free of impurities or additives. Two main approaches are open as to the strength of cannabis sold at approved outlets. Cannabis could be sold with a potency ranging from very low (say 0.2% THC) to medium (say 1.5% THC). On this approach high potency cannabis and concentrated forms of the drug would not be available through approved retail outlets. Alternatively, cannabis would be sold in a variety of forms (including resinous material) to a significantly higher maximum THC strength, reliance being placed on the labelling to protect the user against excessive or unexpected reactions.

Taxation

● A tax would be imposed on cannabis purchased from licensed retail outlets. The purpose of the tax would be not only to gather revenue from the orderly marketing of cannabis, but to discourage consumption, particularly of the higher potency material. The level of taxation would have to be set so as not to encourage a black market and would vary according to the strength of the cannabis sold. Since it would seem that cannabis could be cultivated, processed and marketed to sell at $2 to $3 per 30gm lot, and since the present street price of cannabis in plant form is about $30 per lot, there is considerable scope for the imposition of taxation. Prices of cannabis, including the taxation component, would be set by the Board, subject to direction from the government of the day.[11]

Sale or Distribution to Minors

- Licensed retail outlets would not be permitted to sell cannabis to minors. It would be an offence for an adult to supply a minor with cannabis, except when the adult is a member of the same household as the minor. Analogous provisions exist with respect to the sale of cigarettes or tobacco to children under the age of 16, although these are not stringently enforced.[12]

Advertising

- Advertising the availability of cannabis through approved retail outlets or otherwise would not be permitted. Display of cannabis by the retail outlet would not be permitted.

Cultivation for Personal Use

- As in the partial prohibition model, cultivation of cannabis on private property for personal use would not be an offence. The analogy here would be the entitlement of an individual, if he is prepared to go to the trouble, to brew his own liquor for home consumption.

Concentrated Forms of Cannabis

- As in the partial prohibition model, a decision would have to be made whether to permit the preparation or manufacture of cannabis in concentrated form for personal use.

Possession and Use

- Simple possession of cannabis in any form, or the use of cannabis as such, would not be a criminal offence.

Sale and Distribution for Profit

- Unauthorised cultivation, sale and distribution for profit would be criminal offences. Similarly possession of cannabis in any form with intent to sell or distribute for profit would be an offence. The essential element of the offence would not be the sale of a harmful substance as such, but the disruption of the orderly and restricted marketing of a substance which requires careful controls.

Public Conduct

- As with the partial prohibition model, there is a serious question as to whether public use or deliberately offensive display of cannabis should incur penalties. It may be that there is less reason to impose such penalties in a regulatory model, in which cannabis is available from licensed outlets, than in the more restrictive partial prohibition model.

Other Matters

- Medical use of cannabis and driving under the influence of cannabis would be dealt with in similar fashion to that proposed for the partial prohibition model.

Conformity with Guiding Principles

The regulatory model seeks to achieve the policy objectives referred to earlier in this working paper, but does so by different means from the partial prohibition model. The excessive or unwise use of cannabis is discouraged, not by attempting to eliminate the commercial market and restricting legitimate supplies to home cultivation, but by establishing a controlled market in the drug. A broad policy of discouragement of use is followed by restricting legal sources of distribution (other than home cultivation) to a limited number of licensed retail outlets supplying cannabis at regulated prices. This policy would also be pursued by education programs along the lines discussed in our discussion paper, *Education*. Demand for cannabis may be further limited by taxing purchases of the drug and prohibiting advertising. The sensibilities of non-users could be protected if necessary, as in the partial prohibition model, by imposing penalties for public use or deliberately offensive displays of cannabis. If it is thought important to avoid the use of high potency cannabis this could be sought by restricting the strength of cannabis legally available and by prohibiting the preparation or manufacture of concentrated forms of cannabis, although such a proposal raises issues similar to those discussed in the partial prohibition model.

The illicit market is tackled in the only effective way—the creation of a legal market to supply the user with the quantities required in a guaranteed strength and at a price competitive with that prevailing in the illicit market. Unauthorised dealing remains an offence, but the strategy is to tackle the illicit market not so much through law enforcement practices but through the incursions of the legal market. The use of cannabis by young people is discouraged by restricting the sale and distribution of the drug to minors, as is the case with alcohol. Simple possession or use of cannabis in any form, even if obtained from illicit sources, and the cultivation of cannabis for personal use would not be offences because of the costs of enforcing laws prohibiting such conduct.

Effect on the Illicit Market

The regulatory model has one clear advantage over the partial prohibition model in that significant inroads into the illicit market could confidently be expected. In addition consumers are in a much better position to assess the quality of the product being purchased. However, it is likely that the illicit market will survive to some extent even if a regulatory model is introduced, especially if approved outlets sell only low or medium potency cannabis. A proportion of the demand for cannabis is now satisfied by high potency preparations, most but not all of which are imported into Australia. No doubt some consumers would continue to seek cannabis in concentrated forms despite the ready availability of lower strength material. To the extent that they do so, an illicit market will continue, unless this material is sold through approved legal outlets.

There are two schools of thought as to the effect of a regulatory model which does not provide for high potency cannabis or the consumption of

the drug in this form. Some contend that while the concentrated forms of cannabis are popular in an illicit market (because of their lack of bulk, high value and transportability), a legal supply of low or medium potency cannabis will induce users accustomed, say, to hash or hash oil to turn to the forms of cannabis legally and readily available. The argument is that the user will be prepared to purchase the readily available legal preparation rather than remain in the illicit market.[13] On the other hand, some, including the Le Dain Commission,[14] argue that there will always be a high demand for concentrated forms of cannabis and that this demand will not be satisfied by a ready market in other forms of cannabis.

An additional problem is that an illicit market may survive or grow up if the price of the controlled commodity is too high, or if the service provided is insufficiently responsive to the perceived needs of consumers. In many ways the regulatory model for cannabis corresponds to the approach that has been taken to gambling in Australia, closely regulated and taxed legal outlets being available to those who wish to gamble otherwise than privately with friends or acquaintances. The existence of such bodies as the totalisator agency boards, Lottery Commissions and licensed clubs has not caused the complete demise of such illicit operators as 'S.P.' bookmakers and unlicensed gaming houses. It may be that the experience with gambling has lessons for the control of cannabis.

Effect on Patterns of Use

The major uncertainty about the regulatory model is its effect on patterns of use of cannabis. We discussed earlier the possible impact of a partial prohibition approach on the use of cannabis; the creation of a legal market in cannabis, albeit a strictly controlled one, creates a further risk of increases in all categories of use. This risk was one factor leading the Shafer Commission to reject the regulatory model. They argued that a shift from a policy of total prohibition direct to a regulatory model would mark a great change in the basis of official policy. Given the historical nature of the debate surrounding cannabis and the deep divisions within the community on the issue, they considered that a change in the short term to a regulatory model would transform cannabis use into accepted behaviour. The Commission reasoned this way:

> In rejecting the total prohibition approach, we emphasised the symbolic aspects. In essence, we do not believe prohibition of possession for personal use is necessary to symbolize a social policy disapproving the use. Theoretically, a tightly controlled regulatory scheme, with limited distribution outlets, significant restraints on consumption, prohibition of advertising and compulsory labelling, could possibly symbolize such disapproval. Our regulatory policy toward tobacco is beginning slowly to reflect a disapproval policy toward cigarette smoking. Nonetheless, given the social and historical context of such a major shift in legal policy toward marijuana, we are certain that such a change would instead symbolize approval of use, or at least a position of neutrality.[15]

Supporters of this view also point out that no safeguards in a regulatory scheme can prevent the diversion of cannabis from legal outlets to young people, just as liquor licensing laws do not prevent young people gaining access to alcohol. Thus a pronounced shift in the basis of public policy, together with increased availability of the drug, might have an effect on the use of cannabis by young people. This effect could include some increase in the incidence of heavy and sustained use. On this approach, while the introduction of a regulatory model might be possible in the medium to long term, more time may be necessary to enable the community to adjust gradually to new techniques for the control of cannabis use.

The counter argument is that the advantages of the regulatory model could be enjoyed without abandoning the perceived official policy of discouragement of use, particularly irresponsible use. The community would manifest this policy in a variety of ways: taxation, restrictions on public consumption of cannabis, perhaps the provision of only low or moderate strength material and more realistic education programs emphasising the need for rational choices in drug use. Supporters of the regulatory model argue that too much emphasis should not be placed on the law as an influence shaping behaviour; other forms of social control, including a general distaste for drug-influenced behaviour, are effective to keep use well in check. These forms of control already operate since, despite ready availability of the drug, the evidence does not indicate that it is widely used excessively or irresponsibly. Similarly, it can be argued that the legal availability of the drug, coupled with the removal of legal sanctions that serve as impediments to rational decision-making in relation to drug use, may encourage young people to make better informed decisions about cannabis, perhaps with parental guidance.

Treaty Obligations and Pressures in a Federal System

Two matters of practical significance deserve consideration before a regulatory scheme could be introduced. The first concerns Australia's obligations under the Single Convention on Narcotic Drugs 1961, referred to in Chapter 5. In a formal sense the provisions of the Treaty do not concern the State of South Australia since only the Commonwealth is a signatory to the Treaty and under international law the obligations imposed under the Convention relate to the Commonwealth itself. Nevertheless there are obvious difficulties in a State's legislating in a manner inconsistent with the spirit of the Commonwealth's treaty obligations. The position under the Australian Constitution is that if a State takes such action the Commonwealth conceivably could legislate, pursuant to its powers to make laws with respect to external affairs, to implement its treaty obligations directly, although such legislation would create serious constitutional issues.

Since Commonwealth legislation prevails over inconsistent State laws, the effect of such legislation, if valid, would be to overturn the State's

initiatives. Specifically an attempt by a State to introduce a regulatory scheme for cannabis might prompt Commonwealth legislation designed to prohibit commercial cultivation and sale of cannabis (even if authorised by State law) in accordance with what could be seen as the Commonwealth's treaty obligations.

A strong case can be made that the Single Convention, on its proper interpretation, does not prevent the introduction of a partial prohibition model for cannabis as we have described it. The convention can be read, as the Shafer Commission asserted,[16] as requiring the imposition of criminal penalties for possession and cultivation of cannabis only where this occurs in the course of illicit trafficking. On this approach, legislation removing penalties for possession and cultivation of cannabis for personal use would be consistent with the Treaty, although there is a view tentatively accepted by the Shafer Commission (which we are not inclined to share) that the convention requires cannabis possessed for personal use to be regarded as 'contraband', liable to forfeiture.

However, on no reasonable interpretation does the Treaty allow the lawful commercial cultivation and sale of cannabis, even subject to stringent government controls. The solution ultimately may well be for the Commonwealth to lend its support to initiatives designed to remove cannabis from the Schedules to the Single Convention and to insert it in a separate Schedule to the Convention on Psychotropic Substances 1971, which would allow signatories much greater discretion as to the appropriate controls.[17] Such a recommendation is of course beyond our terms of reference; and we understand there are barriers to moves to reschedule cannabis, but until changes are made to the international control system, a regulatory scheme may pose difficulties.

Secondly, policy makers cannot entirely overlook the fact that Australia has enjoyed a tradition of broadly uniform laws between the States, although of course some States have embraced changes in social legislation more rapidly than others. The introduction of a carefully controlled system for the sale and distribution of cannabis would by no means create insuperable difficulties within the Federal system since there would be no free market in the drug and all lawfully cultivated supplies would be under the control of the relevant governmental authority. Therefore other States and Territories would not be faced with uncontrolled legal cultivation in South Australia nor the threat of supplies flooding across borders. Similarly, it is unlikely that South Australia would be faced with an influx of people wishing to avail themselves of a regulatory scheme for cannabis; supplies elsewhere are hardly unattainable. Nevertheless the impact of legislative change in a sensitive area, with ramifications for Australia as a whole, may be seen by some as a reason to move more gradually.

References

1. Advisory Committee on Drug Dependence (1968), *Cannabis (a)* (the Wootton Report), H.M.S.O.

2. Report of the Commission of Inquiry into the Non-Medical Use of Drugs (1972), *Cannabis (b)*, Information Canada, Ottawa.
3. First Report of the National Commission on Marihuana and Drug Abuse (1972), *Marihuana: A Signal of Misunderstanding*, U.S. Govt. Printing Office.
4. Recommended by the Advisory Council on the Misuse of Drugs in Britain: Parl. Deb., H.C., 24 June 1977, p. 589.
5. In general it may not be wise for legislation to stipulate precise quantities. In this case, however, it might be sensible to state a maximum amount permitted in each gratuitous distribution.
6. See Health Commission of New South Wales (1972, February), *Trends in Marihuana Use in New South Wales*.
7. The survey is reported in a news release issued by the Drug Abuse Council, Washington, D.C., on 4 January 1978, which is a summary of the Council's own research.
8. See the figures in National Governors' Conference Centre for Policy Research and Analysis (March 1977), *Marijuana: A Study of State Policies and Penalties*, pp. 22 - 26.
9. *Cannabis (a)*, *op. cit.*, pp. 303 - 310 (M.-A. Bertrand). See also, Brecher, E. M. (ed.) (1972), *Licit and Illicit Drugs*, Little Brown, pp. 535 - 539.
10. Tobacco growers, for example, are subject to a quota under the provisions of the Tobacco Marketing Act 1965 (Cth). The sale of tobacco leaf is also controlled by the various State Tobacco Boards (but not in South Australia)., Producers are also subject to elaborate restrictions under the Excise Act 1901 (Cth.) designed to ensure the payment of excise duty to the Commonwealth.
11. We do not explore the difficulties in the State's imposing such taxation in the light of s.90 of the Constitution which states that the power of the Commonwealth to impose duties of excise shall be exclusive. Of course the Commonwealth, if it wished, could impose excise duties on the cultivation or manufacture of cannabis.
12. Community Welfare Act 1972 - 1976 (S.A.), s.80.
13. See Kaplan, J. (1971), *Marijuana—The New Prohibition*, Meridian, pp. 334 - 335.
14. *Cannabis (b)*, *op. cit.*, pp. 286 - 287. However, it seems that in Canada, at the time the Le Dain Commission reported, cannabis resin was firmly established as the dominant form.
15. *Marihuana: A Signal of Misunderstanding*, *op. cit.*, p. 147.
16. *Ibid.*, pp. 165 - 166.
17. Discussed by the Shafer Commission, *Appendix* (Technical Papers), p. 546.

11 : SUMMARY

- The regulation of the non-medical use of cannabis has been the subject of many official inquiries. These inquiries have reached strikingly uniform conclusions on the effects of cannabis use, both on the user and the community as a whole. The failure of legislators in Australia and other countries to accept these conclusions suggests that legislative responses are affected more by the perceived social status of users and the values and perhaps prejudices of powerful groups in the community, than by a careful evaluation of the pharmacological, medical and sociological evidence (Chapter 1).

- The major policy question is often seen to be whether the use of cannabis should be 'legalised' or 'decriminalised'. These terms are misleading. There are basically five policy choices: total prohibition, the prohibition/civil penalty model, partial prohibition, the regulatory model and free availability (Chapter 2).

- Cannabis contains a psychoactive substance which is not a narcotic and which in moderate doses is a euphoriant. It is not an addictive drug and is comparatively harmless in moderate doses, although there are effects on skills such as those required for driving, and its effects may be greater if it is taken in combination with other drugs. It is almost certainly harmful to some extent in high doses. Therefore the community's main interest is in discouraging the irresponsible or excessive use of cannabis. This summary of the scientific and medical evidence does not entirely resolve the policy questions, since further value judgments have to be made (Chapter 3).

- Evidence from surveys of cannabis use must be treated cautiously for a number of reasons. The impression from these surveys is that cannabis has been widely used, at least on one or two occasions, among some sections of the population, especially younger people. Evidence on the *kind of use* is sketchy, but there is no indication that frequent and sustained use of cannabis is widespread. The evidence indicates an increase in recent years in the number of people who have *ever used* cannabis, although part of the apparent increase may be attributable to a greater willingness by people to admit to illicit drug use (Chapter 4).

- The legal framework for the control of cannabis use in South Australia implements a policy of total prohibition. The controls are divided between Federal and State legislation, reflecting the broad division of legislative powers under the Australian Constitution. Neither the State nor the Federal legislation is based on a clearly defined philosophy and this is seen in the patchwork nature of the provisions. Maximum penalties for cannabis-related offences are severe, but the South Australian courts have adopted a relatively lenient approach to minor cannabis offenders (Chapter 5).

- Court statistics show that the vast majority of drug offences processed through the courts concern cannabis and of these over 90% relate to possession or use of the drug. Very few persons convicted of simple possession or use of cannabis are sentenced to imprisonment, the most common penalty being a fine or bond. Dealers in and suppliers of cannabis are much more likely to receive sentences of imprisonment, although these are usually suspended in prosecutions under State law (Chapter 6).

- No single philosophical principle can be used to determine the proper role of the criminal law in regulating the non-medical use of drugs. The test to decide whether the criminal law should be applied to private behaviour of this kind is a practical one, requiring the weighing of the costs and benefits of the prohibition. The fact that private behaviour offends the 'morality' of a majority of the population is not enough of *itself* to warrant the imposition of criminal penalties on persons behaving in that way (Chapter 7).

- In formulating policies for the regulation of the non-medical use of drugs, specifically cannabis, certain guiding principles should be borne in mind. These include the need to pursue realistic goals, the need to confront policy decisions openly, the need to recognise the values of privacy and individual freedom, the need to distinguish between different kinds of cannabis use, the need to acknowledge the choices open to people relating to the use of drugs, the need to adopt a policy of discouragement of use, the need to attack the black market and the need to respect the sensibilities of non-users of cannabis (Chapter 8).

- The major benefit of the current policy of total prohibition is that the deterrent and symbolic value of the law has contributed to limiting the number of people who have tried cannabis. It may also have had some impact on heavy or irresponsible use. However, the extent of the benefit cannot be quantified and it may be that factors other than the law are more important in limiting consumption. The costs of the total prohibition policy include selective enforcement of the law, the stigma of a criminal conviction for detected users, the strain on law enforcement resources, the dilemmas created for the police, the 'crime tariff' working for the benefit of dealers in the illicit market, and the damage caused to education programs. We have concluded on an assessment of the benefits and costs that modification of the total prohibition policy is warranted (Chapter 9).

- If the total prohibition policy is to be modified, the choice lies between the partial prohibition and regulatory models, although there is room for variation within each model. Under the partial prohibition model possession or cultivation of cannabis for personal use would no longer be a criminal offence; dealing would remain an offence and no legal market in cannabis would be established. Under the regulatory model cannabis would be cultivated and marketed under stringent government controls. Each model has advantages and disadvantages. This paper does not choose between the alternatives, but invites comment on which model should be preferred (Chapter 10).

APPENDIX A: CANNABIS - THE DRUG*

1: WHAT IS CANNABIS?

Cannabis sativa, a tall, robust, herbaceous annual which grows from 3 to 15 feet high, is one of the oldest cultivated useful plants. Man has obtained fibre from its stems ('cannabis' is a Latin word meaning hemp), oil from its seeds and drug from its resin. Coarse hempen cloth estimated to be 6000 years old has been found in Europe, and specimens 3000 to 4000 years old have been found in an Egyptian site.

Cannabis has also been used as a medicine for thousands of years (Rubin, 1976), frequently as an analgesic and a sedative. Records from Russia show that as early as the 7th century BC the plant and seeds were thrown on to hot stones and the smoke was inhaled for the relief of toothache.

The use of cannabis as an intoxicant apparently began in China, spread to India and other Asian countries, and thence to North Africa. It seems that its use as an intoxicant in Europe came only in the 17th or 18th centuries. Some have suggested it to be as late as the return to Europe of Napoleon's troops, who learned of the drug's effects in North Africa. The first comprehensive description of the intoxicating effects of the drug was by Moreau in 1845.

Until about 1930, preparations of cannabis were still used, although infrequently. Parke Davis, Eli Lilly and Squibb (drug companies based in the United States of America) marketed preparations of cannabis extract and promoted them for the treatment of asthma, tension and pain. As recently as 1947, the *British Medical Journal* published a paper which suggested that the preparation of choice for duodenal ulcer was Extractum cannabis BPC (Douthwaite, 1947). Snyder (1971) claims that cannabis extract was once used for medicinal purposes almost as commonly as we now use aspirin.

Chemistry

The pharmacological actions of preparations of cannabis are due to the cannabinoids that are produced by the plant. The plant *Cannabis sativa* is the only natural source of these substances. More than 30 cannabinoids have now been isolated from the plant, though those most commonly found in highest concentration are Δ^9-tetrahydrocannabinol (THC), cannabidiol (CBD) and cannabinol (CBN). The cannabinoids are secreted in a resin which occurs in highest concentration in the leaves, but particularly in the flowering tops of the plant. The main substance responsible for the mood-altering effects of cannabis is THC; CBD is devoid of mood changing effects and CBN is only weakly active. The

*In the preparation of the material in this Appendix, the Commission has received considerable assistance from Dr G. B. Chesher, Reader in Pharmacology, University of Sydney. However, the views expressed are our own, reflecting independent investigation, and Dr Chesher is not to be held responsible for them.

potency of different samples or preparations of the plant depends not only upon the amount of resin, but also on its content of THC and the other cannabinoids. Recent evidence indicates that, although CBD does not itself produce mood changes, it does modify the mood-changing effects of THC. Similarly, CBN has been shown to increase the rate of disappearance of THC from the blood in rats. Therefore, it is not only the concentration of THC within a sample of cannabis that determines its activity; the proportion of other cannabinoids also seems to exert a modulating influence.

The potency of crude cannabis preparations can also vary greatly depending upon the genetic strain of the plant. Doorenbos *et al.* (1971) have found that most samples of cannabis fall quite distinctly within two groups according to the ratio of THC to the other cannabinoids. One plant type, with a very low proportion of THC to the other cannabinoids, may be termed a 'fibre' type, and the other, with a high proportion of THC, a 'drug' type. A third intermediate group has also been described. These findings have been confirmed by others (Small and Beckstead, 1973; Fetterman *et al.*, 1971).

Despite many claims to the contrary, it appears to be very rare for preparations of cannabis to include other psychoactive substances. Of the many thousands of samples that have been analysed in this country, only one has been found to contain such a substance. In most cases in which this claim is made, an analysis of the sample has revealed a higher than usual concentration of THC.

Botany

Cannabis, most botanists now agree, is a monotypic genus—that is, it has only one species, *Cannabis sativa*. Its closest relative is Humulus, the genus containing the hop plant. Although other names may appear in the literature, such as *Cannabis indica*, or *Cannabis sativa* var. *indica*, there is no evidence to suggest that these plants are any different from those described in Linnaeus's standard botanical classification set down in 1735. Cannabis seeds usually germinate within 3 - 7 days and the plants grow rapidly, maturing within 5 to 8 months. It would be possible, therefore, to produce two crops over a 12-month period. Cannabis is also diœcious, that is to say, the male and female plants are separate; only rarely do male and female flowers occur on the same plant (monœcious). The female plant has much more foliage than the male and is leafy up to the top. The male has fewer flowers, and tends to have a shorter life span than the female.

Perhaps the most distinctive part of the cannabis plant is the leaf which has a slender stalk and usually between five to seven long, thin, soft-textured serrated finger-like leaflets, of uneven size. The leaves have tiny hairs on their upper surface, some of which come from glands within the leaf. These hairs secrete the resin that contains the cannabinoids. The glands are found in both the male and the female plants, the highest concentration being in the flowering tops. The female plant, therefore,

produces more resin (and therefore more drug) than the male. However, the resin from both male and female plants is equally potent.

Cannabis is prepared and sold in a number of different forms depending on the country of origin and the manner of preparation. These preparations vary considerably in their potency because of the differing concentrations of the resin contained in them, and therefore, in the amount of THC.

1. **Marijuana** is the name commonly given to a preparation of the dried cannabis plant prepared for smoking. Most samples of cannabis in this form which have been assayed in Australia have contained 1% or less THC, but some preparations particularly rich in high resin flowering tops may contain as much as four times this quantity of THC. Cannabis in this form has generally been cultivated in Australia, although some is imported. The main areas of cultivation in Australia, reflected in the numbers of plantations detected by the authorities, are New South Wales, South Australia (particularly in the River Murray region) and Queensland. There is considerable interstate traffic in cannabis.

2. **Cannabis resin** (hash) is a concentrated preparation of the resinous parts of the plant which is usually compressed into blocks. It varies in THC content and may be as much as 10%. Only a small amount of cannabis resin is produced within Australia, although the quantity may be increasing. Imported resin appears to come from such sources as Nepal, Pakistan, Afghanistan, Lebanon and Turkey.

3. **Buddha sticks** are made from a flowering top of the plant which has been bound around a bamboo twig with hemp tissue. The THC content varies between 5% and 12%. All genuine Buddha sticks are imported, but there have been detected cases of locally produced varieties using the same technique.

4. **Hash oil** is an extract of the cannabinoids prepared from the plant by the use of organic solvents. It may have a THC content of from 10% to as much as 60%. Very little hash oil is produced in Australia; it is imported from basically the same sources as cannabis resin.

It will be seen, therefore, that the various preparations of cannabis differ only in their concentration of the resin and, therefore, of THC. These variations may be likened to the various forms of alcoholic beverage—for example, beer, with 4% to 5% alcohol, table wines (10% to 12%), sherry (20%) and whisky, brandy or vodka (40% to 45%).

Analysis of Samples

In order to obtain more detailed information on the strength of cannabis available in Australia generally, and in South Australia in particular, we undertook investigations through the South Australian Government Analyst.

Thirty-nine samples of cannabis were analysed by the S.A. Government Analysist, between July 1977 and March 1978, 26 of these originating from police seizures, 13 from private sources submitted for analysis to the

Commission. In addition, 6 samples of cannabis resin were analysed, 5 from police seizures and one from a private source. The mean THC content of police seizures of cannabis is 1%, and that of cannabis resin is 4%.

Cannabis resin samples were, as might be expected, generally stronger than cannabis samples, but *all* samples show a wide range of potency, with some samples containing negligible quantities of THC. No drugs other than THC were detected in any of the local samples. Some of the South Australian samples of cannabis leaf contained more than 3% THC. It is apparent that Australian-grown cannabis can attain a high THC content.

Pharmacology

When any drug enters the body it is altered chemically before being stored and/or eliminated. This process is called metabolism. What happens to THC in the body? The crucial aspect of the THC molecule is that it is very soluble in fat and almost insoluble in water. When THC enters the lungs it can easily cross the lung cell membranes to the bloodstream and is then carried by the blood, partly dissolved in fatty particles. It can also easily cross the blood-brain barrier and thus some of the drug reaches the brain without going through the liver, where much of it would be metabolised into some inactive and some still active compounds or substances (metabolites). Ultimately, most of the drug will pass through the liver before being eliminated from the body. The liver changes THC into forms which are more water soluble, and these appear in the urine and the bile. Cannabinoids take a long time to be removed from the body altogether—about 4 to 5 days for half a moderate dose (Wall *et al.*, 1976; Lemberger, 1973). However, *within* the body the drug is distributed to the tissues, including the brain, very rapidly, that is, the drug has a rapid effect (depending on its route of administration) and the blood level does not necessarily indicate the level of drug in the brain.

Definition of Effects

While the active molecules of any drug are present in the body in a sufficient concentration (which is related to the dose taken) and these molecules can still reach those parts of the body where they can have an effect, there will be a pharmacological response. All drugs have a finite period of action after a single dose, and this is determined by the body's ability to eliminate the active form of the drug or to distribute the drug molecules away from their specific sites of action. This period of drug effect is termed the *acute effect.*

If the drug is taken on a continuous basis, it is possible that effects from its continued presence or its accumulation may become apparent. These are called the *chronic* or *long-term effects.*

This section deals with the pharmacology and toxicity of cannabis—in other words, how it works—because certain effects, some acute, some chronic, can most readily be understood in relation to these processes. The desired effects of cannabis are discussed in the next section, 'Cannabis -Uses and Effects' (p. 110). Those areas of concern as to possible damage,

both long-term and short-term, which may result from use of cannabis, are dealt with in section 3, 'How Dangerous is Cannabis?' (p. 117).

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Since pure THC has been available, comparative studies with other drugs indicate that this substance is most closely related to the hypnosedative group of drugs (which includes alcohol). Alternatively, it may be classified as a mild hallucinogen, primarily because of the drug's effect on sensory perception. In high doses THC does produce hallucinations.

To evaluate the consequences of the use of cannabis and to assess both its desired and undesired effects, a number of factors must be considered. These include:

- the manner of administration (cannabis is usually smoked or eaten);
- the dose (potency of the preparation used);
- set and setting (the reason for taking the drug, what the user is expecting from taking it and the usual environment in which the drug is taken);
- the frequency and pattern of use (how much, how often and for how long).

Manner of Administration

In this country, cannabis is most commonly smoked, although sometimes it is used in cooking, rather like a herb. When it is smoked, the drug is rapidly absorbed from the wide surface area of the lungs and begins to have an effect quickly—within a few minutes—because the blood containing the drug then returns to the heart from the lungs and is pumped to the main arteries supplying the brain as well as the rest of the body. Some of the drug thus reaches the brain before going through the liver, where much of it would be converted into inactive metabolites. When the drug is eaten, however, absorption into the bloodstream is slow and not particularly efficient and the blood containing the drug then goes to the liver. Any of the drug which has escaped metabolism than passes to the heart, is pumped to the lungs and only then through the main arteries to the brain and the rest of the body. So one needs to take more by mouth than one needs to smoke in order to get the same result. One also needs patience, since it will take much longer for the effects of the drug to be noticed—usually about an hour.

Similarly, the way the drug is taken controls the length of time that the effects last. If an average quantity of cannabis is smoked, the effects will probably last between one and two hours. If the drug is eaten, the effects may last longer than one or two hours. In both cases, however, larger doses will result in more prolonged effects.

In general, cannabis taken by mouth is two or three times less effective than an equally strong amount smoked.

Adverse effects from illicit drugs (where there is no quality control) are frequently due to contaminants. While this is common with narcotic drugs

such as heroin, contaminants are only very rarely encountered with cannabis. The preparation most likely to be contaminated is cannabis resin and the substances encountered might be fungal or atropine-like alkaloids. Fungal adulterants may cause an asthma-like attack and the atropine alkaloids may produce delirium, high fever, hallucinations, blurred vision and dry mouth. It should be stressed that such adulterants are extremely rare.

Dose

The amount of THC in an average joint is usually low—about 1% or less. But the preparations used are not scientifically standardised and often vary quite considerably in strength. In addition, the fact that cannabis is most commonly smoked means that there are many variables which may reduce the amount of THC absorbed. A variable proportion of THC is lost by the process of burning. The temperature of a marijuana cigarette which is smoked slowly may be about 600°C. At this temperature approximately 50% to 60% of the THC survives. An eager smoker may induce a temperature of 900°C, which will destroy over 90% of the active drug. In addition, depending upon the smoking technique, more or less of the available THC is absorbed. Variable amounts of the drug are lost in the sidestream smoke and, as is the case with the nicotine of the tobacco cigarette, the drug tends to concentrate in the butt or 'roach'. Thus, anywhere between 40% and 98% of the original THC in the cigarette may be lost.

The dose of THC which is eventually absorbed also depends on which kind of preparation used. Cannabis resin and oil are almost always used in far smaller quantities than cannabis in leaf form, but the desired effects may be the same. The variables which may reduce the absorbed dose will, however, be the same.

In an attempt to determine the amount of THC necessary to produce the desired effects, Perez-Reyes *et al.* (1974) used an elegant technique of administering THC by a slow intravenous infusion to volunteers. The subjects were asked to indicate when they could detect a change produced by the drug, and when they would like the infusion to stop. The threshold dose—when the subjects started noticing effects—was about 1.5 mg, and the social 'high' was achieved at between 2 and 3 mg of THC.

Adverse reactions to a single dose of cannabis are seldom reported. This could be because of the relatively low potency of most of the preparations used, but it also suggests that such adverse reactions as do occur are relatively mild and of short duration. Such reactions may be explained in terms of a relative overdose.

One adverse reaction is the effect of a dose greater than that to which the user is generally accustomed. The effects of such overdose may include anxiety, paranoia, dizziness, short-term memory loss and confusion. This is directly comparable to the sensations experienced after one drinks too quickly too much of an alcoholic drink which is more potent than expected. Such a relative overdose of cannabis is less likely to occur if the drug is

smoked rather than eaten, because the onset of action is quicker, and thus the dose is more likely to be regulated. Of course, for many cannabis users, the effects described above are not necessarily alarming, and some may be part of the desired effect.

A more serious adverse reaction is a toxic psychosis, sometimes called an acute brain syndrome. It is the result of the presence of an abnormally high dose of a drug which acts upon the central nervous system. Other drugs or toxins may produce much the same reaction. The signs and symptoms of toxic psychosis include disorientation, sudden and unexpected mood changes, delusions and hallucinations (Halikas, 1974). Toxic psychosis clears relatively rapidly, generally within a few days. The following case history illustrates the syndrome:

> . . . A 24 year-old law student who smoked marihuana daily and 'never had any difficulty with it' read that Baudelaire had obtained hallucinatory experiences by drinking suspensions of powdered hashish in coffee. Accordingly, he obtained a '½-inch cube' of hashish, powdered it, suspended it in coffee, and drank it on an empty stomach early in the evening. He described his subsequent experiences as follows: 'I didn't feel anything for about 40 minutes. Then I gradually started feeling high, and the feeling intensified over the next 20 minutes. About 1 hour after I had finished the coffee, I suddenly felt higher than I ever had after smoking hashish, and I also began to feel sick. Then everything became very confusing. I couldn't make sense of what people were saying or what was happening. I don't remember very well what happened next. I think I went to bed and just lay in misery for about 6 hours. The only thing I can compare it to is what I remember it was like to have measles as a child, when I had a temperature of 105°F. I know I saw crawling patterns on the walls and heard very unpleasant voices calling me. I couldn't recognise or talk to people who came into the room to find out how I was. I fell into a fitful sleep sometime after midnight and had horrible nightmares. In the morning I felt exhausted and washed out, but the worst of it was over. I ached all over and had a headache and hangover for a day and a half.'
>
> (Weil, 1970)

Set and Setting

Effects of drugs can depend to a great extent upon the expectations of the person using them, and the circumstances under which the drug is taken. These expectations and circumstances are called set and setting and can determine the effects of any drug, but especially those which change mood. Someone feeling emotionally secure, in a relaxed environmental free from stress and anxiety about detection, is likely to have a different drug experience from that of someone taking the drug in more stressful circumstances. In the latter case, an adverse reaction often referred to as a 'panic-anxiety' syndrome may occur.

This is probably the most frequently encountered adverse effect of cannabis. It seems to occur most commonly with inexperienced users and is probably the result of an interaction between the effects of the drug and the user's initial anxiety about the use of the drug. There does not appear to

be any relationship with the dose of the drug taken, and the reaction is generally quite easily handled by reassurance.

An interaction of set and setting can also influence reactions to a drug even if the 'drug' is quite inactive—for example, a capsule containing sugar. Such an inert substance is referred to as a *placebo* (Latin for 'I shall be pleasing') and is used in measuring reactions among people who think they have been given a drug. It is generally estimated that about one-third of any group studied will show a true drug-like effect with a placebo, because they were expecting this effect.

It is highly likely that a placebo response with smoked cannabis, particularly with preparations of lower potency, is quite frequently encountered. However, the placebo effect is by no means restricted to cannabis. In a clinical setting, the administration of a placebo in the place of sedatives or tranquillisers (psychotropic drugs) may also have the desired sedative effect. It is important to realise that this placebo effect is not due to 'faking'. It is a genuine experience, resulting from expectation. Of course, people's suggestibility varies.

As mentioned before, the quantity of THC in an average Australian joint is small—about 1% or less. Further, the way in which the drug is used in this country—sharing a joint among several people—would seem to ensure that a proportion of occasional users achieve only a placebo effect, not a true pharmacological effect, when they use cannabis.

Frequency and Pattern of Use

Just as the acute effect of a drug depends on the dosage taken, so also the possibility of an individual suffering adverse effects from the long-term use of any drug will depend upon how much of the drug is taken, how often, and for how long.

A single dose of cannabis takes several days to be eliminated from the body. Cannabis is one of a group of drugs that, with repeated use, accumulates in the body. The consequences of this accumulation are not yet clear, but evidence to date has given no indication of any serious effects. It has also been shown that after repeated exposure to the drug, the body adapts and is able to get rid of the drug in about half the time it took for the first dose.

Cannabis and Tolerance

After repeated doses of some drugs the user may find that the effect of the drug diminishes, and he or she must then increase the dose of the drug in order to obtain the desired effect. This phenomenon is termed tolerance and is a characteristic feature of many depressant drugs, the hypnosedative groups of drugs (including the minor tranquillisers and alcohol), and the narcotics. Despite earlier evidence, there is now very little doubt that with sufficient quantities and a regular and frequent dosage, tolerance does develop to cannabis. The dosage levels used on a regular basis by people in Greece, Costa Rica and Jamaica (where such use has been the subject of intensive controlled studies) are extremely high when compared with those

commonly used in this country or in the United States. Despite these high doses (equivalent to 20 to 40 joints a day) the users showed no evidence of undue depression or adverse effects. Such a dose in a non-tolerant individual would be extremely unpleasant.

Studies in which young American users were given regular increasing doses on a round-the-clock 4-hourly schedule showed rapid development of tolerance within 18 days (Jones and Benowitz, 1976). Doses as high as 400 mg of THC per day were tolerated without ill effect. By comparison, several other studies with groups of young Americans given a once-daily dose of THC for 16 to 28 days showed no evidence of tolerance, withdrawal or cumulative effects (Frank *et al.*, 1976; Renault *et al.*, 1974). Recent experiments suggest that at the current rate of use of cannabis in this country and in the United States, tolerance develops to only a low degree (Perez-Reyes *et al.*, 1974).

Often cannabis has no effect at all when it is used for the first time. With subsequent use, however, the effects are said to increase in intensity. This phenomenon has been termed 'reverse tolerance' and it is claimed that by the same process, the experienced user is able to achieve the desired level of intoxication with a smaller dose of the drug. Some attempts have been made to explain this phenomenon on pharmacological grounds—that repeated use results in production of a more active metabolite (Lemberger *et al.*, 1976). This view is no longer strongly held. A much more likely explanation lies in social and environmental factors associated with the use of cannabis—set and setting. Smokers gradually become more familiar with the techniques required to achieve the greatest absorption of THC. Also, with experience, the smoker learns to recognise and enjoy the drug's effects and to absolve the anxiety and possible fears that might be associated with the unknown, especially when it is illegal. Reverse tolerance has not been demonstrated when THC has been given orally. With sufficient dosage, both inexperienced and experienced users will perceive a drug effect with THC , whether taken by mouth or smoked. Some of the increased sensitivity said to be part of reverse tolerance might be due to a placebo response, associated with the ritual of passing the joint or the smell of burning cannabis—in other words, expectation and circumstances.

Cannabis and Dependence

If one takes sufficient quantities of some drugs, often enough and for long enough, it is possible to alter the body's functions so that the body becomes physically dependent on the presence of the drug. Lack of the drug produces a 'sickness' which is called the withdrawal syndrome. The withdrawal syndrome can be avoided by maintaining a continual level of the drug in the body, and can be 'cured' by another dose of the drug, or of another drug which shows cross-tolerance to the original drug.

Physical dependence on a drug can be determined by a withdrawal syndrome if the drug is no longer available. Clinical reports of a withdrawal syndrome from cannabis are extremely rare, and the reported symptoms have been mild. It has not been possible to determine whether the observed

effects could be attributed solely to cannabis, or to other drugs, or to a concurrent illness. Under experimental conditions, however, some withdrawal symptoms have been demonstrated (Jones and Benowitz, 1976). In a study recently completed, in which subjects received increasing doses of THC on a four-hourly basis for 21 days, subjects showed signs of irritability, restlessness, insomnia and some mild physical signs such as increased salivation, sweating and hiccups, within 6 to 12 hours after the last dose of THC. This study is important because it shows that a withdrawal syndrome can occur with cannabis. However, it required a strict 4-hour round-the-clock schedule of increasing dosage of the drug to produce it—hardly a drug-taking pattern typical of the usual cannabis user.

It has also been suggested that in heavy users, withdrawal may occur but that it is not recognised as such because the symptoms are so mild—rather like those of a cold. It is important, however, to note that cannabis withdrawal is not accompanied by psychological craving for the drug, which does occur with narcotics and alcohol. This craving prevents the appearance of withdrawal symptoms.

The experience of a drug like cannabis, which produces pleasure and relaxed euphoria, possibly may induce some people to use it, perhaps compulsively, to minimise some external stress. But there is certainly no over-riding compulsion to obtain the drug, regardless of the cost, as there is with narcotics. The situation is perhaps best summed up by Graham (1977):

> Cannabis is not a drug which causes physical dependence; only rarely is it likely to cause a compulsive desire for it, but one can readily become more than a little fond of it, and therefore, involved with it.

Toxicity

The toxicity of a drug can be considered at three levels: acute toxicity, or the effects of one big dose; cumulative toxicity, or the effects of repeated single doses in a short time; and chronic toxicity, or the effects of repeated doses over a long period of time. Various characteristics of THC mean that acute toxicity is unlikely, but that the possibility of cumulative or chronic toxicity cannot be ignored.

Acute Toxicity

There have been no documented cases of human fatality which can clearly be attributed to the acute effects of a single dose of cannabis. The concentration of THC in cannabis, for example, means that it would be extremely difficult—if not impossible—to take a lethal dose. Experimental animals are used to measure the lethal dose of a drug. In the case of THC, this dose varies according to the species of animal, the route of administration, and the vehicle used to dissolve or suspend the drug being tested. The dosage is expressed as that required to kill half the animals tested, and is called the LD50, or median lethal dose. If one uses the LD50 of THC given orally to rats, it suggests that one would have to *eat* 4kg of

average Australian cannabis in order to kill oneself. Alternatively, it would be necessary to smoke 400* average Australian joints simultaneously to achieve a median lethal dose (Graham, 1976).

Since the average dose required for a social high is about one average Australian joint, it appears unlikely that deaths from acute overdose will occur. Pharmacologically, THC has a very wide margin of safety—that is, there is a huge difference between the amount needed for a social high and the amount needed to produce death. In fact, even the amount necessary to produce hallucinations is at least five times greater than that required for a social high (Isbell, *et al.*, 1967), and others (Hollister *et al.*, 1968; Jones and Benowitz, 1976) have suggested that it might be even higher. By comparison, a dose of alcohol five times greater than that normally consumed for a social high may produce coma and death. In other words the margin of safety for alcohol is very narrow. As it happens, when high doses of alcohol are consumed, the rate of consumption is usually such that either vomiting or unconsciousness intervene before a lethal dose is reached. But not always: alcohol overdose deaths *do* occur, from alcohol alone and specially when used with other drugs (notably 'sleeping pills').

Cumulative Toxicity

After THC has been given intravenously to people who have not previously used the drug, it takes about 57 hours for half the administered dose to be eliminated from the bloodstream. This means that THC has a long plasma half-life—that is, the time taken for half a measured dose to be eliminated from the bloodstream. (When this experiment was repeated with experienced users of cannabis, the plasma half-life was found to be only 28 hours, since in experienced users the drug is metabolised more rapidly.)

Because the drug stays in the body for a relatively long time—although it may not actually be exerting any pharmacological effect—each new intake of the drug (for example, a joint a day) will add to the existing levels within the body, and so accumulation will occur. Since it is not known what proportions of the accumulated drug are stored as active and inactive substances more work is needed before an accurate assessment of the cumulative toxicity of high doses of cannabis can be made. The studies of Thompson *et al.* (1974) indicated that in Rhesus monkeys, repeated high doses did produce cumulative toxicity. However, only *one* death has been reported in the literature as attributable to a cumulative effect of high doses of cannabis (Heyndrikx *et al.*, 1969). This case rests upon evidence of heavy and continuous use, and absence of evidence of any other causes of death.

Chronic Toxicity

Chronic toxicity—the result of repeated use over a long period of time—may arise from cannabis use. Not only does the drug accumulate in the body as a result of continued use in a short time, but since THC is

*Calculated on the basis of one 1gm joint of 1% THC, allowing 50% loss from burning.

practically insoluble in water but highly soluble in fat, it is possible that THC may accumulate in the body's fatty tissues. The consequences of this accumulation are not yet known. THC is not unique in having a long plasma half-life and a propensity for accumulation with repeated doses. Several drugs commonly prescribed by doctors also have a long plasma half-life.

Drug	Use	Half-life
guanethidine	treatment of high blood pressure	9 - 10 days
phenobarbitone	anxiety	2 - 6 days
diazepam	anxiety	1 - 2 days
THC	active ingredient in cannabis	1 - 2½ days

The fact that a drug stays in the body for a long time is not necessarily a reason for the drug not being prescribed.

2: CANNABIS - USES AND EFFECTS

Recreational Use

In Western society, cannabis is used mainly as a recreational drug. It is, therefore, directly comparable with alcohol. In the dosages currently used in the West, the effects of cannabis are indeed very similar to those of alcohol. In other cultures (notably in Jamaica) cannabis is used in very high doses as a work adjunct. The drug is taken during work as an 'activator' to relieve fatigue and boredom, and not as a relaxant or a reward after work. Perhaps our equivalent work drug is caffeine in tea or coffee, or nicotine in tobacco.

Careful analysis of the effects of cannabis as seen in the laboratory cannot accurately describe the subjective effects experienced by the user taking the drug in a social setting, since the laboratory and the experimental setting are quite alien to the usual social environment. Furthermore, as indicated earlier, in a social setting it is possible that some of the pleasure is obtained at very low doses, and may be due to a placebo effect.

However, various methods have been used to describe the non-subjective effects of cannabis in a scientific and measurable manner. Cannabis produces a number of changes in body function, some of which are quite easy to measure accurately (such as increase in pulse rate), and which may be termed *physiological effects*; and others which are quite difficult to measure (such as the effects on mood, and the 'high'), which may be termed *psychological (subjective) effects*. As it is the psychological effects which are usually sought after, they will be discussed first.

Psychological (Subjective) Effects

As mentioned before, mood, motivation and expectations of an individual when he or she takes a drug can all modify the effects of the drug, and the individual's reaction to the effects. Similarly, the immediate environment can influence reactions. But most important, the response is dose-related. This is true of all mood-altering drugs—cannabis, alcohol, the hallucinogens, the opiate narcotics, sedatives and hypnotics. The first effect of cannabis on the brain is usually, like that of alcohol, stimulating. (In some this may produce anxiety.) Subsequently, the effect is one of sedation and sleepiness. At social doses, users of cannabis say that they feel friendly, that they can communicate better, that they are tranquil and introspective. At higher doses, feelings similar to psychosis may occur in waves, ranging from depersonalisation to vivid hallucinations.

The effects of cannabis on the psyche may be considered under these headings:

- Mood and the emotions
- Sensory perception
- Space-time perception
- Immediate memory

Mood and Emotions

Cannabis, like alcohol, is usually consumed in a social setting for pleasure. Both drugs initially induce a feeling of well-being and assist in reducing social inhibitions. Most users of cannabis describe a feeling of greater togetherness and relaxation, with a feeling that time is passing slowly. Hilarity is common, as are changes in mood. In some, intense feelings of uneasiness are felt. Unlike alcohol, cannabis is not accompanied by a hangover—there is no 'morning after' effect other than a feeling of lethargy if one has smoked a large quantity. This lethargy may, however, last quite a long time (Crowley and Cartwright, 1977).

Effects on sensory perception

> The benefit I get from marijuana is the ability to concentrate without distraction on both passive and active activities, to perceive without bias, to relax easily, to relax social inhibition by sharing marijuana with people, and to release or activate my imagination.
>
> Submission 44, p. 1

> I found the feeling of smoking marijuana to be light-heartedness and to have a cheerful effect.
>
> Submission 2, p. 1

> I often use cannabis to relax after work or on a weekend, as a stimulant and to make my sleeping better. My main use of it stems from my creative activity—painting. The stimulating characteristics of the drug heighten sensory experience. Because I am working in the field of perception, artistic development and education, I find this a particularly interesting study.
>
> Submission 59, p. 1

> Marijuana makes me feel relaxed, in good spirits and hungry. For the first hour or so I feel pretty lively, but after that I don't want to do much at all, just listen to music or go for a ride. Music sounds better, you can sit there and try to figure out meanings and just groove along to it, but it has to be the right kind of music. I don't think you can hear better but things you enjoy when you're not stoned you enjoy more when you're stoned.
>
> Submission 24, p. 1 - 2

> Inspiration for creating flows very readily once the effects are felt (about 10 mins. from the moment one begins inhalation). The extraordinary effects of perception and cognition are far greater than what one perceives with normal humdrum everyday existence. I find that due to the pressures of work and modern life the use of this drug acts as a short cut in breaking down the bind of objective vision (and other sensory areas of which one is not normally conscious). It produces non-objective sensual experiences and aesthetic vision in particular. Our materialistic society forces us to neglect this side of our experience to our detriment I believe. Using cannabis is to satisfy this need.
>
> Submission 59, p. 3

> Heightens sensitivity to colour, sound, touch, smell, taste, texture, beauty, form, contrasts, etc. . . . increased sensitivity to people's emotional state and unspoken communications . . . speed, distance, time, senses are distorted (experienced users are often aware and make allowance for these distortions) . . . Music - appreciation enhanced because of increased perception of the musician's ability and emotions necessary to create the music. Also the sound is just better.
>
> Submission 151, p. 3

These are some of the comments made to us about the effects of smoking cannabis.

Attempts to measure these drug-induced changes in sensory perception by laboratory methods have generally not been successful, perhaps because a laboratory bears no resemblance to the conditions under which cannabis is normally used. However, in a recent study, Thaler *et al.* (1973) were able to demonstrate a significant improvement in discrimination in a series of hearing tests. These results suggest that there could be a physiological basis to the often claimed effects of cannabis in enhancing the appreciation of music.

Effect on space-time perception

Under the influence of cannabis, the perception of time (felt time) is longer than clock time. Studies with alcohol indicate that this drug makes them feel shorter than clock time.

Effect on immediate memory

The effect of cannabis on short-term memory* has been studied extensively by a number of research workers. There seems little doubt that short-term memory is impaired *during* the period of cannabis intoxication. Darley and Tinklenberg (1974) demonstrated in carefully controlled studies that recall ability *after* cannabis intoxication was not affected at all. In addition, words learned under the influence of the drug are later recalled more satisfactorily if the person is tested after they have used cannabis again. A similar effect has been described for alcohol. The drug appears to have no effect whatever on memory of things learned before the drug was taken.

Physiological Effects

Cannabis does produce effects which can be measured objectively. There is, for example, a striking increase in heart rate, perhaps as much as 50%. Changes in blood pressure in man are generally minimal and only significant after high doses, and the minimal increases in blood pressure are probably explained by the increase in heart rate. In some cases a fall in blood pressure may occur when people smoke a lot and remain standing.

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*Short-term memory is that part of our memory store into which it is believed all new information is first processed. From here it may be forgotten or may be stored in the long-term memory. For example, when we look up a telephone number we tend to remember it only long enough to dial it. Should we want to dial it again, even within a few minutes, most of us would have to re-check it, although it is possible to commit the number to our long-term memory where it is stored in a more permanent fashion.

This may be sufficient to cause dizziness and fainting. In experimental animals, especially dogs, cannabis characteristically produces a fall in blood pressure which lasts a long time.

Cannabis does produce non-pathological changes in the brain's electrical activity, as shown in the electroencephalogram (EEG). Fink (1976) showed the extent of these changes to be dose-dependent. He stated that the 'effects are short-lived at social doses, but with higher doses, the effects . . . may persist up to at least 4 hours'. But he also could discover no differences in the incidence of abnormal EEGs among long-term users and controls.

Graham (1977) refers to a study which showed that *withdrawal* of cannabis caused changes in brain wave patterns, but points out that this applies to most sedative drugs upon which people may depend. He also mentions the difficulty in assessing slight changes in EEG patterns, since it is possible that they are due to drowsiness and boredom resulting from a long EEG recording session.

In a study of chronic cannabis users, Karacan *et al.* (1976) found no evidence of disturbances in sleep patterns resulting from cannabis use, other than a significantly longer average duration of rapid eye movement (REM) sleep among users.

Reddening of the eyes and dryness of the mouth are characteristic effects of cannabis.

Motor Functions

There is good evidence that certain skills and motor functions are affected by depressant drugs such as alcohol. It is becoming increasingly obvious that these functions are also depressed by THC and the ability to make fine corrective movements is affected. These and other tests indicate that intoxication with cannabis, just as with alcohol and other depressant drugs, produces effects that could impair the ability to drive a motor car (or operate other complex machinery) with safety (See 'Cannabis and Driving', p. 117).

Detection of Cannabis

Alcohol and cannabis are often consumed together in a social setting. The interaction between these two drugs is incompletely understood, but research indicates that it is at least additive. At the moment, only the presence of alcohol can be readily determined when one is routinely testing for impaired driving skills. There is no 'cannabis detector' equivalent to the simple and accurate Breathalyser—or indeed any simple test which will detect any other drugs that can interfere with a driver's ability.

At present, the detection of any drug other than alcohol in the blood requires a complex chemical procedure and expensive equipment. It is not a procedure suitable for routine roadside or police station checks, but it would be incorrect to say that no procedures at all are available for determining the presence of drugs in the body. In fact, there are accurate and widely used techniques such as radioimmunoassay, chromatography

and mass spectrometry. But more knowledge is needed, and there are technical problems to overcome before a simple method of cannabis measurement becomes available. Some of the criteria for an ideal method of analysis are as follows:

- The method should be technically simple, accurate, reliable and fast, and should be within the competence of an adequately trained police officer. The apparatus should be portable and cheap.
- The specimen required for analysis should not require a medical practitioner to obtain it—in other words, it should be breath or saliva or urine (not blood).
- A legal concentration limit should be determined above which it is an offence to drive a car (such as the 0.08% blood alcohol level), which can readily be proved in court. There should be a known and constant relationship between a given blood concentration and the specific effects of the drug on driving skills. There should be no change in the concentration of the drug (or its metabolites) in the sample by chemical or biological action while it is in storage.
- Interference with the sample by other substances—naturally occurring in the body or legally available—must be prevented.
- It is also important that the processes undergone by the particular drug be understood, since metabolites of some drugs are as active or more active than the parent molecule. These metabolites must be identifiable, and perhaps allowable levels will also have to be determined for metabolites.

Ideally, accurate determination of intoxication at a specific time involves measurement of the concentration of the drug in the brain. Obviously, one cannot take a brain sample, so the next best thing is to measure the blood level. The concentration of alcohol in tiny air sacs in the lung, as measured by the Breathalyser, is a direct indication of the concentration of alcohol in the blood. No such correlations have yet been determined for cannabis, whether between blood and breath or blood and performance, for example. Moreover, there are no clear indications by which a court can assess whether a police officer was acting reasonably in ordering a test to be made on a particular motorist in respect of the suspected use of a drug other than alcohol. Weaving about on the road, excessive speed, or a noticeable lack of speed are accepted as reasonable indications of alcohol intoxication, warranting the administration of a Breathalyser test. But no correlations have been determined between certain types of behaviour and cannabis intoxication, or indeed for any of the other more widely used drugs in the hypnosedative group.

Cannabis can be detected on the breath after it has been smoked, but no quantitative measurements have yet been made, and it is also not clear whether cannabinoids can be detected on the breath if the drug has been eaten rather than smoked. Further, the testing of urine samples is of value only to prove that the drug has been taken, not that the person was under the influence of the drug at a specified time.

In summary then, techniques for measuring blood levels of *any* drug are presently available, and widely used in hospitals, but they are not yet available in a form suitable for roadside use. However, it seems that such

procedures could be developed in the near future. Perhaps the greater problem will be fitting these techniques into the existing legal framework for dealing with people suspected of driving under the influence of a drug.

Effects on Sexual Activity

There is no scientific evidence that cannabis (or any other drug) is an aphrodisiac. Cannabis does lessen inhibitions and may help one to enjoy a relatively risk-free activity even more.

Many people who use cannabis believe that moderate use of the drug improves their sexual experiences, making them more sensually and sexually aware. One of the most frequently mentioned effects of cannabis on sex is that orgasm appears to be prolonged, perhaps because of the drug's prolonging effect on felt time. Scientific assessment of such claims is difficult.

However, cannabis has been claimed to affect physiological sex functioning in a variety of ways. These are discussed in the section 'How Dangerous is Cannabis?' (p. 125).

Summary

The general effects of cannabis can be descibed as producing a state of well-being, relaxation and sedation. The effect usually includes an apparently stimulatory phase when euphoria and excitement are experienced and spontaneous laughter is common. Perceptual awareness is increased. Sudden mood changes can occur, and short-term memory and some cognitive processes are adversely affected. Of course, these effects may be *desirable* from the user's point of view.

There is an increase in heart rate, slight changes in brain electrical function, dryness of the mouth and throat, reddening of the eyes and some disturbance in psychomotor coordination. Both the psychological and physiological effects are short-lived.

Medical Uses of Cannabis

The main reasons for the decline in the use of cannabis as a medicine were the variability in the potency of the preparation from batch to batch, the drug's instability when stored, and its poor absorption from the gastrointestinal tract. At this time the active principle had not been identified and no suitable methods were available to determine potency. It was not possible, therefore, to prepare standardised mixtures. Other substances such as the barbiturates became available which could be standardised and were, therefore, preferred. Medical use of cannabis largely ceased when laws were passed in various countries earlier this century to proscribe all use of cannabis.

The isolation and identification of the cannabinoids and their subsequent availability for research purposes led to a tremendous increase in cannabis research. A significant proportion of the current research into the properties of cannabis has been devoted to its possible use as a medicine. A number of therapeutic possibilities are being investigated and some of these

are showing great promise. A great many derivatives of the parent cannabinoid molecules have been synthesised with a view to improving their therapeutic usefulness and diminishing unwanted side effects.

A symposium was held in California in November 1975, specifically to discuss the progress in research into the therapeutic usefulness of cannabis (Cohen and Stillman, 1975). To date the most promising avenue for the medical use of cannabis is in the treatment of glaucoma (a disease of the eye in which the pressure inside the eyeball rises excessively, with the risk of blindness). It has been reliably demonstrated that THC reduces the pressure within the eyeball in patients with glaucoma and eye drop preparations are currently being investigated. We received a submission from Mr Bob Randell, of Washington, U.S.A., who has been granted permission to use cannabis for glaucoma.

Several researchers have described the effects of THC on dilating the main respiratory tubes, thus suggesting its possible use for asthma patients. An aerosol preparation is being developed, which delivers doses lower than those which produce euphoria. The effects may last longer than currently used anti-asthma preparations. The anti-epileptic properties of cannabis have been well documented in studies with experimental animals, but no careful studies have yet been carried out in man.

Cannabis has a long history of use as an analgesic and in recent studies with experimental animals, THC has been shown to compare favourably with pethidine and morphine.

THC has been found to be effective in reducing the incidence of nausea and vomiting associated with the present methods of cancer treatment. A recent study suggested that the drug has a beneficial effect on the symptoms of depression, pain, nausea and vomiting and reduces loss of body weight—all of which may reduce the suffering associated with terminal cancer.

Of potentially greater significance is the recent finding that THC inhibits the growth of some types of cancer in tissue culture. Whilst this finding is at the very early experimental stages and there is no evidence that cannabis is effective in cancer therapy in man, it holds promise that THC might be the parent of a new series of anti-cancer drugs. In a submission to us, Dr Harry Lander, Reader in Medicine at the University of Adelaide, referred to the possible therapeutic value of THC, and urged release of this agent for use in medical treatment under appropriate supervision.

3: HOW DANGEROUS IS CANNABIS?

Many of the recently reported studies of possible adverse effects of cannabis have been carried out by using *in vitro* techniques. That is to say pieces of tissue are isolated from the body of animals (or man), treated in various ways and studied in the test tube (*in vitro* means 'in glass'). While the importance of these findings is not to be underestimated, the interpretation of their true meaning is exceedingly difficult. The extrapolation of *in vitro* results to the living animal (or man) is not necessarily valid.

In the present emotional climate that surrounds cannabis use, it is unfortunate that experimental results are often interpreted in a manner not intended by the original investigator and not justified by the data. This point will be made clear in the section that follows.

Cannabis and Driving

A number of studies have been concerned with the effect of cannabis on those motor and mental skills considered important for driving a motor vehicle. The results of these studies indicate quite strongly that intoxication with cannabis may adversely affect ability to drive a car safely.

There are four ways to study the effects of drugs on driving. The most direct is to study the effect under normal traffic conditions. This has its own obvious hazards, and an alternative within this method is to test the driver on a test drive course.

A second method is to use a driving simulator, which enables comparison of driver performance under drug and no-drug conditions, but does not provide the many stress factors that are associated with a real-life situation. However, with both the real-life situation and the driving simulator there are so many variables that the results tend to be inconclusive.

For these reasons most of the studies have been of the third type—conducted under controlled conditions in a laboratory. Those skills believed to be important for overall driving ability are measured to examine the effects of drugs on them. Such skills are reaction time, tasks requiring motor coordination and tasks requiring quick and clear thinking processes.

The fourth method employs epidemiological techniques—for example, examination of blood alcohol levels of road crash victims indicates that alcohol is a factor in about 50% of all fatal road crashes.

A Canadian study (Klonoff, 1974a,b) has been made of the effect of cannabis on 64 volunteers in peak hour traffic in Toronto and on a traffic-free driving course. The authors concluded that 'the smoking of [cannabis] by human subjects does have a detrimental effect on their driving skills and performance in a restricted driving area and that this effect is even greater under normal conditions of driving in city streets . . .' They went on to say 'Driving under the influence of [cannabis] should be avoided as much as driving under the influence of alcohol'. However, the drivers were not all equally affected. Some showed an improvement in performance, especially after low doses of drug.

Less clear-cut results have been obtained from those studies which have used a driving simulator. Rafaelson *et al.* (1973) demonstrated that cannabis produced a failure or delay in responding to signals, rather than affecting control of the car or tracking ability. He concluded that cannabis produced a decrease in the willingness to take a risk. Dott (1972) also showed a similar decrease in risk-taking in a study using a driving simulator.

In an earlier and much publicised study by Crancer *et al.* (1969) a comparison was made between the effect of alcohol and smoked cannabis on performance on a driving simulator. The authors concluded that the effect of cannabis did not appear to be dose-dependent and was less than that of alcohol. These conclusions have been strongly criticised (for example, Milner, 1976). The study used only one dose level of each drug, monitoring of the doses given was inadequate, and the cannabis was smoked to produce a subjective 'normal social cannabis high'. Thus only a low dose of THC was used. On the other hand, the dose of alcohol given was intended to produce a fairly high concentration of 0.1%, and may in fact have produced levels as high as 0.15%. As Kalant (1969), in a criticism of the study, points out:

> The finding that a heavy dose of alcohol caused more impairment than a mild dose of [cannabis] is neither surprising nor helpful in assessing the relative effects of the two drugs in the respective doses in which they are normally used.

The results of those tests studying specific behavioural function under laboratory conditions have been more consistent than those employing driving simulators or real-life driving. Cannabis has been shown to have a decremental effect on motor performance, tracking behaviour, attention, cognition and perception.

Many of these studies have drawn comparisons between the effects of cannabis and those of alcohol. The drugs are similar in some of their effects: both produce a deficit in reaction time and in the performance of simple tasks that require motor coordination. In tasks requiring the division of attention over several tasks simultaneously, it seems that alcohol produces an overall deficit, but cannabis appears to produce momentary lapses of attention, so that a sensory cue may be completely missed.

An important factor in the design of all experiments of the effect of drugs on performance is that of practice. It can be demonstrated convincingly that the performance of a difficult task can be adversely affected by a drug if the drug is given to someone who has not had practice with the task. If the same person is allowed to practise the task on several occasions before the drug is administered, its effects are quite often negligible or absent. It seems that the first or learning phase in performance of a task, which requires considerable attention, is sensitive to drug effects. The later phase, automatic and practised, is more resistant to drug effects. However, some skills are called upon infrequently and only during emergency situations. These are, therefore, less practised and are more sensitive to drug effects. South (1978) suggests that drivers under the influence of cannabis can

compensate for the drug's decremental effects by increased concentration, and by driving in such a way as to take fewer risks. To what extent they can do this, however, is not clear.

Epidemiological studies of the involvement of cannabis in motor crashes has, to date, been precluded almost entirely by the absence of a readily available and accurate test for determining blood levels of the cannabinoids. There is rather weak epidemiological evidence that suggests a possible association of cannabis in road crashes (Sterling-Smith, 1976), made on the basis of presence of cannabis in cars involved in crashes. There was no evidence that the drivers were under the influence of cannabis at the time of the crashes.

A report from Canada (Smart, 1974) studied the records of driving offences of people convicted of a cannabis offence. There was a twofold increase in crashes over the 1 - 12 months preceding the cannabis offence of those people when compared with the incidence of crashes of all people within this age group.

Such reports, although suggestive of a role for cannabis in driving offences, cannot be taken as proof. No direct cause and effect relationship was shown and many other, non-drug factors could also be involved. However, should the use of cannabis in the community increase significantly, an increase could be expected in the proportion of users who drive under its influence. The evidence outlined above is sufficient to indicate a possible adverse effect of cannabis on driving skills, and this effect is apparent not only with high doses or sustained use. It could apply to the intermittent as well as the regular user.

Cannabis and Other Drugs

There is now good evidence that the cannabis user is also likely to be a consumer of alcohol. It is quite common for both drugs to be consumed by the same person on the same social occasion. Despite the obvious social importance of such a drug interaction, there has been little investigation of the nature of the effects produced. Such work as has been completed has generally focussed on psychomotor effects relevant to driving skills.

Four studies of the effects of alcohol and cannabis, alone and in combination, on perceptual, cognitive and motor functions have now been conducted in a laboratory setting by the Pharmacology Department of the University of Sydney (Chesher *et al.*, 1976, 1977). From these studies it is clear that either drug given alone produces dose-dependent decrements in the performance of the tasks, and that when the drugs were given together, the effect is additive.

Similarly, additive effects have been reported when alcohol is used with other widely used drugs. Indeed, the interaction between diazepam (Valium) and alcohol is greater than would be expected by addition. This may be explained by the recent finding that in the presence of alcohol, the rate of absorption of diazepam from the intestines is increased. Maximum blood levels were nearly doubled when diazepam was used with alcohol (Hayes *et al.*, 1977). The precise effects of interactions between alcohol and

other drugs are not known, and the relationship between such interactions and road crashes is an area requiring a great deal of work.

Cannabis and Escalation

Does cannabis lead to other drugs? In particular, does it lead to heroin? The argument that it does rests not on the chemistry or pharmacology of the drug, but on the sociology and psychology of its use. The narcotics are not at all like THC in structure. Pharmacologically, they have in common the fact that they both act on the central nervous system, though probably not in the same way or at the same sites. THC is very difficult to use with a hypodermic syringe, and the narcotics are not usually smoked in Australia.

As to the 'drug experience' itself, cannabis is used primarily for its effects on sensory perception—for what users call 'mind expansion'. Heroin and the other narcotics are used primarily for their ability to block out sensations, to produce a nirvana-like state. The nature of the drug experience with cannabis may suggest that people who enjoy this drug could, in some cases, seek to use other mind-expanding drugs, notably LSD and the other stronger hallucinogens, but does not support the idea that having tried cannabis, heroin would then seem more desirable. The contrary is often said to be the case, cannabis users being wary of addiction.

Is the pattern of behaviour associated with cannabis and heroin similar? It is well established that drug use may be of various kinds: experimental, occasional, regular or heavy. This is true for any drug. Among experimental users, there will be some who will try anything, and so there will be some who will try not only cannabis but also heroin, and many other drugs, or experiences. The order in which this is done is a matter of current availability, current fads, and chance. Cannabis is by no means always the first drug to be tried. Experimental users may change their drug of choice frequently, or they may never try more than one illicit drug. Nor is there any reason to suppose that occasional users of cannabis will move on to heroin. Indeed, this cannot be so, since cannabis use is common and heroin use is uncommon.

Cannabis users do not appear to have any distinguishing characteristics other than their relative youth. Among users of illicit narcotics there would appear to be rather more people with a high load of other social or psychological problems, and a higher proportion of regular and heavy users. This is partly because of the addictive properties of the narcotics and partly because of other factors not well understood, such as family background. It is hardly surprising that among people who are drug-dependent, most will have used cannabis before using narcotics or that many will continue to do so. But this is not always so, for many will not have started with cannabis, but with other drugs, or directly with narcotics. They are also likely to use other psychotropic drugs, either as substitutes, to supplement supplies or to offset one effect with another.

For example, in a study of 635 addicts for whom methadone was authorised, the N.S.W. Health Commission found that 78% had used

cannabis, 63% amphetamines and 67% hallucinogens from their first use of drugs to the date of survey (Reynolds, 1975).

Crowley and Cartwright (1977) cite a case study in the *Medical Journal of Australia* (Bartholomew and Reynolds, 1967), which reported the variety of drugs taken by two 19-year-old males, both serving sentences for drug use. In order, the first had used ritalin, benzedrine, barbiturates, cannabis, cocaine, morphine, Morning Glory (LSD); the second, alcohol, purple hearts, methedrine, cannabis resin, barbiturates, cocaine and opium.

The use of cannabis by narcotics addicts does not prove a causal relationship between the use of cannabis and the use of heroin. What it does show is that people who use one drug to excess may, and probably will, use other drugs, and often they will use these drugs to excess also. Thus some regular and perhaps many heavy users of cannabis may use other drugs: where they belong to a subculture of drug users, the drugs chosen may be of only one type—that is, they may be only cannabis, or only heroin, but they will often be mixed, including 'pills' and sedatives of various kinds, and hallucinogens. They will also vary from time to time. Concentrating concern upon a causal role for cannabis in this group of users can only be counterproductive.

Could the use of cannabis lead to the use of other illicit drugs, because the illicit nature of the cannabis use makes other illicit acts more likely? In theory this is possible, but is not supported by the facts. Among regular users, the illicit nature of cannabis is not the major consideration, and even among occasional and experimental users, the probability of detection is so low (probably fewer than 1% of users of cannabis are arrested) that it cannot be an important factor in motivation.

Can cannabis use lead to other drugs because the occasional or experimental user, in obtaining cannabis, is led into a drug subculture in which multiple drug use is common? The evidence suggests that movement between categories of use is uncommon. Someone whose cannabis use is central to his life is sufficiently distinct from someone whose use is peripheral to his life. The latter will commonly use alcohol and tobacco, but in the same casual way, while the former may often use other drugs as part of a drug-dependent lifestyle.

Graham (1977) summarises the position as follows:

> There is no factual evidence that those who chose cannabis are more likely to escalate to heroin . . . than those who chose pep pills, . . . LSD, or anything else. The evidence is—those who depend on heroin have tried most of the drugs available, have misused cannabis and alcohol, but have gravitated to an all embracing dependence because of an all embracing weakness.

Cannabis, Aggression and Crime

The belief that cannabis causes crime emerged in the 1930s. This belief was based partly on a failure in logic—the view that if many criminals have used cannabis, then cannabis causes crime. It was strengthened by

propaganda, new penal legislation relating to cannabis, and anecdotal reports of frenzied killings brought about by the drug. However, every government-sponsored commission of inquiry which has investigated the relationship between cannabis and violent crimes* has concluded that there is no such connection.

On the contrary, cannabis generally lessens aggression, producing drowsiness and passivity. Kolb (1962) observed that one of the most significant aspects of the information in police files dealing with cannabis offenders was the absence of arrests for assault.

Tinkleburg *et al.* (1976) concluded from a study into the association of cannabis, alcohol, violence and crime that:

> . . . there is no evidence that an increase in violent crime is directly related to the increase in cannabis use; in fact, considerable evidence suggests that cannabis often decreases assaultive tendencies.

Alcohol, on the other hand, is directly associated with aggression and violent crime, an association which is well known. The Senate Standing Committee on Social Welfare (1977) cites a study of criminals in which it is stated that probably 50% of those convicted of the more serious crimes were under the influence of alcohol at the time they committed the crimes.

Graham (1977) states clearly that:

> There is no direct relationship between cannabis and violence, other than in exceptional circumstances; usually the reverse.

Cannabis and Brain Damage

Cerebal atrophy (shrinking of the brain), even to a minor degree, is 'liable to produce profound effects—for example, on memory, temperament, clarity of thought, or capacity for work' (*Lancet* editorial, 1971). This condition is most uncommon in young people. Therefore, the scientific world was suprised when Campbell *et al.* published a paper in 1971 which demonstrated, by air encephalography, cerebral atrophy in ten selected young males with long histories of heavy cannabis use. These patients also had various serious psychological or neurological symptoms and several had also used drugs other than cannabis. The authors called for further investigation of the possible association between cerebral atrophy and chronic cannabis use.

Campbell's findings have not been replicated. Negative findings have been reported in two recent studies using computerised transaxial tomography (CAT scanning) (Kuehnle *et al.*, 1977; Co *et al.*, 1977). CAT scanning is a more precise technique for assessing anatomical change in the brain than was available to Campbell's group. It may have been that a previously existing neurological condition in some of Campbell's cases led to both the cerebral atrophy and the drug use. The editorial in the issue of

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*Indian Hemp Drugs Commission 1893 - 1894; Mayor's Committee (New York) 1944; White House Conference on Narcotics, 1962; President's Commission on Law Enforcement, 1967; Wootton Report, 1968; Senate Select Committee Report, 1971; WHO Scientific Group, 1971; Le Dain Commission, 1972; Shafer Commission, 1972.

the *Lancet* containing Campbell's paper also pointed out that the controls could have been better matched for sex and symptomatology.

Factors other than drug use can produce atrophic changes in the brain, and indeed they were discussed in the editorial too, the writer pointing out that while Campbell had certainly demonstrated changes in the ten cases, 'what is not certain is whether these changes are *caused* by the use of cannabis'. The editorial also quoted another larger study of 100 patients with the same condition of the brain, in which 71 had *no* history of drug abuse, while 15 drank to excess and 20 used other drugs as well or instead.

The two American studies (Kuehnle *et al.*, 1977; Co *et al.*, 1977) which claim to discount Campbell's findings were as unsatisfactory in their sample selection as Campbell was. Campbell's sample was very small (10 patients) and highly selective. Having found four patients with signs of cerebral atrophy and a history of heavy cannabis use he and his co-workers appear to have searched for further cases. Indeed anyone referred to a highly specialised neuropsychiatric unit is hardly typical of a cannabis user, very few of whom are likely to be referred for neurological investigation. Nevertheless, establishing the risk of a condition such as cerebral atrophy, which could have only an extremely low incidence, is neither easy nor inexpensive. Air encephalography, used by Campbell, is too dangerous a technique to have been undertaken lightly, without perhaps a high index of suspicion on clinical grounds.

But by the same token, the study of Kuehnle *et al.* (1977) is not immune from criticism, for their workers obtained their small sample of 19 people by seeking volunteers through an advertisement in the local newspaper. It seems very unlikely that anyone with impending dementia would have contacted the research group, and very likely that the local pro-cannabis lobby could readily have provided healthy cannabis users for the live-in study.

The authors of the other study mentioned earlier, employing the same technique (Co *et al.*, 1977) are more open about bias in their sample, even mentioning a further possible source of error, both in their own and Campbell's work. But again only 12 people were investigated fully, and while none of these had evidence of brain damage, they also had no psychiatric or neurological disturbance.

CAT scanning is as yet prohibitively costly, but it is safe, and could be used in a large scale retrospective or prospective study to establish beyond doubt the risk, if any, of long-term effects on the brain from heavy chronic use.

Other studies of larger samples of chronic cannabis users, notably that in Greece by Boulougouris *et al.* (1976a) make it clear that it is possible to use cannabis in high doses for long periods of time without evidence of brain damage.

At present it can be said that it is perfectly possible to use cannabis in low doses intermittently without any lasting effects on the brain, and that there is good evidence to suggest that chronic cannabis use is also possible without brain damage. Thus the risk of brain damage from cannabis use

must be very small. But this risk cannot be excluded without long-term prospective studies of the type which have now established precisely the risks of serious side effects from the contraceptive pill. Now that the risk of cerebral thrombosis from 'the pill' has been established, millions of users have been able to make an informed choice about their drug use.

It is, therefore, reasonable to conclude that there may be a risk from heavy long-term cannabis use.

Cannabis and Mental Function

The possibility that cannabis may be associated with prolonged adverse psychological effects has been a controversial matter. Reputable studies indicate no psychological abnormality among long-term cannabis users (Coggins *et al.*, 1976; Knight, 1976). The sorts of psychological abnormalities which have been investigated include isolated symptomatology (such as flashbacks), personality disorders (such as the postulated amotivational syndrone), and cannabis psychosis. Cannabis psychosis needs to be distinguished from discussion of toxic psychosis and acute anxiety reactions, both of which have been discussed earlier (p. 104).

The first of these abnormalities, flashbacks, can be readily dismissed. Flashback is a spontaneous recurrence, in the drug-free state, of an experience similar (or identical) to those experienced under the influence of the drug. Flashback is supposed to occur after the use of LSD, and it has been suggested that cannabis can induce a flashback of an LSD experience. Recently, some evidence has been presented that cannabis can also induce flashbacks in people who have never taken LSD. The incidence of the reaction is unknown, and seldom, if ever, severe (Edwards, 1976).

The second, the amotivational syndrome, appears to be more a result of observer bias than a real entity. The term was originally applied by McGlothin and West (1968) to a condition they themselves stressed was only a clinical impression. They describe the symptoms as:

> diminished drive, lessened ambition, decreased motivation, apathy, shortened attention span, distractibility, poor judgment, impaired communication skills . . . introversion . . . diminished capacity to carry out complex plans or prepare realistically for the future . . . habit deterioration, and progressive loss of insight.

Attempts to replicate the symptoms under controlled conditions have been unsuccessful (Miles *et al.*, 1974; Mendelson *et al.*, 1974, 1976). It certainly does not occur among chronic ganja smokers and careful studies of these groups have indicated that many poor peasants use the drug to improve their work capacity, and that they do indeed work more effectively while using the drug. Moreover, studies of college students in the United States, conducted with proper controls, provide no supporting evidence for the existence of this syndrome (Mellinger *et al.*, 1976). However, it is possible for students who may be disaffected with academic life (or disturbed for other reasons) both to use cannabis and to fail to complete their studies.

Cannabis-related psychosis could be explained in any one of the following ways: the drug could induce a schizophrenic reaction in an

individual who could not otherwise have developed a psychosis; it could precipitate a psychosis in a predisposed personality harbouring a latent psychotic tendency, or it could accompany or aggravate a pre-existing schizophrenia (Davison, 1976).

The incidence of psychotic illness in the community is estimated to be between 0.5% and 3.0% and the age group which presents with initial signs of schizophrenia is usually between 15 and 35 years. This is the same age group generally associated with cannabis use in the West. It is to be expected, therefore, that a proportion of cannabis users will develop schizophrenia, with little or no relationship between the drug and the illness. In the same way, a proportion of bicycle riders will develop schizophrenia.

Studies of populations of very heavy users, in Jamaica, Costa Rica and Greece, have failed to detect evidence for the existence of a specific cannabis psychosis (Knight, 1976; Stefanis *et al.*, 1976).

Cannabis and Reproduction

Mention was made earlier of the effect (or claimed effect) of cannabis on sexual activity. Lately there has been considerable concern expressed about the effects of cannabis on sex functioning and reproduction. The drug is supposed to have oestrogen-like effects, to produce enlarged breasts in men, and to cause a lowering of testosterone levels. Breast enlargement in men has been reported to be the result of a number of drugs, including some tranquillisers, antihypertensives and antihistamines. The incidence is extremely low.

The normal range of testosterone levels in the blood of healthy males can be influenced by a wide range of factors and varies enormously—from 275 to 1500 ng/100 ml of blood. Levels can be decreased by stress and increased by exercise. None of the changes in testosterone levels reported to result from cannabis have been outside the normal range. All workers in the field have expressed caution in interpreting the data, and no firm conclusions can be drawn.

In the search for possible genetic effects of cannabis, several studies have been conducted on chromosomes from the white blood cells. The cells are grown in an artificial culture and studied under a microscope. Results have been inconclusive, probably because of the inadequacies of the method, and interpretation of these results is best summarised in the sixth report of the Secretary of Health, Education and Welfare to the U.S. Congress, *Marihuana and Health*, published in 1977:

> Overall, there is no convincing evidence at this time that [cannabis] use causes clinically significant chromosome damage. However, it should be emphasized that the limitations of the research conducted thus far preclude definitive conclusions.

Cannabis and Pregnancy

Reports on the effects of THC administered to experimental animals during pregnancy are conflicting. In studies using rats, mice, rabbits and hamsters, some have reported foetal abnormalities, whilst others, using

these species as well as the chimpanzee, have reported no adverse effects, either to mother or foetus (*Marihuana and Health*, 1977). Many factors could explain the conflict, including dosage, time of administration, species and strain of animal.

To date no systematic study has been made in humans to determine the effect of cannabis on pregnancy. The background incidence of foetal abnormalities is such that a large-scale investigation is required in order to establish if a cause and effect relationship exists. Despite many years of experience with alcohol in our culture, it has been only within the last few years that evidence has been presented to show that, even in moderate doses during pregnancy, alcohol may be teratogenic—that is, may produce foetal abnormalities. Although there is at present no evidence to suggest that cannabis is teratogenic in humans, the information obtained from experimental animals is sufficient to cause concern. Indeed, the present state of knowledge of the effects of drugs on the foetus is such that the use of *any* drug during pregnancy should be avoided, unless such drug use is essential for health.

Similarly, it should be borne in mind that many drugs, including THC, are found in the milk if the drug is used by the mother during lactation.

Cannabis and the Immune Response

Over the past few years considerable interest has been focussed upon the effects of cannabis on the body's immune mechanisms, notably on the formation of the T-lymphocytes.

The T-lymphocytes are the cells which circulate in the blood and lymph and are believed to mediate cellular immunity. For example, it is the T-lymphocytes which play a large part in the rejection of tissue transplants. They are also of importance in the immunity against viral infections. The B-lymphocytes are the antibody-forming precursor cells and are believed to mediate the immunity against invading bacteria.

Nahas *et al.* reported in 1974 that there was a marked reduction in the immune response of a group of cannabis smokers when compared with non-smokers. Subsequent attempts by other workers to replicate these results have led to contradictory reports. Other workers were also able to show a depression in the immune response in cigarette smokers (Thomas *et al.*, 1973; 1974a,b). A single therapeutic dose of aspirin produced similar results when tested by this procedure (Crout *et al.*, 1975; Opelez and Terasaki, 1973; Pachman *et al.*, 1971). To date there is no evidence for an increased incidence in cannabis users of those diseases that would be associated with a deficit in the cellular immune mechanisms (e.g. viral infections or cancer).

Cannabis and Damage to Lungs and Liver

As the most common method of using cannabis is by smoking, and as the plant material, like tobacco, contains cancer-producing substances, it is to be expected that cannabis and tobacco smokers will be exposed to similar risks of lung diseases. As most cannabis smokers tend to be heavy tobacco

users as well, it is difficult to distinguish between the effects of the two drugs in epidemiological studies. Some have suggested that cannabis use, together with tobacco, might produce a greater degree of lung damage at an earlier age than does tobacco alone (Tennant *et al.*, 1971). A high incidence of lung abnormalities was found amongst American servicemen in Germany who were heavy users of hashish. In the studies in Greece, Costa Rica and Jamaica, where matched control groups of non-users of cannabis were used, no evidence was found to support this contention.

The assessment of the effect of cannabis on the liver in man is similarly confused by the concurrent use of alcohol. In the studies of chronic users of cannabis in Greece (Boulougouris *et al.*, 1976b), a higher incidence of enlarged liver was found among the cannabis resin users than in the control group. However, when these subjects were examined for a correlation between the extent of their cannabis use and the liver abnormality, no correlation was found. A significant correlation was found between the liver enlargement and the extent of their alcohol use. None of these subjects, including those in the control group, showed any clinical signs of liver dysfunction. A possibility still to be considered is that cannabis may enhance the toxicity of alcohol to the liver.

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APPENDIX B: TERMS OF REFERENCE

The terms of reference of the Royal Commission into the Non-Medical Use of Drugs are to make inquiry into the factors underlying or relating to the non-medical use of narcotic, analgesic, sedative and psychotropic drugs or substances of dependence, not including nicotine or alcohol, and in particular:

1. to marshal from available sources in South Australia, Australia and abroad information concerning such drugs or substances and their use;

2. to inquire into and report on current scientific, medical, social and other knowledge on the effects of such drugs or substances;

3. to inquire into and report on the extent and character of the use or abuse of such drugs or substances in South Australia, the types of persons engaging in such use or abuse, sources of supply, and the medical, social and economic factors underlying or associated with such practices;

4. to inquire into and report on the effects of the existing law and its administration in relation to the use of such drugs or substances in South Australia;

5. to inquire into and report on the provision of educational, preventive, treatment and rehabilitation programs in South Australia for persons using or abusing such drugs or substances; and

6. to recommend such changes to the law in relation to the use and abuse of such drugs and the provision of such education, preventive, treatment and rehabilitation programs as you think appropriate.

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