Report of the Proceedings

WORKSHOP ON THE USE OF SANCTIONS IN CONTROLLING BEHAVIOUR ON THE ROADS

Convened by the
Centre of Criminology
UNIVERSITY OF TORONTO

December 13th—14th, 1972

OTHER CONFERENCES CONVENED BY THE CENTRE OF CRIMINOLOGY

National Conference of Judges on Sentencing	1964
Conference of the Chief Justices of Canada	1964
National Conference on the Prevention of Crime	1965
Conference of the Chief Justices of Canada	1965
National Conference on the Disposition of Offenders in Canada	1972
National Symposium on Medical Sciences and the Criminal Law	1973
Private Policing and Security in Canada: A Workshop	1973

Proceedings of the

WORKSHOP ON THE USE OF SANCTIONS IN CONTROLLING BEHAVIOUR ON THE ROADS

Convened by the Centre of Criminology, University of Toronto

December 13th and 14th, 1972

Workshop Chairman:

Professor T. C. Willett, Department of Sociology,
Queen's University, Kingston, Ontario.

Rapporteur:

Mr. Philip C. Stenning, Centre of Criminology,
University of Toronto.

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FOREWORD

by the Director of the Centre of Criminology

Traffic accidents, injuries and fatalities have become so much a part of our daily living that society often appears to be oblivious to the contributory circumstances that may eventually occupy the attention of the criminal justice authorities and other administrative agencies. Action taken by the police, the courts and the non-judicial authorities is all too often viewed with the same degree of ephemeral concern that is accorded the frightening toll of casualties on our highways. Criminology, too, has been woefully backward in according its proper place to research into the manifold problems surrounding the existing methods used in controlling driving behaviour.

So it came about that the happy coincidence of my sharing responsibility with Professor T. C. Willett of Queen's University, as co-examiners of a thesis dealing with road traffic sanctions, led to a renewal of our earlier interest in organising a workshop that would seek to weld the fragmented efforts of governmental agencies, police, prosecutors, judges, automobile associations and insurance companies who are constantly engaged in attempts to regulate driving behaviour. There never was any doubt in our minds that even this vast enterprise and its several parts were but a section of the larger system of highway traffic in which environmentalists, traffic engineers and planners, automobile manufacturers, forensic scientists and other groups play equally essential and interrelated roles.

Government departments of Transport and Communications, it seems fair to presume, are constantly evaluating and improving upon the engineering and environmental aspects of highway traffic. Consequently, the decision was made to restrict the ambit of the present meeting point to the specific problem of the use of sanctions in connection with driving behaviour. As the report of the ensuing proceedings amply demonstrates, there exists a veritable dearth of reliable information in Canada on the effectiveness of the whole criminal justice and administrative machinery when applied in its separate parts to controlling individual conduct on the roads. The suspicion grows that the entire system of licensing,

suspension and disqualification - to say nothing of the more traditional sanctions such as fines and imprisonment - do not act as the particular deterrents that they are confidently assumed to represent. Other forms of sanctions, available at the discretion of the appropriate administrative agencies, are never or rarely invoked. Experiments by way of re-educating incompetent or irresponsible drivers are gradually emerging into view but they still lack the rigour of evaluative assessment which must precede a wider adoption of the methods used. Whichever way we turn, the relative absence of convincing research findings makes it imperative that, in this area of criminology no less than in many others, we cease to engage in mere theorising or reliance on an accumulated body of what we loosely describe as experience, and begin to invest public resources in research that will provide some of the definitive answers that we presently lack.

With this in mind, I requested the Chairman of the Workshop, Professor T. C. Willett, to set down at the conclusion of this Report a summary of the issues to which, in his opinion, priority should be given in research dealing with sanctions in the social control of road traffic. I commend it to the urgent attention of governments and legislators throughout Canada in the confident expectation that the importance of the work that has to be undertaken will be matched with adequate resources. It may be that it will also capture the attention of criminological researchers, whatever their basic discipline may happen to be, who have tended to by-pass this area of human activity as if it were devoid of any relationship to other forms of criminal, or deviant behaviour. The growing recognition that traffic offenders are in no way a distinctive, homogeneous group should help to dispel any such false assumptions.

Meanwhile my thanks are extended to all the participants who combined in an exercise that revealed how little we know and how much needs to be done to bring about a more effective system of regulatory control on our highways. In this connection, I would like to mention particularly my colleague, Mr. Philip Stenning, who shouldered most of the administrative burdens in organising the workshop and in editing these proceedings, and also Miss Marbeth Greer who, with her customary quiet efficiency and cheerfulness transformed the various draft reports into manuscripts ready for publication.

May 1973.

J. Ll. J. Edwards

INTRODUCTORY NOTE*

The readings which are collected together in this binder are not intended to be representative of all of the literature which relates to the subject of the use of sanctions in controlling driver behaviour. The limited selections offered here could not possibly adequately serve such an objective. They are included merely as a selection of some of the more interesting generalized articles on the subject, together with two short notes on current experiments being undertaken in Canada.

Willett, in his article "Sociological and Criminological Factors in Road Traffic Offences", gives us a wide-ranging overview of the problem of motoring and motoring offences, from the perspective of the sociologist. Adopting Ogburn's theories of "cultural lag", in which cultural, moral and legal developments are seen as lagging behind the practical and technological changes which take place more rapidly in our society, Willett shows how much of our modern behaviour and attitudes as well as our legal institutions, in relation to drivers and driving, reflect an outdated and inaccurate view of the phenomenon. The result is seen as a crimino-legal system of control which is not only largely ineffective in dealing with modern road traffic problems, but which generates negative attitudes which are likely to weaken its effectiveness in other areas of social control. Willett concludes with a plea for more positive programmes of social control, which will exploit some of the basic interests people have in driving, rather than rely chiefly on more negative sanctioning devices.

In his paper "Law, Order and the Motorist", Cressey reviews the history of motoring law, emphasizing the negative effects it appears to have had on public attitudes towards the role of the law enforcement agencies - notably, but not exclusively, the police. Noting that the advent of the automobile and the anti-social forms of behaviour associated with it, more than any other social phenomenon, has demanded a primarily proactive stance from the police, Cressey examines critically the effects this trend has had in western societies in which law enforcement functions have traditionally been defined as primarily reactive in character. Cressey also considers the possibility that law enforcement

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*extracted from the Background Materials sent to participants prior to the Workshop

agencies have in reality always been proactive, but that it is only with the advent of the automobile, and its originally upper- and middle-class driver, that proactive law enforcement has come to be noticed and resented. Cressey considers the ways in which the police, in particular, have tried to adapt to this changing situation, through changed recruitment, training and enforcement policies. He notes the confusion and weakening of values which has resulted from this attempted adaptation by the police, and the extent to which it has merely "put the policeman in a game he cannot win". It is now the police, not the motorists, who have been successfully labelled as the villains.

Writing as a lawyer, Cramton, in his article "Driver Behaviour and Legal Sanctions: A Study of Deterrence", reviews current knowledge and thinking (particularly legal thinking) about the deterrent effect of legal sanctions generally, and about their deterrent effect on driving behaviour in particular. After considering a variety of factors - e.g. the type of offence, the level of enforcement, the characteristics of the offender, and the severity of the available penalties - which he feels influence the deterrent effectiveness of sanctions against driving behaviour, he concludes that available evidence suggests that deterrent sanctions can be and are effective in preventing delinquent driving behaviour in some, but not all, circumstances. Research is needed, chiefly of a controlled experimental kind, to sort out those types of anti-social driving behaviour which are amenable to control through the application of deterrent legal sanctions, from those which are not. Cramton questions the "rehabilitative" efforts which are currently being applied to "problem drivers" (particularly the chronic drinking driver), and concludes that the type of "inexpensive and expeditious methods of mass treatment" which are usually involved in such programmes have been, and are likely to remain, inadequate to deal with the "deep-seated personality traits and attitudes" which characterize such drivers.

In his article, "The Utility of the Culpability Concept in Pro-Moting Proper Driving Behaviour", Mancuso, a psychologist, deals with a subject which has engaged much controversial debate in recent years. Disagreement over this issue of whether or not legal or social respons ibility for road accidents should be based on the notion of fault, was crystallized recently in the United States by the publication of a monograph by the U.S. Department of Transportation in 1970, entitled Causation, Culpability and Deterrence in Highway Crashes. The author of this report, Klein and Waller, both experienced and well-known researchers in this area, concluded that the value of the concept of culpability in tackling problems of road traffic is extremely limite and recommended that funds currently being employed in determining

fault on a case-by-case basis in road traffic litigation (both criminal and civil), should be diverted to programmes which emphasize environmental design improvement (both in highway and automobile design), and to educational efforts. Space precludes the inclusion of this important monograph amongst the materials presented here. Mancuso's article, however, represents an alternative view of the value of the concept of culpability in this area of social control. Reviewing modern theories of behaviour control and modification - which he terms as the impulse control, habit-reward and moral judgement theories - Mancuso concludes that advocates of the rejection of the concept of culpability have failed to give adequate attention to the implications of the moral judgement theory. His conclusion, favouring the moral judgement theory, is that theory strongly supports the utility of the concept of culpability in dealing with road traffic problems. In the course of his argument, Mancuso alludes to many of the most well-known pieces of research undertaken in this area. It is perhaps fair to add that in his endorsement of the culpability concept, Mancuso seems to be in a minority amongst psychologists today.

The final two short pieces included in these readings (Hooper's note on "Curbside Licence Suspension", and Atrens' note on "Section 126A of the British Columbia Motor Vehicle Act") are notes by law teachers on two experimental programmes currently being operated in British Columbia. They both represent attempts to relieve the courts from the heavy burden of fairly routine traffic violation cases, and to provide a more effective form of sanction against delinquent driver behaviour - one through a more immediate form of licence control through roadside suspension, and the other through a controlled form of driver record surveillance in the form of "violation reports" to the Registrar of Motor Vehicles.

Major credit for the select bibliography on the use of sanctions in controlling behaviour on the roads, which appears at the end of this binder, must go on two sources. Janet Freedman was employed by the Centre especially for the task of compiling a bibliography for the Centre's two-day workshop on this topic. After she had completed this task, a substantial bulk of bibliographical material on the subject was received by the Centre from Kathleen Weber, librarian of the Highway Safety Research Institute, University of Michigan, Ann Arbor, Michigan. In assembling this final bibliography, the Centre has drawn heavily on this additional material. The Centre is indebted to both Janet Freedman and Kathleen Weber for their respective contributions to the finished product.

Terence Willett and Philip Stenning

LIST OF BACKGROUND MATERIALS SENT TO PARTICIPANTS PRIOR TO THE WORKSHOP

Willett, Terence C. "Sociological and Criminological Factors in Road Traffic Offences," reprinted from Sweden, Department of Justice, *Symposium on Human Factors in Road Traffic Proceedings*, Stockholm, Department of Justice, 1971, pp. 7-26.

Cressey, Donald R. "Law, Order and the Motorist," paper presented at the *Bristol Seminar on the Sociology of the Police*, 25th-28th February, 1971.

Cramton, Roger C. "Driver Behavior and Legal Sanctions: A Study of Deterrence," *Michigan Law Review*, Vol. 67 (1969), p. 421.

Mancuso, James C. "The Utility of the Culpability Concept in Promoting Proper Driving Behavior," *Marquette Law Review*, Vol. 55 (1972).

Hooper, A. "Curbside Licence Suspension," *Criminal Law Quarterly*, Vol. 10 (1967-68), pp. 22-25.

Atrens, Jerome. "Section 126A of the British Columbia Motor-Vehicle Act," *University of Toronto Law Journal*, Vol. 19 (1969), pp. 431-436.

Selected Bibliography, prepared by the Centre of Criminology, University of Toronto.

PARTICIPANTS

Chairman:
Professor T. C. Willett,
Department of Sociology,
Queen's University,
Kingston, Ontario.

Deputy Chief J. W. Ackroyd,
Metropolitan Toronto Police.

Superintendent D. A. Atam,
Ontario Provincial Police.

Mr. Roger Beames,
Ontario Regional Director,
National Parole Board.

Professor J. Ll. J. Edwards,
Director,
Centre of Criminology,
University of Toronto.

Mr. Philip J. Farmer,
Executive Director,
Canada Safety Council.

Mr. D. Farren,
Director,
Systems Research Branch,
Ministry of Transportation and Communications, Ontario.

Mr. Rick Fruin,
President,
Ontario Road Traffic Conference.

Mr. A. M. Gartshore,
Deputy Registrar of Motor Vehicles,
Ministry of Transportation and Communications, Ontario.

Professor P. J. Giffen,
Department of Sociology,
University of Toronto.

His Honour F. C. Hayes,
Senior Judge of the Provincial Courts (Criminal Division),
Toronto.

Professor A. Hooper,
Osgoode Hall Law School,
York University, Ontario.

Mr. Keith Jobson,
National Law Reform Commission.

Mr. H. A. Leal,
Chairman,
Ontario Law Reform Commission.

Mr. N. LeSauvage,
Director,
Public and Government Relations,
Ontario Motor League, Toronto Club.

Mr. L. Lonero,
Research Officer,
Systems Research Branch,
Ministry of Transportation and Communications, Ontario.

Mr. K. McDougall,
lay participant.

Mr. P. K. McWilliams, Q.C.,
Barrister.

Mr. D. Morrison,
Director of Legal Services,
Ministry of Correctional Services, Ontario.

Mr. E. Murphy, Q.C.,
Crown-Attorney,
Barrie, Ontario.

Mr. E. G. Paul,
Traffic and Safety Officer,
Canadian Automobile Association.

Miss Margaret Phipps,
Chief of Department of Social Services,
St. Joseph's Hospital,
London, Ontario.

Mr. E. H. S. Piper, Q.C.,
General Counsel,
Insurance Bureau of Canada.

Mr. C. M. Powell,
Senior Crown Counsel,
Ministry of the Attorney-General, Ontario.

Dr. W. Schmidt,
Associate Director of Research,
Alcoholism and Drug Addiction Research Foundation, Ontario.

Mr. Philip C. Stenning,
Senior Research Assistant and Special Lecturer,
Centre of Criminology, University of Toronto.

Mr. W. J. Trainor,
Senior Advisory Counsel,
Criminal Law Section,
Ministry of Justice, Ottawa.

Dr. G. J. S. Wilde,
Department of Psychology,
Queen's University,
Kingston, Ontario.

AGENDA FOR DISCUSSIONS

Topic A

Given that criminal and non-criminal sanctions can be distinguished from each other (see below), what general principles can be agreed upon to determine which type is appropriate to a given case. E.g., should criminal sanctions be reserved for instances where there is culpability, and not for those where culpability is in doubt? Should criminal sanctions be reserved for "serious" offences, and, if so, by what criteria is "seriousness" properly defined? How important is effectiveness as a criterion for the application of sanctions? To what extent can effectiveness be adequately measured?

In using the terms criminal and non-criminal sanctions, a distinction along the following lines is suggested:

Criminal sanctions include:

Imprisonment, fines, probation and suspended sentence, discretionary prohibitions and restrictions on driving imposed by a court, mandatory suspension of licences under the Highway Traffic Act, demerit points, impounding of vehicles, and orders to pay costs of criminal proceedings.

Non-criminal sanctions include:

Discretionary powers of Registrar of Motor Vehicles to grant, renew, suspend or cancel licences and permits, imposition of re-examination of driving competence, requirement of medical or optometrical examinations, compulsory interviews, warning letters and police cautions, sanctions relating to insurance premiums, civil damage and costs.

Topic B

To what extent do current enforcement practices in Ontario reflect the principles established in discussions of Topic A above, and to what extent do they appear to reflect other principles? (A brief summary of current enforcement patterns in Ontario will be presented, and special attention will be given to the reasons for the adoption of these practices).

Topic C

What evidence is there as to the effectiveness of criminal sanctions as they are now applied? To what extent is this evidence adequate, and how could it be improved?

Topic D

Is the present range of criminal sanctions adequate? Is the present application of criminal sanctions appropriate? To what extent are changes in the range and applications of these sanctions needed? What innovations are practicable?

Topic E

What evidence is there as to the effectiveness of non-criminal sanctions as they are now applied? To what extent is this evidence adequate, and how could it be improved?

Topic F

Is the present range of non-criminal sanctions adequate? Is the present application of non-criminal sanctions appropriate? To what extent are changes in the range and applications of these sanctions needed? What innovations are practicable?

Topic G

What contribution to road safety can be made by the use of (a) indirect sanctions, and (b) positive incentives, in both the criminal and non-criminal control systems? What innovations are worth trying?

TIMETABLE

DAY 1 - WEDNESDAY, December 13th, 1972

MORNING	9.00 - 9.30	Welcome and introduction by Professor J. Ll. J. Edwards, Director of the Centre of Criminology. Administrative announcements.
	9.30 - 10.30	Session 1 - Topic A
	10.30 - 10.50	Coffee
	10.50 - 12.30	Session 2 - Topics B and C
AFTERNOON	12.30 - 1.30	Lunch
	1.30 - 3.00	Session 3 - Topic D
	3.00 - 3.20	Coffee
	3.20 - 5.00	Session 4 - Topic E
EVENING	6.00 - 10.00	Reception and Dinner, Park Plaza Hotel.

DAY 2 - THURSDAY, December 14th, 1972.

MORNING	9.00 - 10.30	Session 5 - Topic F
	10.30 - 10.50	Coffee
	10.50 - 12.30	Session 6 - Topic G
AFTERNOON	12.30 - 2.00	Lunch
	2.00 - 3.00	Session 7 - Rapporteur's Report and Discussion of it
	3.00 - 3.20	Coffee
	3.20 - 5.00	Session 8 - Final Discussion

RAPPORTEUR'S REPORT

The Workshop opened with some introductory remarks by Professor J. Ll. J. Edwards, Director of the Centre of Criminology, in which he outlined some of the factors and circumstances which had led to the establishment of the Workshop, and in which he welcomed participants to the morning session.

Topic A: Given that criminal and non-criminal sanctions can be distinguished from each other, what general principles can be agreed upon to determine which type is appropriate to a given case. E.g., should criminal sanctions be reserved for instances where there is culpability, and not for those where culpability is in doubt? Should criminal sanctions be reserved for "serious" offences and, if so, by what criteria is "seriousness" properly defined? How important is effectiveness as a criterion for the application of sanctions? To what extent can effectiveness be adequately measured?

The first topic was introduced by the Chairman of the Workshop, Professor T. C. Willett, of the Department of Sociology at Queen's University, Kingston, Ontario. In introducing this topic, Professor Willett began by stressing the importance of the subject of road traffic offences to the criminologist and cited with approval Lady Wootton's claim that "the motoring offence is the typical crime of the century and the motoring offender the typical criminal". He suggested that the inclusion of this area of social control within the purview of the criminal law and the criminal process was more a result of the application of traditional and habitual patterns of thought than of any inclusion as to the inherent appropriateness of the criminal law and its processes in dealing with this particular form of anti-social behaviour. He also stressed the inappropriateness, both in terms of public attitudes and in terms of the resources and expertise available to the criminal agencies, of leaving this area exclusively to the control of the criminal law and the criminal process. This was not to say, however, that there is not a small percentage of all motoring offences and offenders which might not best be dealt with through the application of the criminal law. The problem, he felt, is to define

"appropriate criteria" for separating out this small minority of offences and offenders from the vast majority for whom the criminal process is inefficient and inappropriate. In terms of offences rather than offenders, Professor Willett concluded by suggesting three possibly desirable criteria for appropriately designating driving behaviour as criminal. These were the presence of: (1) deliberate intent, (2) harm to persons or to property, and (3) dishonesty. Any two of these, he suggested, should be adequate to warrant intervention by the criminal law agencies.

The Chairman then called on Professor Anthony Hooper of the Osgoode Hall Law School at York University, Ontario, to outline the current legal criteria which define criminal responsibility in the area of driving behaviour. Professor Hooper spoke of four levels of culpability involved in driving offences. These were (1) mens rea, in which some degree of foresight is required, (2) gross negligence, (3) mere negligence, and (4) strict liability. He indicated that very few of the existing driving offences set any standard higher than that of strict liability and for those (mostly Criminal Code offences) which set a higher standard, the courts have constantly vacillated over the correct standard to be applied. They have generally stopped short, however, of requiring full mens rea, and settled for requirements mainly of gross negligence, and in some cases mere negligence. Professor Hooper concluded that neither the courts nor the legislature appear to have established consistent and coherent policies on the question of fault in driving offences. Since it is unlikely that the elimination of the requirement of fault from driving offences would, he felt, reduce in any way the amount of bad driving, he concluded that principles of fairness would seem to require some degree of fault before there can be liability for punishment. These principles would apply with even greater force where the punishment is more serious. Finally, Professor Hooper proferred his personal view that reliance on strict liability in driving offences has the effect that administrators are not encouraged to make appropriate environmental improvements in dealing with the problems involved.

In reviewing some of the cases in which the question of the level of fault in driving offences has been considered by the courts, Mr. P. K. McWilliams, Q.C., confirmed the present state of uncertainty in which the law relating to the requirement of culpability in proof of driving offences now stands. He noted the constitutional problems relating to the extent of federal and provincial legislative power in this area, and the consequent problems the courts have experienced in reconciling the federal criminal offence of dangerous driving with the provincial quasi—criminal offence of careless driving in terms of the degree of

fault which is required for each. He suggested that a more logical scheme would be to leave the more serious offences requiring fault to the federal jurisdiction, and what he described as "minor law of the road offences" to the provincial sphere. Referring to the low level of culpability which the courts have required even for the more serious Criminal Code offences, Mr. McWilliams suggested that the probable explanation for this was the considerable difficulty which had been experienced in the past in securing convictions for driving offences for which full mens rea was required. This led governments to replace these offences by others in which the requirement of a lower level of culpability would make convictions easier to secure.

In the general discussions which followed these three presentations the first subject which arose was the question of how seriousness can be defined for the purposes of determining whether behaviour is appropriately dealt with through the criminal process. It soon became apparent that a divergence of opinion existed amongst the participants between those who felt that the main criteria for deciding whether behaviour should be criminal is the quality and nature of the act itself, and those who felt that the crucial factor is the actual consequences of the behaviour. There was little agreement amongst the participants as to which of these two criteria formed the more appropriate basis for defining seriousness. Those who defended the criterion based on the nature of the act stressed the deterrent function of the criminal law and criticised the consequences criterion as inadequate because it relies too heavily on factors which are often the product of pure chance. On the other hand, those who defended the consequences criterion stressed the remedial and educative functions of the law. Chief among the proponents of this latter view was Mr. Keith Jobson, of the staff of the National Law Reform Commission, who felt that where no serious consequences occur, the remedial and educative functions of the criminal law and the criminal process are unlikely to operate effectively. For this reason he felt that such cases are not appropriately handled through the medium of the criminal law or in the forum of criminal court.

On the question of the relevance of intent or foresight of consequences as a criterion for separating criminal behaviour from non-criminal behaviour, there again appeared to be a divergence of opinion amongst the participants. Whilst many expressed the philosophical view that the notion of intent should be a minimum requirement for the application of criminal sanctions, many others commented on the numerous practical problems involved in effectively applying such a standard in the courts. The problems of proof, and the well-known reluctance of juries to convict for offences requiring full mens rea, were particularly

stressed in this connection. Professor Hooper suggested that these problems could largely be overcome by reversing the burden of proof from such offences so as to cast on the accused the burden of establishing that he did not have the required intent. Mr. Philip Stenning, Senior Research Assistant at the Centre of Criminology, however, suggested that reversing the burden of proof in this fashion tends to have the effect in practice of virtually eliminating the requirement of intent altogether. Such a practice, therefore, could not be seen as a viable solution to the dilemma.

Apart from the criteria of seriousness and intent as possible principles which could be used to delimit the scope of the criminal law in this area, two other criteria were also suggested during the discussion in this session. Mr. C. M. Powell, Senior Crown Counsel in the Ministry of the Attorney-General of Ontario, suggested that concentration on the offender rather than the offence in determining the appropriateness of criminal sanctions, would yield more useful results. He felt that it is the consistent offender who should be singled out for attention by the criminal agencies, and subjected to compulsory educational and rehabilitative programmes. This view appeared to be shared by several other participants. A different approach, however, was taken by Mr. E. Murphy, Q.C., Crown Attorney in Barrie, Ontario, who stressed that the dominant criterion for the scope of the criminal law, particularly in the area of driving behaviour, should be that of public acceptability. In this connection Mr. Murphy emphasised that the only noticeable effects of laws which did not meet this criterion were a high rate of acquittals in the courts and a low level of enforcement by the police.

The question of the relevance of the proven effectiveness of criminal sanctions as a possible criterion for defining the scope of the criminal law in this area (which had been placed on the Agenda) was neither raised nor discussed during this session. The session concluded without very much general agreement as to what were the most appropriate general principles by which the proper scope of the criminal law and the criminal process in controlling delinquent driving behaviour should be determined.

Topic B: To what extent do current enforcement practices in Ontario reflect the principles established in discussion of Topic A above, and to what extent do they appear to reflect other principles? (A brief summary of current enforcement patterns in Ontario will be presented, and special attention will be given to the reasons for the adoption of these practices).

This topic was introduced by Mr. Philip Stenning, Senior Research Assistant and Special Lecturer at the Centre of Criminology. Utilizing a chart specially prepared for the Workshop, outlining the current provision for sanctions for driving offences under the Criminal Code and under provincial statutes in Ontario, as well as statistics gleaned from the reports of the Dominion Bureau of Statistics, the provincial Department of Transportation, and the Provincial and Metropolitan Toronto Police, Mr. Stenning surveyed the very wide range of sanctions currently provided by the law for driving offences. He emphasised the extensive nature of the criminal sanctions provided for by the Criminal Code, ranging from a small fine to life imprisonment and extended license suspension. He also noted the potentially extensive non-criminal discretionary sanctions provided for in the provincial Highway Traffic Act. Above all he stressed the very great extent of regulation in this area. He noted that, although quantitatively criminal sanctions were far the more commonly used, qualitatively their use appeared to be fairly restricted in practice. As evidence of this conclusion he mentioned the apparent reluctance of the authorities to utilize the more serious charges in the Criminal Code carrying the heaviest penalties, the heavy reliance on the use of summary process, even where indictable process is available, the predominant use of fines over other forms of disposition, even in more serious cases, and the minimal use of such dispositions as probation and suspended sentences.

Turning then to the area of non-criminal sanctions, Mr. Stenning emphasised the apparently wide discrepancy between the extensively defined non-criminal discretionary powers of the Registrar of Motor Vehicles, under the Ontario Highway Traffic Act, and the very restrained use of those powers in practice. In summary, he indicated that this pattern of restrained use of extensively defined powers appeared to be typical of the application of both criminal and non-criminal sanctions in this area, at least as far as the province of Ontario was concerned, and as far as the very limited data available on the subject appeared to allow any realistic conclusions to be drawn at all.

Mr. Stenning went on to speak of the research problems involved in gathering any reliable statistical information on the use of sanctions in this area. In particular, he emphasised the almost total lack of available data on most of the non-criminal sanctions, especially those relating to the exercise of police discretion. In the light of the characterization of the police function in this area (given by Professor P. J. Giffen, of the Department of Sociology at the University of Toronto, earlier during the discussions) as that of the effective "keepers of the gate," this particular lack of information as to the use of non-criminal sanctions (e.g. cautions) with respect to driving behaviour,

should be regarded as a matter of primary concern. He also noted that research problems are compounded as a result of the division of responsibilities in this area between the federal and provincial governments, the courts, the police, and the Parole Board. The relative lack of communication and integration between these various agencies in attacking the problems of driving behaviour has resulted in a diffuseness of records and other sources of data for research. The result has been an inability to gather information sufficient for research even at the level of a basic numbers game, let alone for the purposes of inquiring into the quality of current sanctions as used, the incidence of recidivism, etc. At the present time, when various levels of government are on the verge of introducing the computer in developing their systems of records and information, there is a critical need to develop guidelines for the collection, recording and storage of data in such a way that it will be of value not only to administrators but also to researchers in this area. For this purpose, of course, there will also have to be a concentration on the need to provide properly trained personnel to undertake these tasks.

Turning to the question of the extent to which current enforcement practices and use of sanctions reflect the principles discussed in the earlier session, Mr. Stenning indicated that the available information was insufficient for anything more than a very generalised answer to this question to be offered. Insofar as there appeared to be general agreement in the earlier session that as a general principle the use of criminal sanctions in this area should be minimized and reserved only for the more serious type of offence, it was possible to say in one sense that current enforcement practices and use of sanctions do reflect that general principle. For the full rigour of the criminal law is apparently rarely and only reluctantly used. In another sense, however, it could be said that current practices do not really reflect that principle, in that the criminal process appears to be the largely predominant resort of the authorities in dealing with problems in the area of driver-control.

In the discussion which followed Mr. Stenning's presentation, it appeared that many of the participants seemed to feel that the fact that, in terms of their restraint, enforcement practices appear to reflect in one sense the general principle established in the earlier discussions, indicates not a conscious application of that principle, but a practical necessity created by such contingencies as the problems of proof, and the difficulties experienced in securing convictions for those driving offences carrying the heavier penalties. The latter difficulties are primarily a reflection of general public attitudes towards driving offences as being not "truly criminal" in character.

Topic C: What evidence is there as to the effectiveness of criminal sanctions as they are now applied? To what extent is this evidence adequate, and how could it be improved?

This topic was introduced by Deputy Chief J. W. Ackroyd, of the Metropolitan Toronto Police. The Deputy Chief noted that the police believe that proper enforcement of traffic laws, followed by properly applied criminal sanctions, can influence driver behaviour in such a manner that both violations and accidents can be reduced. He recognized, however, that a precondition for this effectiveness is an awareness in the motorist that this type of enforcement will be constant. As examples of instances in which there appeared to be some, albeit debateable, evidence of the effectiveness of criminal sanctions, he mentioned: (1) statistics relating to the demerit point systems presently in use in Ontario; (2) a study conducted in Chicago which purported to relate the level of police traffic enforcement to the level of accident occurrence; (3) some statistics from Toronto which appeared to show a relationship between the lowering of the age for the legal consumption of alcohol and a dramatic increase in the number of charges laid against drivers between the ages of 18 and 21 for impaired driving; and (4) a study commissioned by the federal Department of Transportation in Canada in which differing levels of enforcement were used at a number of selected intersections in Metropolitan Toronto, the preliminary findings of which appeared to show a relationship between the levels of police enforcement and the rate of violations and accidents. In concluding his remarks, however, Deputy Chief Ackroyd stated his opinion that in general the evidence as to the effectiveness of criminal sanctions in controlling delinquent driving behaviour was neither conclusive nor adequate. He felt that greater emphasis should be placed on studying the effects of weather on driving behaviour, and on studying the relative effectiveness of both criminal and non-criminal sanctions in reducing accidents. Finally, he noted the various research problems involved in the collection of adequate data for research and suggested that a form of questionnaire to police forces throughout the province should be developed which could adequately provide information as to enforcement levels, enforcement methods, and police views as to the practical effects of various forms of sanctions.

Deputy Chief Ackroyd's presentation was followed by that of Mr. A. M. Gartshore, the Deputy Registrar of Motor Vehicles for Ontario. Mr. Gartshore expressed his view that it was unrealistic to expect criminal sanctions to be effective against any drivers other than those whose conduct could be characterized as wilful, deliberate, or motivated by a genuine desire to cause injury. It was unlikely, he felt, that a

severe penalty would be effective where the violator is ignorant of the nature of his offence, which he may never even discover if he pleads guilty. By the same token, punishment was not an accepted remedy for poor memory or temporary physical incapacity. Mr. Garshore felt that current evidence is not adequate to answer the question as to whether criminal sanctions are effective, and suggested that data should be acquired more selectively so that an assessment can be made of the effectiveness of criminal sanctions in those cases where results can reasonably be expected. In particular he suggested that research should be undertaken into the behaviour motivation of a random sample of violators, so that a more reliable basis could be established for evaluating the more generalised data currently available on recidivism.

During the discussions which followed these two presentations, there seemed to be general agreement amongst all the participants as to the lack of adequate available evidence as to the effectiveness of criminal sanctions. Mr. P. J. Farmer, Executive Director of the Canada Safety Council, indicated that such evidence as is available elsewhere, especially in Europe and in the United States, is unconvincing and generally tends to suggest if anything a lack of effectiveness of criminal sanctions in altering the traffic safety problem. There is virtually no available evidence on this question in Canada. Several participants referred to the well known American study conducted at the Lackland Airforce Base, and in particular Dr. W. Schmidt, Associate Director of Research at the Alcoholism and Drug Addiction Research Foundation of Ontario, indicated his view that the results of this study, which showed an apparent effectiveness of penal sanctions, were sufficiently convincing to warrant its application to other populations on an experimental basis. Others, however, were more sceptical about this particular study, singling out especially the conditions under which it was conducted, involving a captive population, as the basis for their scepticism. There was also much discussion as to the effectiveness of license suspension as a sanction. Many participants referred to the great extent to which this sanction appears to be simply ignored by those upon whom it is imposed, and to the very considerable enforcement problems which result from this situation. Amongst the participants there seemed to be a general agreement as to the great need at this time to develop research in this area, particularly as to the question of deterrence and its validity as an assumption upon which much of the current evaluation of criminal sanctions is based.

Topic D: **Is the present range of criminal sanctions adequate? Is the present application of criminal sanctions appropriate? To what extent are changes in the range and applications of these sanctions needed? What innovations are practicable?**

This topic was introduced by Dr. W. Schmidt, Associate Director of Research at the Alcoholism and Drug Addiction Research Foundation of Ontario. Speaking with particular reference to drinking drivers, Dr. Schmidt noted that until fairly recently it was popularly believed that most alcohol-related accidents involved normal casual drinkers. Subsequent research, however, has tended to show that there was a disproportionate number of excessive and pathological drinkers amongst those who are involved in alcohol-related accidents. The drinking driver problem, therefore, can to a significant extent be seen as a problem of alcoholism, requiring the application of treatment and preventive medicine as well as of other sanctions. Dr. Schmidt mentioned a number of possible suggestions as to how such an approach might be implemented, including the establishment of clinics, referral to which could be made a condition of the re-issuance of a license to a driver convicted of drinking driving.

Dr. Schmidt referred in particular to the Phoenix D.W.I. program, and other similar programs, and noted the difficulties involved in convincingly evaluating such rehabilitation-oriented programs. He especially emphasised the limited scope of such programs, being restricted, as they are, to the prevention of recidivism. At the most, such recidivists account for only about 10% of all convicted drivers. Even assuming a 50% success rate for such programs, therefore, only 5% of all convicted drivers could be beneficially affected by them. Thus, the "Phoenix" approach should be seen as only a minor part of an overall program, which should concentrate on solving the problem of the common first offender.

Earlier during the Workshop a film about the Phoenix D.W.I. program had been shown to the participants. A similar program had been set up in Alberta and is in its early stages of implementation. Both Mr. LeSauvage, of the Ontario Motor League, and Mr. Farmer, of the Canada Safety Council, indicated their views that whilst it is true that the evidence as to the effectiveness of such programs is not yet adequate, preliminary findings about them appear to be quite promising.

Dr. Schmidt's remarks were followed by those of Mr. E. Murphy, Q.C., Crown Attorney in Barrie, Ontario. In his introductory remarks, Mr. Murphy indicated first his opinion that the current range of criminal sanctions is not adequate. In particular he indicated his belief in the potential deterrent effect of criminal sanctions and suggested that far greater use, for instance, should be made of the sanction of imprisonment. He also expressed his view as to the complete inappropriateness of monetary tariffs as sanctions, and cited s.82 of the Ontario Highway Traffic Act (dealing with speeding offences) as one of the worst examples of the use of this type of sanction. Mr. Murphy felt that in the circumstances of

current public attitudes towards driving offences, the present application of criminal sanctions is appropriate. He claimed, however, that the real problem in the application of criminal sanctions lies in the question of public acceptability. The deterrent potential of criminal sanctions, he said, has not been properly supported by society, and as evidence of this fact he cited the difficulties experienced in securing convictions by juries for the more serious indictable Criminal Code driving offences. Even when convictions for such offences are obtained, the penalties exacted are, he felt, unrealistically lenient. He suggested that this apparent lack of public acceptability may well indicate some kind of hypocrisy on the part of the relevant authorities, i.e. both legislators and enforcers, and wondered to what extent this is merely reflective of a more general public hypocrisy toward the resolution of the social problem of delinquent driving. He stressed the need to discover the extent to which laws truly reflect public opinion rather than the special prejudices or vested interests of legislators and lobbyists. Mr. Murphy concluded that in the light of this lack of public support for traffic laws, the whole problem of traffic control should be removed from the police, the Crown Attorneys and the criminal courts, since the enforcement of publicly unacceptable laws merely bring these agencies into public disrepute.

A lively discussion of this topic by the participants ensued. Many participants agreed with Mr. Murphy that the current range of criminal sanctions is inadequate. In particular Mr. P. J. Farmer, of the Canada Safety Council and Mr. W. LeSauvage, Director of Public and Government Relations for the Ontario Motor League's Toronto Club, supported Mr. Murphy's call for more extensive use of imprisonment. Others stressed the current reluctance to use the sanction of probation, the potential use of volunteers, and the lack of adequate sanctions against pedestrians who cause traffic problems. Many, too, agreed with Mr. Murphy's call for a greater matching of the laws to meet levels of public acceptability. In terms of the application of sanctions by the courts in their sentencing practices, many participants stressed the need to tailor the sanction to the individual circumstances of the offender. This was particularly important with respect to the appropriateness of the application of monetary fines. On the question of uniformity in this area, Mr. W. J. Trainor, Senior Advisory Counsel with the Ministry of Justice in Ottawa, stressed the need of the superior courts to take a more active role in developing sentencing guidelines for the lower courts.

A great many of the participants expressed the view that it is enforcement, and not the manipulation of the range of sanctions, which is predominantly important in this area. This view was put forward most forcefully by Professor P. J. Giffen, of the University of Toronto Sociology Department, Professor G. J. S. Wilde. of the Queen's University

Psychology Department, Mr. P. J. Farmer, of the Canada Safety Council, and Mr. L. Lonero, Research Officer with the Ontario Ministry of Transportation and Communications. These participants felt that the public perception of the risk of apprehension for driving offences is the most significant factor involved in controlling such offences. Mr. Lonero in particular, however, noted the difficulties involved in significantly raising public perceptions of the risk of apprehension. In order to achieve a relatively small increase in a driver's subjective perception of the probabilities of apprehension, research had shown that an unrealistically great increase in the actual probabilities of apprehension was required. Whilst many participants appeared to feel that an increase in enforcement of road traffic laws would provide a solution to many of the problems in this area, Professor Wilde and Deputy Chief Ackroyd in particular referred to the need to bear in mind the social costs of increased enforcement in terms of public cooperation with, and support for, the enforcement agencies, particularly the police.

There were also many adherents to the view that the application of criminal sanctions is wholly inappropriate in relation to minor offences, and that the handling of these offences should be completely removed from the criminal courts and given to some administrative agency. The possible detrimental effect of such a change on public respect for traffic regulations, the need to find appropriate persons to head up such an agency, and the need to preserve the public status of both the regulations and the enforcing agency as serious expressions of societal disapproval of anti-social driving behaviour, were noted by several participants. Others, more sceptical, questioned to what extent this proposed change would merely be an exercise in changing labels, in which the now already heavily bureaucratised traffic court system would simply continue under a new name.

Several participants also referred to the inequities of many of the criminal sanctions as they are currently applied. This point was raised in particular in relation to license suspension and monetary fines. With respect to license suspension, Mr. McDougall, a lay participant drawn from the general driving public, expressed his view that this particular form of sanction tended in its practical application to be discriminatory against the middle classes. Superintendent D. A. Atam, of the Ontario Provincial Police, also referred to the unrealism of many of the current criminal driving prohibitions. He noted that the exigencies of modern driving conditions often force people to break the law, and cited as an example the rush-hour conditions on Highway 401 which often force motorists to commit the offence of following too closely. Where the law is in such cases so out of touch with the realities of the driving experience, people are merely bewildered by it as it is often applied, and Superintendent Atam felt that it is both arbitrary and meaningless to punish in such circumstances.

From a psychologist's point of view, Miss M. Phipps, Chief of the Department of Social Services at St. Joseph's Hospital in London, Ontario, expressed her view that many criminal sanctions are inappropriate because they do not adequately relate to the known characteristics of driving offenders. In support of this view, she cited the research she has been undertaking with Dr. W. A. Tillman into accident-prone drivers. This research has demonstrated that the two main characteristics of this type of offender are refusal to accept responsibility and a history of constant conflict with authority. In the light of these known characteristics, it is unrealistic simply to rely on sanctions which merely restate the need for responsibility and for conformity, without involving any steps to encourage or ensure the attainment of these goals.

To summarize the discussions on this topic, it may be said that there was general agreement amongst the participants that criminal sanctions as they are currently applied are not adequate. There was a divergence of opinion amongst the participants, however, as to whether this inadequacy is a result of lack of proper enforcement or of inherent inappropriateness in the available sanctions. Most of the suggested alternatives favoured minimizing the criminal element in sanctions. Once again, the need for adequate research into the question of deterrence was stressed by many speakers.

Topic E: What evidence is there as to the effectiveness of non-criminal sanctions as they are now applied? To what extent is this evidence adequate, and how could it be improved.

This topic was introduced by Mr. D. Farren, Director of the Systems Research Branch of the Ontario Ministry of Transportation and Communications. Mr. Farren indicated that early efforts to curb accidents and fatalities had concentrated on highway design and improving the roadway and the roadside environment. Over the years, however, it had become apparent that while these efforts were both justified and effective, they applied in only about 10% of all accidents and fatalities. The other 90% were related to human or vehicle deficiencies, and were not therefore amenable to solution through an approach based primarily on highway design. Consequently accidents and fatalities have continued to rise inexorably, indicating that non-criminal sanctions and their current application are not very effective and warrant research aimed at improving their effectiveness. As examples of more positive approaches from which potentially greater benefit may be derived, Mr. Farren suggested: (1) a greater emphasis on the teaching of driver skills, including perhaps a planned education

programme as a mandatory part of the school curriculum; (2) the imposition of mandatory use of seat-belts; and (3) the setting up of drunk driver rehabilitation clinic programmes. In conclusion, Mr. Farren felt that it was only by taking a total systems approach to the problem that a research programme could be developed which would establish effective non-criminal sanctions, directed specifically at the known problem areas.

Mr. Farren's presentation was followed by that of Mr. L. Lonero, Research Officer in the Systems Research Branch of the Ontario Ministry of Transportation and Communications. Mr. Lonero reviewed the current state of research into the effectiveness of various types of rehabilitative programmes, and indicated that the available evidence suggests that most of the programmes are ineffective in reducing subsequent collisions, although they commonly reduce subsequent convictions. It was found in many of the studies that the level of contact involved in a rehabilitative programme does not bear any significant relationship to the degree of effectiveness reported. Thus, a warning letter seems to have as much effectiveness in curbing future accident involvement as more elaborate forms of rehabilitation programmes. In terms of the adequacy of the available evidence as to the effectiveness of non-criminal sanctions, Mr. Lonero expressed his view that the evidence in this area is better than in most related areas, although a recognition of the need for experimental control has not yet penetrated all areas of the traffic safety field. In conclusion,he indicated that the current state of research in this area suggests that it is relatively easy to achieve some beneficial effect on high-violation drivers with a minimal contact, but very difficult to achieve a lasting additional effect on their subsequent collision record, even with very elaborate and costly programmes. Some programmes have shown significant short-term effects or possible longer-term effects, and these may be regarded as leads for further work towards making non-criminal sanctions an effective tool in the effort to make road travel safer. Mr. Lonero particularly stressed his view that where studies showed no significant differences between and treatment and control groups as to effectiveness, this does not mean necessarily that the programme being studied is of no value. It may simply indicate that it has not yet been given a fair chance to succeed.

In the discussions which followed Mr. Lonero's remarks there was little dissent amongst the group as to his survey of the current research or as to his conclusions. Mr. Farmer, of the Canada Safety Council, however, indicated his view that the defensive driving programmes have shown to be relatively effective. In response, Mr. Lonero expressed his concern that this particular programme had received very wide implementation before there was any convincing evidence of its effectiveness. He noted that this is a frequent danger associated with the introduction of new programmes.

Professor G. J. S. Wilde, of the Queen's University Psychology Department, also raised the question of the adequacy of the research in measuring effectiveness. It is impossible to tell, he claimed, exactly how any reported effectiveness of a given programme has come about, and in particular whether it was a result simply of a reduction in the amount of driving by the subject, or of an improvement in his driving. It is important to discover whether, when we speak of the effectiveness of a programme, we are really speaking of anything more than simply a reduction in the amount of driving the offender is engaged in.

Summarizing these discussions, it may be said that there was general agreement that there is virtually no convincing evidence of substantial, long-term effectiveness of non-criminal sanctions. With respect to the adequacy of the available evidence, there seemed also to be agreement that the available data is reasonably adequate so far, and is certainly more adequate than comparable with respect to other types of sanctions, particularly criminal sanctions. On the question of how the evidence could be improved, there was agreement that care should be taken when setting up new programmes to ensure that they are set up in such a way that they can be properly and convincingly evaluated. In achieving this goal it is important to draw proper distinctions between legal types of expert evidence, and scientific empirical evidence. Dr. Schmidt, in particular, referred to the problems involved in research in this area, citing as an example the shifting definitions of such words and phrases as "alcoholic" and "drinking problem". Mr. Lonero also referred to such problems, mentioning in particular the problem of maintaining stable samples of research, especially when the research is long-term in nature.

Topic F: Is the present range of non-criminal sanctions adequate? Is the present application of non-criminal sanctions appropriate? To what extent are changes in the range and applications of these sanctions needed? What innovations are practicable?

In starting off the discussion on this topic, Mr. A. M. Gartshore, Deputy Registrar of Motor Vehicles for Ontario, reviewed the extensive non-criminal powers of the Registrar under the Ontario Highway Traffic Act. He noted that these powers are wide and probably adequate, but are in practice sparingly used. He felt that they could be extended, for instance the Registrar could be given power to insist upon referral of a persistent offender, or a driver persistently involved in accident occurrences, to a training programme or clinic, but he questioned whether such extension would be appropriate. He gave it as his personal view that because these powers were in a sense both arbitrary and very extensive, they should not be in the hands of an administrator who is not subject to some form of judicial review. Generally he surmised

that he personally, as an administrator, would feel very reluctant to make extensive use of such powers.

Mr. Gartshore's remarks were followed by those of Mr. E. G. Paul, Traffic Safety Co-ordinator for the Canadian Automobile Association. Mr. Paul indicated that the Canadian Automobile Association, as a policy, believes that the use of non-criminal sanctions can be an effective method of controlling driving behaviour, but that this type of sanction should be expanded. As examples of potentially new types of programmes he suggested the following:

1) a greater attempt at discrimination in the issuance of drivers' licenses to ensure that a driver does not drive types of vehicles which he is not qualified to operate;

2) the establishment of government approved refresher courses for drivers to upgrade their knowledge of the rules of the road and learn of new driving techniques;

3) periodic re-examination of all currently licensed drivers regardless of age;

4) adjustment of licensing regulations so that they would give recognition and incentive for the successful completion of driver education programmes;

5) the establishment of favourable insurance rates for drivers who have successfully completed an improved driver training course;

6) a revision of the demerit point system so that it would adequately identify dangerous drivers, following which, the Registrar should be given power to insist upon the successful completion of a refresher course before the driver is permitted to drive again;

7) the establishment of a merit point system to apply to those who have successfully completed refresher courses.

In conclusion, Mr. Paul emphasised that the Canadian Automobile Association feels that current research is inadequate to indicate how effective criminal and non-criminal sanctions are in altering driver behaviour, and that Canadian research programmes should be directed to produce some of the required answers.

Following Mr. Paul's remarks, Mr. E. H. S. Piper, Q.C., General Counsel for the Insurance Bureau of Canada, summarised the contribution which the insurance industry can and has made in the area of non-criminal

sanctions against anti-social driving behaviour. Mr. Piper began by noting the extent to which there are political complications involved in the application of sanctions through the medium of insurance. He also noted certain other inherent limitations in this form of sanctioning, particularly those relating to the danger of such sanctioning systems merely resulting in there being an increase in the number of drivers who are driving without insurance at all. Within this limited framework, he said, the insurance industry had over the years developed three basic forms of sanction. In earlier times it was common for an applicant with a bad record to be relegated to an assigned risk plan involving higher than the average premium. Nowadays this form of sanction has been replaced by a system of applying specified surcharges in the event of certain driving errors or convictions under the Highway Traffic Act or the Criminal Code. Under this system the amount of protection a bad risk applicant can obtain through insurance may be somewhat limited. The third form of sanction which is now being developed by the industry is the creation of greater liaison between the insurance companies and the various governments of Canada, whereby a system of applying surcharges according to the number of official demerit points which are recorded against any particular driver is being developed. This last form of sanction is in complete accord with systems of insurance enforced in those provinces where provisional monopolies have been established in the field of basic automobile insurance. In conclusion, Mr. Piper noted that in the final analysis sanctions based on insurance are limited to either a complete denial of the market to an applicant, or to manipulating the level of premiums so as to effectively tax the delinquent driver. Neither of these methods could seriously be entertained as any means fully adequate solutions to problems of anti-social driving behaviour.

During the lively discussions which followed these three presentations, there was much concentration on the question of the adequacy of license suspension as a non-criminal sanction. Many participants referred to the great problems involved in effectively enforcing suspension as a sanction, and the Workshop did not seem to be able to come up with any practical solution to these enforcement problems. There was again some discussion of the D.W.I. type of programme, and again it was emphasised that however adequate these programmes might be, in terms of the numbers of people they could effect their impact on the total problems could only be minimal at best.

Several speakers, notably Mr. Farmer of the Canada Safety Council, raised the question of whether any method could be devised of identifying the drinking driver before he becomes a problem drinker. Again, however, no practical solutions to the problem could be found. Noting that under sections of the Ontario Highway Traffic Act, both doctors

and optometrists within the Province are obliged to report to the Registrar of Motor Vehicles cases which come before them of patients who in their opinion are unfit to drive, Mr. Gartshore, the Deputy Registrar, indicated that in practice such reporting is not particularly common. In any event, it can scarcely be realistically viewed as a satisfactory means of solving the problem of the early identification of potential problem drinkers. Whilst it is true that the medical profession was responsible for the introduction of these provisions, there were some participants at the Workshop who suggested that the provisions do not in fact by any means command the support of all the members of the profession. In particular, Dr. W. Schmidt of the Ontario Alcoholism and Drug Addiction Research Foundation expressed his view that if the Foundation were to make extensive use of this reporting power, it would very soon find that it had lost many of its presently voluntary patients. No sanction appears to be spelled out in the Highway Traffic Act against doctors who fail to comply with the reporting provision, and although a prosecution is theoretically possible under the act, no prosecutions for such failure have in fact ever been initiated in Ontario.

There was also some discussion during this session of the extent to which the courts can contribute towards the development of non-criminal sanctions in the area of the adjustments of awards in civil damage suits. In particular, the extent to which adjustments in damages could be made on the basis of whether or not the plaintiff was at the material time wearing a seat belt, was canvassed by many participants. It is clear that whilst some courts in Canada have allowed evidence as to the failure of the plaintiff to wear a seat belt to be introduced as evidence of contributory negligence, allowing for a reduction in the amount of damages awarded, this principle has not been uniformly accepted yet by the courts. Professor J. Ll. J. Edwards, Director of the Centre of Criminology, noted that the reluctance on the part of the courts to adopt this type of defence may be explained in part by the variable quality of scientific expert evidence on the subject being made available to them. This is, therefore, a problem to which criminologists should direct serious attention in attempting to develop higher standards of expert testimony on these issues.

In summarizing the discussions on this topic, it can be said that there was general agreement amongst the participants that inadequate use is being made of the current available non-criminal sanctions, and that the range of those sanctions is also presently inadequate. The use of non-criminal sanctions, particularly of those available to the Registrar of Motor Vehicles, appears to be largely based on the presence of medical problems in the driver. Most participants appeared to feel that this is an unduly restricted basis

for the application of non-criminal sanctions. The appropriateness, however, of many of the current and suggested forms of non-criminal sanction, particularly those related to insurance, was by no means accepted without question by all the participants. This was to some extent true also in relation to the sanction of administrative license suspension, insofar as some participants felt that no practical means could be devised adequately to enforce this sanction.

Topic G: What contribution to road safety can be made by the use of (a) indirect sanctions, and (b) positive incentives, in both the criminal and non-criminal control systems? What innovations are worth trying?

This topic was introduced by Dr. G. J. S. Wilde, Professor of Psychology at Queen's University in Kingston, Ontario. Dealing first with the potential role of indirect sanctioning systems, Dr. Wilde expressed his view that the emphasis which the workshop had placed up to this point on the accident repeater or violation recidivist, was perhaps misplaced. In the light of the available evidence, it might be assumed with a reasonable degree of confidence that only approximately 3% of all accidents could be avoided if all drivers who had one or more accidents in a two year period were completely removed from the roads. This does not mean that these repeaters are of no interest from a legal or accident prevention point of view, but Dr. Wilde felt that it is most important that they should be viewed in the right quantitative perspective when considering them in relation to the total accident and violation picture. He indicated that greater emphasis should be placed upon developing sanctioning systems which would affect the behaviour of the driver population in general.

In terms of this general population, two major factors seemed to him to determine the deterrent effect of sanctions. The first is the subjective perception of the probability of apprehension, and the second is the practical cost to the individual. Dr. Wilde reviewed the difficulties, which had been raised in an earlier session, in altering the subjective perception of risk of apprehension and also noted the potential social costs, particularly in terms of respect for the enforcement agencies, involved in any attempt to increase the subjective perception of risk in this area. Dr. Wilde went on to review a number of studies in which the effects of various visible physical signs and law enforcement practices, in terms of their effect of driver behaviour, have been measured. He indicated that the results of these various studies are often conflicting and do not appear to show any convincing patterns of success. Clearly more research and better ideas for implementation are necessary to enhance the safety-promoting effects of the "physical presence of the law" on the road, if it is significantly to influence the driver population as a whole.

Turning next to the question of the role of positive incentives in this area, Dr. Wilde noted that psychological research on a very wide variety of behaviours indicates that rewarding desirable behaviour has much greater and longer lasting positive effects than punishing undesirable behaviour. He expressed his view that there is no compelling reason to believe that this would not also hold true in relation to driving behaviour, provided that such rewards and incentives as could be devised were arranged in a way that is actually interesting, motivating and equitable according to public opinion. The legal implications of rewarding as well as of punishing would have to be arranged in such a way that the public as a whole would learn that it pays to accept lesser risks whenever and wherever they drive. In conclusion, Dr. Wilde suggested that there are three major areas of challenge to research and implementation regarding the effect of the law upon driver behaviour. These are: (a) the surveillance and enforcement activity of the police; (b) optimizing the effect of traffic signs and signals; and (c) the introduction of incentive systems in order to reduce the level of risk acceptance throughout the population.

Following Dr. Wilde's presentation, Mr. Piper, General Counsel for the Insurance Bureau of Canada, briefly outlined some of the safety promotion features which the insurance industry have participated in. These include: (1) the establishment of a teenage safe-driving rodeo which brought together young drivers from all provinces of Canada in a championship test of driving ability; (2) the provision of finances, through the Canada Safety Council, to provide driver-education teacher-training courses in all provinces of Canada; (3) recent announcements by the insurance companies of appropriate rate reductions with respect to vehicles fitted with bumpers capable of absorbing an impact force specified by the insurer; (4) the promotion of safety films, of which the most well-known is one entitled ".08", on the problems associated with drinking and driving; (5) the establishment of merit rating systems under which drivers who are accident- and conviction-free pay substantially less in insurance premiums than those who are involved in accidents giving rise to claims or who are convicted of driving offences; and (6) the development in the commercial field of fleet rating systems, through which the records of individual drivers can be closely scrutinized and those who are sub-standard can be either forced to improve their capabilities or else be subject to dismissal.

Perhaps because the remainder of the Workshop had been devoted to the question of sanctions, the discussions which followed these two presentations concentrated almost exclusively on the question of the role of positive incentives in this area. All the participants

seemed to be agreed that the development of positive incentives to better driving would be desirable, and many suggestions as to the forms which such incentives might take were made during the discussion. These included: (1) an increase in the use of beneficial insurance rates for drivers with good accident-free and violation-free records; (2) the issuance of free or reduced-cost vehicle permits or drivers licenses to such drivers; (3) deductions on income-tax for such drivers; (4) rebate on provincial gasoline tax for such drivers; (5) letters of commendation from the Minister of Transportation to drivers who have maintained a successful driving record after having acquired demerit points or after having received warning letters from the Ministry; (6) insurance premium reductions based on in-car evaluation and assessment reports on drivers by qualified and approved driving instructors; (7) the establishment of a merit point system, based on the number of months, or years, of accident-free or violation-free driving by license holders; (8) greater use of signs, posters, information and other kinds of warnings on highways.

Whilst it was generally agreed that the development of positive incentives to improve driver behaviour was a desirable goal, however, there was considerable attention given to some of the inherent problems involved in devising appropriate and practical schemes of this kind. The problems which were raised during this discussion were as follows:

1. It is thought to be of critical importance to any reward model that the reward is reasonably contemporaneous with the behaviour being rewarded. Many of the proposed incentives in the area of driving behaviour seem to involve too great a delay between the application of the reward and the behaviour being rewarded.

2. There are inherent problems in defining exactly what is "desirable" driving behaviour for operational purposes. To attempt to reduce accidents or violations totally would clearly be unrealistic, since such a goal could probably only be achieved through a reduction of total mobility to a completely unacceptable level. What must be aimed for, therefore, is not total reduction of accidents but reasonably safe mobility. Thus, "desirable" driving behaviour must be defined in terms of economic optimality, and we are left with the problem of securing agreement as to what is an acceptable level of accidents or violations as the price of mobility.

3. The percentage of the total driver population which is responsible both for accidents and for offences is so small that it would be very difficult to devise any programmes which could successfully (a) identify, and (b) reach them before an accident or an offence occurs. It is possible that to be effective such a program would be so expensive as to be unjustifiable in economic terms.

4. Because we have concentrated so heavily in the past in developing sanctions against anti-social driving behaviour, we have little idea at present as to what would be perceived by members of the general driving public as significant rewards. This is clearly a basically empirical question, however, and useful answers could presumably be derived from effective research.

5. With some of the proposed incentive programmes, problems would arise in ensuring the general applicability of such programmes on an equal basis to all drivers. This would particularly arise in relation to incentives based on insurance premiums, where the securing of general equal applicability would necessitate a considerably greater degree of centralized control, probably through the government, of an otherwise largely free enterprise industry.

6. Special problems also arise in relation to the possible introduction of possible incentive programmes into the criminal law and criminal court setting. In one sense, it can be said that the notion of positive incentive is largely alien to the current and traditional philosophy of the criminal court system, and of the criminal law, of which the notion of achieving social control through deterrent sanctions seems to be such a fundamental element.

7. A further practical problem involved in introducing positive incentives into the criminal court setting is created by the fact that a very large percentage of offenders never go to court at all, their cases being disposed of by mail, thus rendering them not amenable to any but the more remote types of incentive program.

Final Session - Rapporteur's Report

The main discussions of the topics on the Agenda concluded at this point, and in the final session the rapporteur's report on the proceedings was read by Mr. P. C. Stenning, Senior Research Assistant at the Centre of Criminology, and was approved by the participants. It was agreed that no formal resolutions or recommendations would be made by the Workshop as a whole, but that a full record of proceedings should be prepared and widely distributed. It was also agreed that a statement should be prepared for immediate release to the press, indicating the nature of the topics covered at the Workshop, and that a report would be forthcoming at a later date.

INDIVIDUAL INTRODUCTIONS TO TOPICS

Introduction to Topic A:

Given that criminal and non-criminal sanctions can be distinguished from each other, what general principles can be agreed upon to determine which type is appropriate to a given case. E.g., should criminal sanctions be reserved for instances where there is culpability, and not for those where culpability is in doubt? Should criminal sanctions be reserved for "serious" offences and, if so, by what criteria is "seriousness" properly defined? How important is effectiveness as a criterion for the application of sanctions? To what extent can effectiveness be adequately measured?

I. Professor T. C. Willett, Chairman of the Workshop: Department of Sociology at Queen's University, Kingston, Ontario.

I hope that the readings prepared for this workshop have confirmed commonsense in showing that the control of behaviour on the roads is one of the most difficult problems facing those who would have a society that is both peaceful and free. The problem has grown at a geometric rate during the last thirty years, and it has manifested itself in such a manner as to justify Lady Wootton's claim that the motoring offence is the typical crime of the century and the motoring offender the typical criminal.

But should these offences be the typical crimes and should their perpetrators be labelled as the typical criminals? If they are either, they are so simply because we have reacted to them in the only way we seem to know: by making criminal laws and punishing those who disobey them, and in relying on deterrence to discourage disobedience. We have done this though we know that what we are penalising is not - unlike true crime, I would think - wholly attributable to deliberately anti-social action. For example we penalise daily the consequences of what we call accidents: by definition, acts of God!

So it is that the criminal agencies are overwhelmed with business that is not really thought by most people to be criminal business at all. The courts do not like this, the police do not like it, and the great majority of offenders neither like it nor understand it. Indeed the effect is to alienate them from the law and from those who have to enforce it. Moreover I would suggest to you that the criminal agencies have neither the interest nor the expertise to deal with most of these cases although they form the bulk of what they have to do.

Despite all this there are offences and offenders in this field whose behaviour is such that they cannot be distinguished in reality from those offences and offenders against persons and property who are, until we can find a better way, the concern of the criminal agencies. My own research work suggests that these offenders are only about two per cent of all serious motoring offenders: a small number in toto, but one that may have a disproportionate effect on the image of the population of motoring offenders in its entirety. Hence the trouble is that the problems that these people present - and they are serious and difficult problems - are obscured by the masses of other motoring offenders with whom they are merged.

So the first problem we want to put to you is to ask whether we can rationalise the irrational muddle that road traffic law seems to have become by separating out those of offences to which the criminal process is really appropriate, leaving the rest to non-criminal agencies of control such as the highway authority. To some extent this is being done, as you know, in for example British Columbia and the State of New York where certain behaviour formerly processed by criminal agencies is now called infraction and is handled by the highway administrative authority. But even these schemes leave the mass of so-called moving offences, such as careless driving, in the criminal category: and perhaps this is right since these rearrangements in the area of road traffic law can easily be seen as yet another major encroachment of the administrative bureaucracies into areas within which the rights of citizens have been protected by the devices of criminal law.

But if we do attempt such a separation, by what criteria could it be done? Perhaps we should, in considering this, concentrate first on offences since it is always easier to categorise types of action than to categorise types of people. Offences may, perhaps, be pressed into categories, but I doubt if offenders will.

Let us begin, then, with offences. In my own research work I have found that a substantial number of people who think about motoring offences seem to define serious offences as those in which any two of the following criteria could be present: deliberate intent, harm to persons or to property, and dishonesty in that there is some intent to

lie or to otherwise mislead as to what the individual did. However, this may be much too simple. But, even if it is, it seems to me that the assumption that mens rea is or is not appropriate to motoring offences is important, and I will now ask Professor Hooper and Mr. McWilliams to say what they think of this as one criterion by which we might distinguish one serious and criminal class of road traffic offences from the mass of other inconvenient, though often dangerous, forms of misbehaviour.

2. *Professor A. Hooper, Osgoode Hall Law School, York University, Downsview, Ontario.*

FAULT IN DRIVING OFFENCES

If it is desired to punish conduct only if there was fault, then the law-maker can require one of the following three kinds of fault:

(a) a knowledge of reckless indifference on the part of the accused that he was engaging in the conduct;

(b) a gross or very substantial departure on the part of the accused, albeit unknowingly, from the standard of conduct expected of the reasonable man (or, insofar as we are concerned here, of the reasonable driver);

(c) a departure on the part of the accused, albeit unknowingly, from the standard of conduct expected of the reasonable man/driver.

Criminal lawyers call (a) mens rea, (b) gross negligence and (c) mere or simple negligence. It is obvious that (c) is less difficult to prove than (b), and (b) is less difficult than (a) and this can be shown by the following example. Suppose that A is charged with dangerous driving. He was driving east when, for no apparent reason, his car crossed the centre line and ended up in a ditch on the other side of the road. There is evidence that driving conditions were good, that A was driving at the normal speed and that there was no apparent defect in the car. A states, truthfully, that he remembers nothing about the accident and that he had not been drinking. Whichever

degree of fault is required, the Crown must first prove that the accused's driving was, objectively speaking, dangerous. This would not be difficult to do. If dangerous driving can be committed by simple negligence, the Crown need only satisfy the Judge that the accused's driving did not meet the standard of the reasonable driver. Since reasonable drivers do not cross the median strip and end up in ditches, this would not be a difficult task. If dangerous driving requires gross negligence, the Crown must satisfy the Judge that the accused was guilty of simple negligence and further satisfy the Judge that the accused's driving showed a very substantial departure from the driving expected of a reasonable driver. Again the Crown could probably succeed. If dangerous driving requires mens rea, then the Crown must prove that the accused knew, prior to the accident, that he was driving in a manner that was dangerous to the public. Although it may be inferred from the fact of dangerous driving that the accused knew that he was driving dangerously, such inference does not have to be drawn and, faced with the accused's testimony and with the fact that he was driving at the normal speed, a Judge might be most unwilling to conclude that the accused had this knowledge. Any evidence that the accused was sleepy would, of course, incline the Court to convict, reasoning that A must have known he was sleepy and must have known that it was dangerous to drive while sleepy. Absent such evidence, a conviction for dangerous driving might be difficult.

So far we have examined three degrees of fault. There is a fourth possibility: that is to punish the driver for his objectively wrongful conduct irrespective of fault. If the driving was in fact dangerous, then the accused is guilty whether he was at fault or not. An English case illustrates this. The accused, a soldier, was driving an armoured car. Arriving at an intersection with a major road, he halted. Since the construction of the armoured car left him with very restricted vision, he had to rely on his commander's order to proceed. The commander stated that the road was clear and the accused pulled out. Unfortunately the road was not clear, and a motorcyclist was killed in a collision with the armoured car. The Court held that the accused was guilty of dangerous driving because his driving was, in fact, dangerous even though he had in no way been negligent. (I might say that the commander was also found guilty and sentenced much more severely).

There seems little doubt that some degree of fault is required in Canada for those driving offences created by the Criminal Code, although it is far from clear what is the degree of fault required. The law relating to driving offences in the Highway Traffic Act is much clearer, so let us deal with these first. There seems

little doubt that these offences do not, as a rule, require any fault at all, a result which has been achieved by the courts rather than by the legislature, the statute being silent on the issue. If a person is charged with going through a red light, it is no defence for him to say that he did not see the red light. Even if the policeman were to admit that it was well-nigh impossible to see the red light and that hundreds of motorists were caught going through the light, it would make no difference. It may be that fault is required in one or two respects. If the accused was, through no fault of his own, unable to control the car, then it may be that he would not be guilty of this offence. For example, if a bee had stung him, or if the brakes had failed and it could not be said that the brake failure was in any way his fault, then it may be that the accused would be found not guilty. However, the courts have not laid down any authoritative ruling on the matter and the result could depend upon the particular judge. Some Highway Traffic offences require negligence, for example, careless driving and following too close. A person is not guilty of careless driving unless his driving was negligent, simple negligence being sufficient. Much criticism has been levelled at offences which do not require fault. Critics say that it is unfair to punish someone when he could not have avoided the conduct, and that to punish him in these circumstances brings the legal system into disrepute. They point out that a finding of 'not guilty' in circumstances like those set out above, would more readily induce those responsible for the placing of the traffic lights to ensure that they can be seen. On the other hand, it is argued that to permit lack of fault to be a defence to these offences would allow too many guilty people to escape by lying and would unnecessarily slow down the judicial process.

Much more confusion exists about the degree of fault required for the Criminal Code offences. The offences of driving in a criminally negligent manner and the associated offences of causing death by criminal negligence and causing bodily harm by criminal negligence, as well as the offence of dangerous driving, have been interpreted in different ways by the courts. Courts have held that these offences require full mens rea, i.e. the accused must have known that he was endangering the lives or safety of others in the case of criminally negligent driving or must have known that he was driving dangerously in the case of dangerous driving. Other courts, however, presumably aware of the difficulties of obtaining convictions if full mens rea is required, have stated that such knowledge is not required. Although it is not clear in these cases what degree of fault is required, it would seem to be gross negligence. This confusion exists at the highest level, the Supreme Court of Canada having given contradictory decisions on the matter. Two offences which seem to require

full mens rea are 'hit and run' and 'driving while under suspension.' An accused is not guilty of the former unless he knew he was involved in an accident, and of the latter unless he knew that his licence had been suspended. (The latter is subject to an exception if the statute states that the licence is suspended immediately on conviction: if the accused did not know this, he would be making an error of law, and not an error of fact, and errors of law are irrelevant). Interestingly enough, impaired driving requires a degree of fault. The accused will only be guilty if he knew, or ought to have known, that he was likely to become impaired. So a driver was held not guilty when he drove after being unaware of the side-effects of an anaesthetic given to him by a dentist. If, however, he knows that he is impaired, then it does not matter that he did not intend to drive. In one case the accused made arrangements to be driven home and, later, became very drunk. While being driven home he became very belligerent and finally the driver abandoned him and the car. The accused drove the car for a few yards before it became stuck. It was held that he was guilty of impaired driving because he had voluntarily become impaired although he had no intention of driving while impaired.

In conclusion, it can be said that neither the courts nor the legislature have established consistent and coherent policies on the question of fault in driving offences. It seems unlikely that eliminating fault from the driving offences will reduce, in any way, the amount of bad driving. If this is so, then the principles of fairness seem to require some degree of fault before punishment and also require a higher degree of fault where the punishment is more serious.

3. *Mr. P. K. McWilliams, Q.C., Barrister in Oakville, Ontario.*

PROBLEMS IN THE USE OF THE CRIMINAL SANCTION IN DRIVING OFFENCES

Federal

The enactment of criminal law is within the jurisdiction of the federal government by S.91(27) of the B.N.A. Act, and driving offences were enacted.

With the 1953 revision of the Criminal Code, the major driving offence was criminal negligence in the operation of a motor vehicle or, if death ensues, causing death by criminal negligence. Criminal negligence is defined in the Code as:

> 202 (1) Every one is criminally negligent who
>
> (a) in doing anything, or
>
> (b) in omitting to do anything that it is his duty to do,
>
> shows wanton or reckless disregard for the lives or safety of other persons.
>
> (2) For the purposes of this section, "duty" means a duty imposed by law.

It has been referred to as "advertent negligence"; that the evidence must show that there was advertent or subjective foresight as to the consequences of ones conduct.

Criminal negligence as so defined connotes such a high degree of negligence that juries proved reluctant to convict. The problem of proof is the basic one of the proof of the mental element of the crime. A man seldom declares his attitude or state of mind. This must be inferred from his conduct. With every man an expert driver, in his own estimation at least, and with so much depending upon the circumstances of driving situation, it is little wonder that juries and judges are slow to find that there is proof beyond a reasonable doubt as to the mental element of the offence.

This difficulty led to the re-enactment of the offence of dangerous driving in 1960-61, after having been enacted in 1938 as S. 285(6), and then omitted in the 1953 revision. This in turn has led to continuing confusion as to the relationship of dangerous driving to the quasi-criminal provincial offence of careless driving.

It has been held in O'Grady v. Sparling (1960) S.C.R. 806, that the offence of careless driving was within the provincial legislative power; that is, that the federal government has made "advertent negligence" a criminal offence but had not occupied the field insofar as "inadvertent negligence". Then in 1966, it was

held in Mann v. R. (1966) S.C.R. 238, that the offence of dangerous driving (S. 221(4)) did not create a crime of "inadvertent negligence," and so again a provincial offence of careless driving was upheld.

However, the relationship of dangerous driving to criminal negligence and the question whether mens rea was a necessary ingredient to the offence of dangerous driving continued to trouble the courts. In Binus v. R. (1967) S.C.R. 594, Cartwright, C.J., for the majority, held that "advertent negligence" was necessary, while Judson J. approved of the reasoning of Laskin J.A. in the Court of Appeal as to proof of mens rea being unnecessary in the sense of either intention to jeopardize the lives or safety of others or recklessness as to such consequences, but rather that it be shown that the accused did not drive with the care that a prudent person would exercise in the circumstances. and that, in failing to do so, in fact endangered the lives or safety of others. In short, he held that the test was objective and the mind of the driver immaterial!

Then in Peda v. R. (1969) S.C.R. 905, Judson J, carried the day with terse reasons which leave us in confusion. He simply said that dangerous driving defines the offence within itself and it is not necessary to relate it to "inadvertent negligence." But that does not mean that proof of "inadvertence" or mere negligence was sufficient for conviction of dangerous driving: R. v. Prince (1970) 2 C.C.C. 213.

Provincial Offences

The major provincial offence is careless driving, under the Highway Traffic Act, which carries a maximum penalty of three months imprisonment plus $500 fine or both and a minimum fine of $100. To convict of this offence, it is necessary to show that the accused drove either without due care or attention or without reasonable consideration to others. Proof of intent to do so is unnecessary. A driver is not required to exercise an objective standard of care and skill or perception, but only that of an ordinary prudent driver, and this standard is constantly shifting in accordance with traffic conditions. Moreover, the driving must fall below the standard so as to be considered a breach of duty to the public and such deserving of punishment by the State.

Similar problems of proof arise in proof of intent to escape civil or criminal liability in the offence of failing to remain at the scene of an accident under the Criminal Code. Again this has led to the province enacting an offence of failing to remain which requires no proof of intent.

The drinking offences of driving, or being in care or control, while impaired or with over 80 mgm. of alcohol technically require proof of guilty intent. This has been limited simply to proof of voluntary ingestion of alcohol, or drugs, as the case may be. Ignorance is no defence. The only case where defence of lack of intent was sustained was R. v. King (1962) S.C.R. 746, when the dentist injected sodium pentothal into the accused without advising him as to the effects.

Generally, intent is criminal negligence as shown by evidence of high speed, repeated infractions of rules of the road, and often by proof of consumption of alcohol.

Then there are the provincial rules of the roadloffences of absolute liability which carry maximum fine of $50. There are a considerable number of these and they are quite specific in their terms. It often becomes difficult for a police officer to lay the appropriate charge, and out of an abundance of cautions, the tendency is to lay the more serious offence of careless driving.

My own view which I have expressed in an article, "What is Dangerous Driving?" 7 Criminal Law Quarterly 297 at 304, is that the logical scheme or progression of major traffic offences would be much simpler if Parliament enacted careless driving or "inadvertent negligence" of a dangerous nature as a criminal offence, punishable by indictment or summary conviction at the option of the prosecution. The potential penalty now in the provincial section is too great for a provincial offence. The offence of dangerous driving as it now exists could be repealed and there would be simply the two offences under the Criminal Code, with minor rules of the road offences in the Highway Traffic Act.

Introduction to Topic B:

To what extent do current enforcement practices in Ontario reflect the principles established in discussions of topic A above, and to what extent do they appear to reflect other principles? (A brief summary of current enforcement patterns in Ontario will be presented, and special attention will be given to the reasons for the adoption of these practices).

I. *Mr. P. C. Stenning, Senior Research Assistant and Special Lecturer, Centre of Criminology, University of Toronto.*

For a summary of Mr. Stenning's remarks see the Rapporteur's Report, at pages 12-14.

Introduction to Topic C:

What evidence is there as to the effectiveness of criminal sanctions as they are now applied? To what extent is this evidence adequate, and how could it be improved?

I. *Deputy Chief J. W. Ackroyd, Metropolitan Toronto Police*

Enforcement of criminal sanctions as applied to traffic basically involves two general functions: (1) Police Traffic Law Enforcement, and (2) Court Traffic Law Enforcement. The effectiveness of criminal sanctions depends upon their correct and proper application at both levels.

Traffic laws, like all other laws, reflect the beliefs, behaviour and standards agreed on by society. They do not relate to behaviour which is necessarily bad in itself, as are laws against theft, assault, indecency, etc. They exist in order to identify and encourage behaviour in accordance with the accepted pattern, and to deal with those who will not conform, and thus aggravate the hazards of traffic movement.

The police believe that the enforcement of traffic laws, particularly those categorized as 'hazarduous moving violations', followed by properly applied criminal sanctions, will influence driver behaviour in such a manner that both violations and accidents will be lessened, provided that the motorist is aware that this enforcement will be constant.

Although there is only limited information readily available as to the effectiveness of criminal sanctions, all of which are very debateable, I have some examples I would like to discuss:

1. A good example is found in the point system presently in use in Ontario. Under this method, as you are probably aware, a motorist convicted of a violation is assessed a certain number of points, depending on the offence. When the driver has accumulated six points, he receives a letter from the Minister noting the fact that he has used up so many points and advising him of what he may expect if he continues to disobey traffic laws. At nine points, the offender is called in for a personal interview, and driving faults are explained. After losing fifteen points, his driver's licence is suspended.

The fact that this system is effective is borne out by the following figures:

Warning Letters (6 points)	1970	75,451	
	1971	77,592	(increase)
Interviews (9 points)	1970	28,744	
	1971	26,128	(decrease)
Suspended (15 points)	1970	5,609	
	1971	5,496	(decrease)

Even though warning letters were up over the two year comparison, interviews and suspensions were down.

2. An article entitled "The Case for Improved Traffic Enforcement in Chicago"*covers a comparison of enforcement during the first 7 months of 1959 and 1960, and accidents for the same period. The survey points up the fact during this period traffic charges dropped 35%, while accidents increased 15%.

This article also noted "that the greatest decrease in traffic deaths came in 1957, the year enforcement of hazardous moving violation laws was at its highest level. There were 38 fewer deaths in 1957 than in 1956." Chief Madl, then the Chief of the Chicago Force, went on to emphasize, "There is strong statistical evidence that districts with low enforcement records are more likely to have an increase in accidents than districts where arrest (summons) levels have not fallen so severely. All evidence favours a much higher level of enforcement in every police district in Chicago as the most immediately effective way of reducing accidents."

3. On July 1st, 1971 the legal age for the consumption of alcohol was reduced from 21 to 18 years of age. The following statistics will indicate (1) the effects that this had on the number of charges laid on this age group for "Ability Impaired"; and (2) the number of accidents for the same age group while the drivers were under the influence of liquor or their ability was impaired by alcohol:

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*In Chicago Traffic Safety Review, September 1960.

Ability Impaired Charges

	Jan. 1 to May 31	Jan. 1 to Dec. 31.
1970	48	84
1971	362	681
1972	494	831 (to Dec. 13)

Accidents

1970 - Fatal	-	1
Personal Injury	24	71
Property Damage	44	107
	68	179
1971 - Fatal	-	1
- Personal Injury	33	134
- Property Damage	36	137
	69	272
1972 - Fatal	1	3)
- Personal Injury	62	181) to Dec. 6
- Property Damage	70	241)
	133	425

4. At the present time, the statistics from a survey "The Effects of Enforcement on Driver Behaviour", commissioned by the Ministry of Transport (Canada), are being analyzed. The study, under the direction of De Leuw Cather (Consulting Engineers), commenced last summer and was divided into five phases:

Phase I	-	Organize Study
Phase II	-	Base Conditions Survey
Phase III	-	Survey with Increased Enforcement Level
Phase IV	-	Return to Base
Phase V	-	Screening and Report

Basically, seven intersections were chosen for the survey. One was used as a control and while it was kept under constant observation as to violations, conflicts and enforcement, no special action was taken. As to the other six intersections, after four weeks of observation (Phase II) various degrees of police enforcement were applied for four weeks (Phase III) and the effects were noted. At the end of this period, the police enforcement was removed and the effects were again noted for a further period (Phase IV). The study is currently in Phase V and will be completed in January.

While the findings are not yet completed, a preliminary perusal of the results shows a decrease at the majority of intersections in violations and conflicts during the period of police enforcement, and I believe a substantial decrease during that period in the number of accidents.

Concluding Remarks

In the original topic, you asked the question "To what extent is this evidence adequate, and how could it be improved?" In my opinion, the evidence is not conclusive or adequate.

The weather conditions are never mentioned in regard to studies. On a clear, dry day in Metropolitan Toronto there is an average of about 110-115 accidents; during the poor weather (rain, snow, freezing rain, etc.) there is an average of about 225-250 accidents.

Perhaps we could extend the current study "The Effects of Enforcement on Driver Behaviour", or conduct a new study to look at

which type of criminal sanction or non-criminal sanction is most instrumental in reducing accidents: the monetary fine (should it be more or less severe or even eliminated); the value and type of demerit point system; the effect of loss of driving privileges; the question of maximum and minimum fines (do we give too much leeway to the traffic judge, resulting in inconsistent sentences?).

Also, possibly a survey could be conducted by means of a questionnaire to Police Forces throughout the province, asking such questions as:

(a) What was your traffic enforcement in the years 1969, 1970, 1971 and 1972?

(b) What were your accident statistics in the years 1969, 1970, 1971 and 1972?

(c) Has your jurisdiction changed any aspect of its enforcement program (more attention to pedestrians, increased speed enforcement, etc.)?

(d) Is enforcement in your area selective?

(e) Are you generally satisfied with the sentences given to violators?

(f) What, in your opinion, would be the best type of fine (money, points and suspension, immediate suspension, etc.)?

2. *Mr. A. M. Gartshore, Deputy Registrar of Motor Vehicles, Ontario Ministry of Transportation and Communications.*

In reviewing the background papers circulated prior to this workshop, I was struck by the careful study and informed speculation which had been applied to many of the factors and facets of the subject which we have gathered here to consider.

It is apparent that such matters as the philosophy of enforcement, the reaction of the motorist as related to his real or imagined

status, social background, sex and temperament, the projected image of the police and public attitudes toward traffic law, have excited interest and study. Perhaps because it could be considered self-evident, the reason for existence of a body of statutes and regulations as large and complex as our traffic law does not appear to have received comparable attention.

It is an accepted truism that a law which is not respected cannot be enforced, whatever sanctions a violation may carry, and I am sure that most of us will agree that traffic offences are generally considered to be trivial, if not even laughable. This leads me to base a train of thoughts on the reasons for the existence of such a law, in the hope that this will indicate what should be expected from criminal sanctions in the way of effectiveness.

Primarily, it may be said that the traffic laws are intended to provide an environment for the orderly movement of traffic so as to minimize congestion and frustration and to ensure the fastest possible point-to-point movement of motor vehicles. Coupled with this, an atmosphere of predictability is engendered, largely eliminating the need for intuitive or diagnostic thought by the driver as he faces traffic situations. As a result of these effects, there is a reduction in potential vehicular conflicts which may develop into collisions resulting in loss of life, injury and property damage.

Turning to identification of those who benefit by the existence of this legislation: while every person who uses the highway or its immediate vicinity by any means or for any purpose, will be safer in life, limb and pocketbook as a result of a reduction in collisions, it is the driver himself who stands to derive the greatest good from universal compliance with the rules of the road. It should, therefore, be worthwhile to try to identify his reasons for failing to comply, to the extent indicated by the number of convictions for violations in relation to the minimal time that each motorist is under surveillance by enforcement officers.

However complete programs of driver education and examination may be, there will always be those who do not know or have forgotten what the law is. Others will be careless, distracted, fatigued or otherwise not functioning at a reasonable level of effectiveness. Some, no doubt, are possessed of a natural perversity which causes them to violate wilfully, in spite of, or even because of, their knowledge of the law, while others again probably have a genuine desire, either permanent (or more likely temporary) to kill and maim.

The imposition of criminal sanctions will probably have a measure of effectiveness in only those cases where the motivation falls into one of the last two categories, either as a general deterrent or as a deterrent to recurrence of the offence due to the severity of the retribution exacted. It is unlikely that a severe penalty will be effective where the violator is ignorant of the nature of his offence, which he may never discover if he pleads guilty. By the same token, punishment is not an accepted remedy for poor memory or temporary physical incapacity.

It follows that the body of available evidence as to the effectiveness of criminal sanctions as a means of changing or controlling driver behaviour is suspect, since it has been applied to all violators while its potential for good can only apply to a minority of offenders.

I submit that the first question posed cannot be answered adequately on the basis of the facts presently available. We will require data on the reasons why offences are committed before an assessment can be made of the effectiveness of criminal sanctions in those cases where results can be reasonably expected. Such data cannot be obtained by consideration of generalities: why a person acted in a certain manner at a certain time and place is not necessarily related to what sort of person he is, although a relationship of probability may be uncovered in the course of investigation.

Perhaps research into behaviour motivation of a random sample of violators would furnish a factor which could be applied to the general mass of available data on recidivism and thus establish the validity of such data when related to a corrected base figure.

Introduction to Topic D:

Is the present range of criminal sanctions adequate? Is the present application of criminal sanctions appropriate? To what extent are changes in the range and applications of these sanctions needed? What innovations are practicable?

I. *Dr. W. Schmidt, Associate Director of Research at the Alcoholism and Drug Addiction Research Foundation of Ontario.*

Until relatively recently, the principal focus of interest has been the role of alcohol in accidents, rather than the role of the driver who uses it. This approach assumed that drinking drivers constitute a random sample of the general population with respect to their drinking habits. As far as safety is concerned, it was widely held that the drinking driver is a casual drinker who has had an accident probably chiefly because of a misguided notion of his ability to function adequately under the influence of alcohol.

Over the last decade several systematic attempts have been made to determine the drinking habits of drivers involved in accidents. In these investigations it has been shown that there is a high prevalence of excessive drinking patterns and alcoholism among those persons who have been using alcohol and are subsequently involved in traffic accidents. Although it is not possible at present to make an exact statement concerning the proportion of excessive and pathological drinkers in populations of drinking drivers, it has become evident that the drinking driver is, to a significant extent, a problem of alcoholism, and may therefore represent a matter of treatment and preventive medicine as well as legislative measures.

This has important implications for those law enforcement agencies charged with the responsibility of dealing with such offenders. For example the reinstatement of a driver's license suspended for impaired driving was largely dependent on proof of financial responsibility (insurance coverage). In the light of the findings summarised above, this procedure alone appeared to be inadequate. A more satisfactory approach would require that drivers convicted for a drinking driving offense submit to an assessment of their drinking behaviour and,

dependent on the outcome, participate in a re-education program initiated by the courts or, if necessary, obtain treatment for alcoholism as a condition of license reinstatement. Such measures were proposed to the Ontario Department of Transport in 1961 as a result of a series of investigation by researchers of the Addiction Research Foundation. It has been suggested, then, that such a system would represent a realistic attempt to rehabilitate a group of drinking drivers in a manner adjusted to their pathology. However, the proposal was not accepted.

More recently, re-education and rehabilitation programs for such drivers have been introduced in the United States. The best known is the "Phoenix, Arizona Program" which has been well described in the literature. Initial attempts to evaluate the effectiveness of this approach have indicated some success. However, it must be noted that the very low rate of recidivism in drinking driving offences make such evaluations very difficult. Very large samples and long periods of follow-up would be required for a more definite assessment of the usefulness of this approach. It should also be pointed out that this method, being restricted to the prevention of recidivism, can only have a ve-y minor impact on the problems of alcohol-related accidents. For example if all drivers convicted for such offences in one year were effectively removed from the driving population in the subsequent year, the potential reduction in all alcohol-related traffic accidents would be too small to be measurable in general populations. Thus the "Phoenix" approach should be seen as only a minor part of an overall program. The latter will have to aim primarily at the prevention of "first drinking-driving offences" which contribute the most important aspect of the problem.

2. *Mr. E. Murphy, Q.C., Crown Attorney in Barrie, Ontario.*

We regret that, at the time of going to press, a copy of Mr. Murphy's remarks to the Workshop was not available for publication.

Introduction to Topic E:

What evidence is there as to the effectiveness of non-criminal sanctions as they are now applied? To what extent is this evidence adequate, and how could it be improved?

I. *Mr. D. W. Farren, Director of Systems Research Branch, Ontario Ministry of Transportation and Communications.*

May I firstly put forth some thoughts to give a more definitive understanding of sanctions as I interpret them.

In the first instance, while driving is a privilege, the use of the highway by the public is a right deriving from public ownership and deserving regulatory and legal protection. The area of control governed by regulation and/or non-criminal sanction is that which in the preventive sense ensures the use of a public facility in a manner that will not jeopardise or interfere with the efficient, safe and proper public use of the facility.

The area covered by criminal sanction relates to control, by retribution under the criminal law, of the operation of a motor vehicle in a manner dangerous to life, limb and property of others. There are four categories of guilt overlapping from one area into the other. They are inadvertent failure, knowledgeable negligence, purposeful disregard and premeditated misuse with mal-intent. These levels of guilt require the exercise of discretion in the application of both non-criminal and criminal sanctions and we should not therefore over-simplify or categorize these procedures.

In my previous work in highway design, we concentrated our efforts on improvement of the roadway and the roadside environment. Over the years it became increasingly obvious that while these efforts were both justified and effective, they applied in only about 10% of accidents and fatalities. The other 90% were related to human or vehicle deficiencies and with this being the overwhelming factor, the overall accidents and fatalities continue to rise inexorably. In coroners' inquests that I attended, the primary cause of traffic accident fatalities could be pinpointed inevitably to failures that would not have occurred if the driver had been better qualified and the vehicle in better condition through the effective application of non-criminal sanctions in a preventive way. These two observations

indicate that non-criminal sanctions and their current method of application are not very effective and warrant careful study and research aimed at improving their effectiveness.

We might possibly benefit from a more positive approach in a number of areas. Our present driver teaching is at the discretion of the driver and gauged to bring him to that minimum level of ability permissible for licensing. Possibly we should aim for a planned education programme as a mandatory part of the school curriculum that would include highway physical and operating characteristics, vehicle dynamics, environmental effects and driver capability and reaction.

In the matter of seat belt usage, we are trying to convince drivers to use them by advertising and informative publications. In the positive sense, we should consider introducing regulations requiring them to be used and by adjusting awarded injury damages according to whether or not the injured person took reasonable precaution, by use of his seat belt, to protect himself from injury. Apart from reduction of injuries, mandatory usage may also be justified since it holds the driver in position to control his car under sudden and erratic changes in vehicle velocity or direction, and in preventing disabling injuries in minor accidents, leaving the driver able to manoeuvre to avoid secondary collisions.

In respect to drinking drivers, instead of the negative approach of "catch and punish", we should consider introducing a drunk driver rehabilitation clinic programme.

It is these positive and total-systems principles that may lead to an effective research programme in the development of more effective non-criminal sanctions.

2. *Mr. L. Lonero, Research Officer, Systems Research Branch, Ontario Ministry of Transportation and Communications.*

In many jurisdictions drivers' conviction records are followed by the driver-licensing administrative authority, under what are commonly referred to as "point systems". These systems identify drivers who collect convictions at a rate above some criterion, and

then subject them to a rehabilitative or punitive procedure. These take various forms, ranging from warning letters, to interviews or meetings, to licence suspension.

A number of rehabilitative programs have been subjected to experimental study with control groups, which gives this area an unusually large and solid body of evidence bearing on program effectiveness. Unfortunately, the evidence indicates that most of the programs are ineffective in reducing subsequent collisions (although they commonly reduce subsequent convictions). Kaestner (1968) reviewed several such studies, concluding that two of the programs had "probably" reduced subsequent collisions when compared to no treatment. Even this conclusion however, is open to considerable question on methodological grounds. A principal criticism is the "no-treatment" type of control group used for the comparison. McBride and Peck (1969) showed that a warning letter could affect collisions, so a "no-contact" control is not really appropriate. Achieving random group assignment of subjects and the handling of those who refuse to cooperate are common methodological problems in this type of research.

In a study of eight programs, Marsh (1971) concluded that one of them had been effective, although the difference did not approach the usually accepted levels of statistical significance. An experimental Driver Improvement Program in Ontario (Wilson, Lonero and Brezina, 1972) found a significant, though short-lived, effect on treated drivers as compared to a warning-letter control group.

In terms of formal scientific adequacy, the evidence in this area is better than in most related areas. Relatively early it was recognized that experimental controls were necessary because of the tendency for the subject drivers, who were selected on the basis of short-term poor records, to spontaneously improve. The recognition of the need for experimental control has not yet penetrated all areas of the traffic safety field.

In terms of the effectiveness of the programs on which this evidence bears, the following conclusions seem defensible. It is relatively easy to achieve some beneficial effect on high-violation drivers with a minimal contact, but it seems very difficult to achieve a lasting additional effect on their subsequent collisions, even with very elaborate and costly programs. Some programs have shown significant short-term effects or possible longer-term effects, and these may be seen as leads for further work toward making non-criminal sanctions an effective tool in the effort to make road travel safer.

References

Kaestner, N. "Research in Driver Improvement - the State of the Art," Traffic Quarterly, 1968, 22, 497-520.

Marsh, W. C. Modifying Negligent Driving Behaviour: Evaluation of Selected Driver Improvement Techniques. California Department of Motor Vehicles, Research and Statistics Section, Report No. 36, 1971.

McBride, R. S. & Peck, R. C. Modifying Negligent Driver Behaviour Through Warning Letters. California Department of Motor Vehicles, HPR-PR-1 (6) B0114, July 1969.

Wilson, W. T., Lonero, L. P. & Brezina, E. H. A Skills-Improvement Approach to Collision Reduction. Systems Research Branch, Ontario Ministry of Transportation and Communications, March 1972.

Introduction to Topic F:

Is the present range of non-criminal sanctions adequate? Is the present application of non-criminal sanctions appropriate? To what extent are changes in the range and applications of these sanctions needed? What innovations are practicable?

I. *Mr. E. G. Paul, Traffic Safety Co-Ordinator, Government and Public Affairs Department, Canadian Automobile Association.*

The Canadian Automobile Association, as a policy, believes the use of non-criminal sanctions is an effective method of controlling driver behaviour, but this type of sanction should be expanded to include the following:

There should be identification of the various modes of transport in relation to the different skills required to operate them efficiently and safely, following which, any driver's licence issued by the Registrar would specify the type (types) of vehicle the holder is qualified to operate.

There should be government-approved refresher courses established throughout a jurisdiction for drivers to upgrade their knowledge of the rules of the road, learn of new driving techniques, and then periodic re-examination of all currently licensed drivers, regardless of age, should be introduced.

Licensing regulations should give recognition and incentive for the successful completion of driver education programs that include both theory and behind-the-wheel training for new drivers.

The insurance industry should also give favourable recognition, to reduce rates or other incentive, for those drivers who have successfully completed an approved driver training course.

The demerit point system should be structured to identify dangerous drivers, following which, the Registrar should insist on the successful completion of a refresher course.

The demerit point system can give incentives by giving merit point credits for those who have enrolled in and successfully completed a refresher course.

In conclusion, we feel that there is insufficient research to indicate how effective criminal and non-criminal sanctions are on driver behaviour, and that Canadian research programs be directed to producing some of the answers.

2. *Mr. E. H. S. Piper, Q.C., General Counsel for the Insurance Bureau of Canada.*

There are really only two main ways in which the insurance industry can be seen to be contributing at the present time to the development of non-criminal sanctions in the area of driver control. These are:

1. Relegating the applicant for insurance to the assigned risk plan as in the old days, or the facility as it is now known under which the amount of protection he can obtain through insurance is somewhat limited and under which he is subject to specified surcharges in the event of certain driving errors or convictions under the Highway Traffic Act or the Criminal Code.

2. Insurance companies keep a close eye on the driving abstracts supplied by the various governments of Canada and companies are rapidly developing a system of applying surcharges according to the number of demerit points which are recorded against any particular driver. This is in complete accord with the systems of insurance in force in those provinces where provincial monopolies have been established in the field of basic automobile insurance.

Introduction to Topic G:

What contribution to road safety can be made by the use of (a) indirect sanctions, and (b) positive incentives, in both the criminal and non-criminal control systems? What innovations are worth trying?

I. Professor G. J. S. Wilde, Department of Psychology at Queen's University, Kingston, Ontario.

SOME PSYCHOLOGICAL ASPECTS OF SANCTIONS AS MEANS OF CONTROLLING ROAD-USER BEHAVIOUR

It would seem that during this seminar we have focussed our attention so far mainly upon drivers who incur accidents repeatedly, and upon those who are frequent violators of the highway code. This emphasis would appear to be entirely in line with the interest of criminology in the habitual offender, the protection of society from this individual, and the possibility of rehabilitation.

However, it must be borne in mind that only a relatively small percentage of all accidents are incurred by accident-repeaters. Various studies have resulted in different estimates of this percentage, but it might be assumed with a reasonable degree of confidence that only approximately 3% of all accidents could be avoided if all drivers who have one or more accidents in a two-year period were removed from the roads. In other words only a very limited percentage of accidents can be attributed to theiindividuals called accident-repeaters.

This does not mean that they are of no interest from a legal or accident-prevention point of view, but their importance to the total accident picture should be viewed in the right quantitative perspective. Moreover, the identification of accident-repeaters is complicated by the fact that some drivers will have more than one accident due to chance factors rather than to inherent individual characteristics.

It might be useful, therefore, to focus our attention upon the behavioural effects of the law and enforcement practices upon the

population of drivers in general. Two major factors would seem to determine the deterrent effect of sanctions: their subjective probability and their costs to the individual. Subjective probability depends upon objective probability among other things, and research studies in risk-taking behaviour suggest that very low frequencies of detrimental effects are treated by the human individual as if they were zero frequencies, regardless of cost. In other words in such cases behaviour is not influenced at all. It is difficult to say to what extent this is true for traffic sanctions, but the fact that, according to at least two studies, excess of the speed limit by 10 m.p.h. or more is followed by a fine once in about 7,000 cases of actual violation, would seem to justify some reflection on this matter. Increasing the probability of sanctioning might be considered to overcome this situation, but it is not without its dangers. It might lead to an increased unpopularity of the police among average citizens and therefore have unfavourable side-effects upon the healthy functioning of society in general.

There have been several empirical studies of the effect of the physical presence of police constables on the roads and streets upon driver behaviour. Syvarnen in Finland studied the effect of the presence of a patrol car upon the perception of a traffic sign. It was found that the presence of a supervisory police vehicle significantly decreased the perception of the sign. When parked at a critical distance from the sign, the supervising police vehicle loses this effect. In a French study by Michèle Monseur, moreover, it was found that the presence of police officers did increase the compliance rate with speed limits, but she also observed that drivers had a tendency to increase their speed a little farther down the road and more so than they would when no policemen were present ("catch-up effect"). I have been told that according to a current study in Toronto, the presence of policemen at some intersections has a decreasing effect upon violations and traffic conflicts, but a systematically enhancing of effect in one particular intersection. Another study, by some of my students in Kingston, showed a definitely beneficial effect of the presence of police constables upon pedestrian violations.

The police constitute a physical representation of the law along the roads and streets, and so do signs and signals in a different way. Rumar and Johansson in a study carried out in Sweden found that on the average only about 50% of all road signs are perceived by drivers. On the basis of Crawford's experiment in Britain it may be concluded that because of the decisional uncertainty about stopping or going when the amber light comes on, some accidents are bound to happen because

of the presence of traffic lights: i.e., some accidents are "built in" into the traffic control system. According to Box in the United States, and Roer in Canada, traffic signals such as yield and stop signs and traffic lights, have no beneficial effect upon safety, and a recent study in West-Berlin came to the same conclusion.

Obviously, more research and better ideas for implementation are necessary to enhance the safety promoting effects of the "physical presence of the law" on the road, if one wants to influence the driver population as a whole.

Democratic societies are characterized by the fact that the authorities such as the police and the courts mainly involve themselves with the individual citizen when the latter trespasses some law, and the ensuing action is largely one of punishment. On the other hand, psychological research on a very great variety of behaviours indicates that rewarding desirable behaviour has much greater and longer lasting positive effects than punishing undesirable behaviour. Assuming that this also holds for traffic behaviour, one is compelled to investigate the merits of establishing rewards and incentives for safe and violation-free driving. Accident-free driving might be rewarded in different ways, e.g., by considerably reduced insurance rates, discounts for vehicle permits and licence renewal, congratulatory letters from the appropriate authorities, tax cuts, and so forth. Such rewards and incentives should be arranged in a way that is actually interesting, motivating and equitable according to public opinion, just as Brown has pointed out that punishments - in order to be truly effective - should match the seriousness of violations in agreement with the views of the road-using public. The legal implications of rewarding as well as punishing will have to be arranged in such a way that the public as a whole learns that it pays to accept lesser risks whenever or wherever they drive.

In short, there seem to be three major areas of challenge to research and implementation regarding the effect of the law upon driver behaviour:

a) the surveillance and enforcement activity of the police force;

b) optimising the effect of traffic signs and signals;

c) the introduction of incentive systems in order to reduce the level of risk acceptance throughout the population.

References

Box, P. C. "Intersections." Ch. 4 in his book Traffic Control and Roadway Elements - Their Relationships to Highway Safety. (Rev. ed.). U.S.A.: Highway Users' Federation for Safety and Mobility, 1970.

Brown, I. D. Unpublished paper, now in press, for presentation at the First International Conference on Driver Behaviour, Zurich, October 1973.

Crawford, A. "Driver Judgement and Error During the Amber Period at Traffic Lights," Ergonomics, 1962, 5, 513-592.

Monseur, M. Unpublished personal communication, 1972.

Roer, P. D. "Traffic Safety and Use of Intersection Control Devices," in Proceedings of the Canadian Good Roads Association, 1968.

Rumar, K. & Johansson, G. "Drivers and Road Signs: A Preliminary Investigation of Car Drivers to Get Information from Road Signs," Ergonomics, 1966, 9, 57-62.

Syvarnen, M. "True Effect of Police Supervision on the Perception of Traffic Signs and Driving Habits," in T.A.L.J.A. Report No. 6, Helsinki, 1968.

Wilde, G. J. S. "Social-Psychological Factors and the Use of Mass Publicity," Canadian Psychologist, January 1973, 14:1, 1-7.

2. *Mr. E. H. S. Piper, Q.C., General Counsel for the Insurance Bureau of Canada.*

I was asked to make some comments related to the safety promotion features which the insurance industry participated in. I give them in some kind of chronological order starting with the teenage safe driving rodeo which brought together young drivers from all provinces of Canada

in a championship test of driving ability following which the insurance industry, through the Canada Safety Council, provided the finances to provide the driver education teacher-training courses in all provinces of Canada.

Another factor lies in the recent announcements by insurance companies that appropriate rate reductions will be made for those vehicles which are fitted with bumpers capable of absorbing an impact force specified by the insurer.

Yet another field lies in the promotion of safety films. Our film ".08" played a very prominent role in changing public attitudes about drinking and driving and when the Criminal Code of Canada was amended to make it an offence to drive with more than .08% of alcohol in the blood, the government of Canada requested us to reissue and modernize the film with appropriate inserts showing the Minister of Justice calling upon all Canadians to comply with the new law.

I indicated also that the basic system of establishing rates within the insurance industry is based on what is known as a merit rating system whereunder those who are accident and conviction free pay substantially less than those who are involved in accidents giving rise to claims or who are convicted of driving offences. In the commercial field, of course, we have fleet rating and the records of individual drivers can be closely scrutinized and the substandards can be either forced to improve their capabilities or else be subject to dismissal.

SUMMARY OF ISSUES TO WHICH PRIORITY SHOULD BE GIVEN IN RESEARCH DEALING WITH SANCTIONS IN THE SOCIAL CONTROL OF ROAD TRAFFIC

by

Professor T. C. Willett, Chairman of the Workshop,
Department of Sociology at Queen's University,
Kingston, Ontario.

General

1. As the conference indicated throughout its proceedings, the central problem in seeking change from an admittedly unsatisfactory and inefficient state of social control in this area is the necessity to base policy on unverified assumptions. It should be the aim of researchers to examine these assumptions and the most important are set out below.

The Law

2. It is assumed that the "majority" of motoring offences are not regarded as 'criminal' by either the judiciary, the police or the motoring public. This presumes that there may be a minority of offences that are thought to be 'criminal' and so appropriate to the criminal process. We need to have a substantial survey among the three groups cited above to find out the criteria they apply to motoring offences and offenders in making distinctions between them on the one hand, and between them and 'criminal' offences on the other. Moreover, we need to know if there are differences between the three groups and upon what basis, if any, the differences exist. The aim should be ultimately to isolate a group of motoring offences and/or offenders that a majority of those surveyed assume to be appropriate to the criminal process.

3. No social history of the law relating to motoring in Canada exists. Such a work is required to underpin the survey study referred to above. It should seek to show how and why attitudes to these phenomena have become what they are.

4. A study is required of the feasibility of a national road traffic code for Canada with common rules and sanctions for the whole nation. This might be linked with the social history referred to above.

5. In jurisdictions where there has been separation between the criminal and administrative agencies in the processing of motoring violations and violators it is necessary to know what the experience has been in "hard" terms, i.e. in regard to the incidence of fatalities (the "hardest" criterion of all in this area), and also in "soft" terms, e.g. in the impact on the persons who have passed through the process. Such studies should not be concluded until the processes have been in operation for at least three years.

Deterrence

6. An intensive interview study is required to establish the driver's perception of the probability of detection in relation to a range of offences in which there is now a marked reliance on deterrence, e.g. impaired driving, failing to stop or leaving the scene of an accident, driving while disqualified.

7. We need to know what influence, if any, deterrent sentences have on motoring offenders by comparing two matched groups: those who "repeat" and those who are not reconvicted or otherwise sanctioned for a road traffic violation within a specific period. The inquiry should be by interview and be concerned with the subjects' opinions, attitudes and beliefs; it should seek to bring out what these people think about sanctions in terms of both general and specific deterrence.

8. We need to know the views of drivers who have not been sanctioned about the "things" that deter them (specific deterrence), and those that they believe to deter others (general deterrence). Such a study could perhaps be combined with the project envisaged in paragraph 2 above.

Sanctions

9. A full scale study is required of the applicability of probation to motoring offenders. It should proceed first with a study of the ways in which existing procedures could be utilized. A series of workshops in which experienced probation workers participated would be a possible means of developing ideas. An operational project might be set up using, in the first instance, impaired drivers who appear to be an obvious choice

for this kind of treatment. It might be profitable to attempt a focus on repeater offenders who would thus be in a position to compare the treatment with their experience of the less sophisticated sanctions. (It is doubtful if "controlled" comparative studies are feasible). There is much room for innovation in the utilisation of probation and some experimental projects involving the use of volunteer supervisors who are keen and knowledgeable drivers might demonstrate the potential of "exemplar" techniques in altering attitudes among these offenders.

10. A study is required of the factors used in imposing sanctions by insurers. A separate study is required of the impact of decisions by insurers consequent upon violations, i.e. how these affect the insured and the extent to which they are seen as sanctions. Such a study should include hidden costs of traffic incidents, e.g. civil actions, additional premiums, costs of losses and repairs borne by the insured under limited liability terms etc. It is necessary to know what is the experience of those who are, in effect, expelled by their original insurer by such means as demanding a very high premium; can these people find others to insure them and on what terms?

11. A study is required of the factors that operate in the exercise of discretion by the responsible law officers in deciding whether or not to initiate criminal process or cautions after incidents involving the driving or riding of motor vehicles.

12. Though it is not what we understand to be research, it would be valuable to canvas ideas concerning inducements or rewards that could be incorporated in existing arrangements for the control of drivers and riders. A prize essay with a substantial reward might be one method.

Information

13. A study is required of the precise nature of the information needed to evaluate enforcement of sanctions in the road traffic field. A comparative analysis needs to be done of all official statistics concerning road traffic in Canada overall and in the provinces. A study of recording practices at the lowest level of report-initiation is necessary.

Motivation

14. Research should be done into the "definition of the situation" by serious motoring offenders in respect of dangerous driving and drunken driving prior to the offence behaviour. This may assist work on motivation, another neglected aspect of knowledge in this field.

BIBLIOGRAPHY*

Adams, J. R. "The Drinking Driver - Who Is He? Oral Habits and Traffic Accidents - Overdependency." Proceedings of the 4th International Conference on Alcohol and Traffic Safety, Indiana, 1965, p. 41.

Addiction Research Foundation of Ontario. "The Chronic Drunkenness Offender." Addiction, Toronto, 11(1): 9(1965). (As above, also 'Drugs and Driving' 12(3): 35(1965)).

Agata, B.C. "Searches and Seizures Incident to Traffic Violations - A Reply to Professor Simeone." St. Louis University Law Journal, 7:1 (Spring 1962).

"Alcohol and Driving". Criminal Law Quarterly, Editorial, 7:281 (1964-65.)

"Alcohol and Traffic Accidents as a Problem in Manitoba." Manitoba Bar News, 35: 178(1964).

Alha, H. "Advance Prevention of Drunken Driving." Proceedings of the 4th International Conference on Alcohol and Traffic Safety, Indiana, 1965, p. 307.

Allsop, R.E . "Drinking Drivers". New Society 6(170): 12-14(1965).

Altavilla, E. "The Obligation to Prevent Other Persons' Imprudence in Road Traffic." Italian Automobile Club, La Scuola Positiva, 70(2): 229-244 (1965).

American Association of Motor Vehicle Administrators. Driving License Administrator's Guide to Driver Improvement. A.A.M.V.A., 1965.

American Bar Association. Report to the City of Detroit on the Study of the Traffic and Ordinance Division, Recorder's Court. A.B.A., Traffic Court Program, Chicago, Illinois, 1965.

American Medical Association. Alcohol and the Impaired Driver. Chicago, 1970.

Ames, W.A. and Peters, E.G. Driving Under the Influence of Alcohol: Determining an Optimum Sanction. Charlottesville, Virginia, Highway Research Council, 1971.

Andenaes, J. "The General Preventive Effects of Punishment." University of Pennsylvania Law Review, 114(7): 949 ff.

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*extracted from the background materials sent out to participants prior to the Workshop.

Andreasson, R. and Bonnichsen, R. "The Frequency of Drunken Driving in Sweden During Period When Supply of Alcoholic Drink was Restricted." Proceedings of 4th International Congress on Alcohol and Traffic Safety, Indiana, 1965, p. 279.

Anthony, A. Occupational Licenses: Authority for and Control of Restricted Driving for Employment Purposes. A Survey of State Laws and Their Administration. Washington D.C., Highway Users Federation, 1971.

Anthony, A. Suspension and Revocation of Drivers' Licenses. (Rev. ed.). Washington D.C., Highway Users Federation, 1970.

Arens, R. In Defense of Public Order - the Emerging Field of Sanction Law. Columbia, Columbia University Press, 1961, p. 161.

Aussel, J. "Driving Licence with Points." Chroniques Internationales de Police, 112: 9-15 (1972).

Austin, M. Accident Black Spot. London, Pelican Books, 1966.

Automobile Club of Michigan. Portrait of a Bad Driver. A.C.M., Motor News Department, Detroit, 1970.

Bailey, W.C. Models of Deterrence. Washington, Pullman, 1971.

Baker, J. S. "Research and Traffic Records." Traffic Digest and Review, 19(7): 8-10 (1971).

Beaumont, K. and Newby, R. F. "Traffic Law and Road Safety Research in the United Kingdom." Paper delivered at National Road Safety Symposium, Canberra, Australia, March 1972.

Bell, R.G. "Medico-Legal Management of Alcohol Addiction." Criminal Law Quarterly, 3: 43 (1960-61).

Bellfatto, H. S. "Judicial Leadership can Curb Juvenile Crime Rate." Municipal Court Review 5(4): 25-30 (1965).

Ben-David, G., Lewin, I., Haliva, Y., and Tel Nir, N. "The Influence of Advisory Letters in Changing the Driving Behaviour of Private Motorists in Israel." Accident Analysis and Prevention 2(3): 189-200 (1970).

Ben-David, G., Zemach, M., Tel-Nir, N., and Alon, E. Report of the Committee on a Research Proposal for (1) the Correlation Between Traffic Offences and Road Accidents; (2) the Possibility of Changing Driving Behaviour by Means of Communication Methods. Israel, Central Bureau of Statistics, Jerusalem, 1968.

Bennett, R. O. "The Traffic Hot-Head: An Unsuspected Motoring Menace." Police Chief 32(11): 20-30 (1965).

Beresford, R. "Three Routes to Traffic Safety Group Therapy for Chronic Traffic Violators." Trial 7:42 (March/April 1971).

Bjerver, K. B. "Punishment or Treatment for Intoxicated Drivers." Blvtalkohol 9(1): 59-62 (1972).

Borkenstein, R. F. "A Panoramic View of Alcohol, Drugs and Traffic Safety." Police 16(11): 6-15 (1972).

Borkenstein, R. F. "Handling the Drinking Driver." Proceedings of 3rd International Conference on Alcohol and Road Traffic, London, 1962, p. 82.

Borkenstein, R. F. et. al. The Role of the Drinking Driver. Indiana, Indiana University Press, 1964.

Bradford, L. W. "Changing Attitudes in Drinking Driver Enforcements as Reflected by the Actions of Researchers, Courts, Prosecutors, and Society." Forensic Sciences Society Journal 6(4): 204-208 (1966).

Braunstein, P. W., Weinberg, S. B., and Dal Cortive,L. "The Drunk and Drugged Driver versus the Law." Journal of Trauma 8(1):83-90 (1968).

Brennan, R. M. "Judicial Review of Driver License Suspension Cases." National Safety Congress Transactions 24: 16-23 (1969).

British Medical Association. Medico-Legal Investigation of the Drinking Driver. Report of a Special Committee of B.M.A., London, 1965.

Bryk, O. Improving the Enforcement of Driver License Denials, Suspensions, and Revocation. Part II: Technical Report. Final Report. Washington D.C., Exotech Systems Inc., 1970.

Buikhuisen, W. "Criminological and Psychological Aspects of Drunken Drivers." (a) Paper from The Human Factor in Road Traffic Stockholm, 1969, p. 30. (b) British Journal of Criminology 12(2): 149 (1972).

California State Department of Motor Vehicles. A Pilot Evaluation of a Renewal Test Waiver Program for Good and Average Drivers. (Report to State Legislature). California State D.M.V., Sacramento, 1971.

Campbell, B. J. "The Effects of Driver Improvement Actions on Driving Behaviour." Traffic Safety Research Review 8(8): 19-31 (1959).

Campbell, D. T. and Ross, H. L. "The Connecticut Crackdown on Speeding; Time-Series Data in Quasi-Experimental Analysis." Law and Society Review 3: 33-53 (1968).

Canadian Bar Association. "Blood Alcohol and Traffic Accidents." Report of a Special Committee. Canadian Bar Journal 8:70 (1965).

Canada Bureau of Statistics. Traffic Enforcement Statistics. Annual, Ottawa.

Canadian Highway Safety Council. Proceedings of Conference. Queen's Printer, Ottawa, 1955-68, Annual. [Canada Safety Counsil 1968-].

Canty, A. Organic Factors as Related to Traffic Violations. Washington D.C., National Research Council, 1954.

"The Careless Driver: His Wrong and His Rights." University of Colorado Law Review 38:584 (1966).

"Causing Death by Dangerous Driving - Penalty." Chitty's Law Journal 13:263 (1965).

Chalfant, M. W. and King, G. F. Reports of Studies on the Effectiveness of Driver Improvement Procedures. Michigan State University, East Lomsing, Michigan, Highway Traffic Safety Centre, 1960.

Charlton, E.M. "House Arrest - How It Works." Municipal Court Review 4(1): 25-27 (Spring 1964).

Chitty, R. M. W. "Drunk Driving and Mens Rea." Criminal Law Quarterly 1: 200 (1958-59).

Cisin, I. "Methods and Objectives in Research on Drinking Driving." Proceedings of 4th International Conference on Alcohol and Traffic Safety, Indiana, 1965, p. 50.

Cisin, I. "Social Psychological Factors in Drinking-Driving." Alcohol and Traffic Safety, U.S. Public Health Department, 1963.

Cohen, J. and Preston, B. Causes and Prevention of Road Accidents. London, Feber and Faber, 1968.

Coldwell, B. B. Report on Impaired Driving Test. Royal Canadian Mounted Police, Ottawa, Queen's Printer, 1957.

Coldwell, B. B. and Grant, G. L. "Some Characteristics of Suspected Drinking Drivers." Proceedings of 3rd International Conference on Alcohol and Road Traffic, London, 1962.

Commission on Driving While Under the Influence of Drink or a Drug - Report. Dublin, Irish Stationary Office, 1963.

Common, W. B. Philosophy of Sentencing and Disparity of Sentences. The Foundation for Legal Research in Canada, 1969.

"Compulsory Periodic Re-examination of Drivers." University of Florida Law Review, 1962.

Coppin, R. S. A Controlled Evaluation of Group Driver Improvement Meetings. State of California, Department of Motor Vehicles. Report No. 9, 1961.

Coppin, R.S. et al. Control of the Negligent Driver. State of California Department of Motor Vehicles. Report No. 8, 1961.

Coppin, R.S..and Peck, R. C. California Driver Record Study. Part 8: The Prediction of Accident Involvement Using Concurrent Driver Record Data. State of California, Department of Motor Vehicles, Report No. 20, 1967.

Coppin, R.S. and Van Oldenbeck, G. Control of the Negligent Driver Part III: Six Years After Action Driving Record. Report No. 25, State of California, Department of Motor Vehicles, 1966.

Coppin, R. S. and Van Oldenbeck, G. Driving Under Suspension and Revocation. Report No. 18. State of California Department of Motor Vehicles, 1965.

Council of Europe. Explanatory Report on European Convention on the Punishment of Road Traffic Offences. Strasbourg, 1970.

Crampton, R. C. "The Effectiveness of the Present System of Legal Sanctions." Paper delivered at the 2nd Annual Automobile Insurance Industry Traffic Safety Research Symposium on Driver Behaviour - Cause and Effect, Ann Arbor, Michigan, Highway Safety Research Institute, 1968.

Crampton, R. C. "Driver Behaviour and Legal Sanctions: A Study of Deterrence." (a) Michigan Law Review 67: 421 (1969). (b) Proceedings of 2nd Annual Traffic Safety Research Symposium of Automobile Insurance Industry, Washington D.C., March 1968.

Crancer, A. Jr., and McMurray, L. Accident and Violation Rates of Washington Drivers with Medical Licensing and Driving Restrictions. Washington Department of Motor Vehicles, Report No. 007, Olympia, 1967.

Cressey, D. R. Law, Order and the Motorist. (Unpublished paper) 1971.

Cresswell, W. and Froggatt, P. The Causation of Bus Driver Accidents - An Epidemiological Study. London, Oxford University Press, 1963.

Crowthorne, E. Research on Road Safety. London, H.M.S.O., 1963.

Curran, W. J. Trauma and the Automobile. Cincinnati, W. H. Anderson and Company, 1966.

Dale, A. (ed.). The Role of the Drinking-Driver in Traffic Accidents. Department of Police Administration, Indiana University, 1964.

"Deprivation of the Right to Drive a Motor Vehicle." Chroniques Internationales de Police 111: 5-12 (1972).

"Disqualification and Endorsement." Solicitors Journal. Comment. 107: 483 (1963).

Donigan, R. L. and Fisher, E. C. Should Judges Suspend Or Revoke Drivers' Licenses? Evanston, Illinois, North-Western University, Traffic Institute, 1965.

Donigan, R. L. and Fisher, E.C. Suspension of Sentence and Probation in Traffic Cases. Evanston, Illinois, North-Western University, Traffic Institute, 1965.

Economos, J. P. "Driver Licensing and the Court." Traffic Digest and Review 17(7): 3-6, 24 (1969).

Economos, J. P. "Effective Traffic Court Penalties." Traffic Quarterly 15(4): 547-562 (1961).

Economos, J. P. "The Traffic Law System. Part I", in Joscelyn, K. B. and Jones, R. K. A Systems Analysis of the Traffic Law System. Reference vol II. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1972.

Elliott, D.W. and Street, H. Road Accidents. Harmonsworth, Penguin Books Limited, 1968.

European Convention on the Punishment of Road Traffic Offences, Proceedings, Council of Europe, Strasbourg (France), 1970. (European Treaty Series No. 52).

Exotech Systems, Inc. Improving the Enforcement of Driver License Denials, Suspensions and Revocations. Part I: Preliminary Guidelines. Final Report. Exotech Systems, Inc., Washington D.C., 1970.

Fetzer, A. "Traffic Education in the Correctional Institution." Zeitschrift fur Strafvollzug, West Germany, 1965.

Filkins, L. D. "The Integration of Alcohol Abuse and Highway Safety Interests and Activists." Paper presented to the Fall Meeting of the Michigan Alcohol and Addiction Association, Marquette, October 1971.

Finch, J. R. and Smith, J. P. Psychiatric and Legal Aspects of Automobile Fatalities. Springfield, Illinois, 1970.

Fine, B. J. "Introversion - Extraversion, and Motor Vehicle Driver Behaviour." Percept. Motor Skills 12: 95-100 (1963).

Forbes, T. W. (ed.). Human Factors in Highway Traffic Safety Research. New York, Wiley-Interscience, 1972.

Fornataro, J. V. "Limiting Factors in Criminal Sentencing." University of British Columbia Law Review 1967: 161.

Gallagher, T. "Law Traffic Regulation and the Administration of Justice." Highway Research Board Special Report No. 86: 93-112 (1965).

Gardiner, J. A. Traffic and Police - Variations in Law Enforcement Policy. Cambridge, Harvard University Press, 1969.

Geurts, A. C. "The Prison Sentence, and Individualization - Evaluation of Individualization of Sentencing of Traffic Violators to Short Term Sentencing in the Netherlands." 1964.

Gissane, W. The Nature and Causation of Road Injuries. London, 1963.

Glatt, M.M. "Recurrent Driving Under the Influence." Proceedings of 3rd International Conference on Alcohol and Road Traffic. London, 1962.

Haddon, W. and Klein, D. "Assessing the Efficacy of Accident Counter Measures." Traffic Quarterly, July 1965.

Haddon, W. "The Shocking Facts About Drinking and Driving." Popular Science 194: 78-81 (May 1969).

Haines, E. L. "Let's Impose a Limit on Drinking and Driving." Criminal Law Quarterly 3: 60 (1960-61).

Halloran, E. W. "The Drinking Driver in Court." Analogy 10: 21 (1971).

Henderson, M. and Messiter, G. The Provisional License Scheme: A Statistical Evaluation. Report No 4/70. New South Wales (Australia), Department of Motor Transport, Traffic Accident Research Unit, 1970.

Home Office. Offences Relating to Motor Vehicles. London, H.M.S.O. Annual.

Hood, R. "Research Into the Effects of Punishments and Treatments." Collected Studies in Criminological Research, No. 1, Council of Europe, Strasbourg, 1967.

Hood, R. "Research on the Sentencing of Motor Offences in Magistrates Courts." Proceedings of 2nd National Conference on Research and Teaching, Cambridge, 1966.

Hood, R. Sentencing the Motor Offender. Cambridge, Studies in Criminology XXXI, 1967.

Hooper, A. "Curbside Licence Suspension." Criminal Law Quarterly 10:22 (1967).

Hooper, A. "Intermittent Prohibitions Against Driving." Criminal Law Quarterly 9: 283 (1967)

Hooper, A. "The Burden of Proof in Dangerous Driving Cases." Criminal Law Quarterly 9(1): 47-53 (1966).

Hooper, A. "Dangerous Driving - A Controversial Decision." Criminal Law Quarterly 9: 37-46 (1966).

Hooper, A. "Dangerous Driving: What is Advertant Negligence?" Criminal Law Quarterly 10: 403 (1967-68).

Hricko, A. R. "Driver License Suspension...A Paper Tiger." Police Chief 37(2): 20-24 (1970).

Hutchison, P. et. al. "A Study of the Effects of Alcohol on Mental Functions." Criminal Law Quarterly 7: 343 (1964-65).

Hyde, W. N. A Review of Point Systems with Recommendations for Administrative Procedures. (Doctoral Thesis). New York, New York University, 1958.

Institute on Traffic Safety. Traffic Law Enforcement - A Guide for Patrolmen. Dallas, 1962.

International Conference on Alcohol and Road Traffic - 3rd Proceedings of. London, 1962.

International Conference on Alcohol and Traffic Safety - 4th Proceedings of. Indiana, 1965.

International Symposium on the Drunkenness Offence - Proceedings of. London, 1968.

Isaacson, I. Legal Driving. Lewiston, Maine, Legal Publications, 1963.

Japan. National Policy Agency. Countermeasures to Intoxicating Liquor Driving. Tokyo, N.P.A., Traffic Bureau, 1972.

Japan. National Policy Agency. Driver's License: Measures to be Taken Against Drivers. Tokyo, N.P.A., Traffic Bureau, 1966.

Japan. National Policy Agency. The Outline of the Point System in Japan. Tokyo, N.P.A., Traffic Bureau, 1968.

Johnston, W. "Orders Prohibiting Driving for Intermittent Periods of Time." Criminal Law Quarterly 11: 407 (1969).

Joscelyn, K. B. "The Adjudication System." Management Workshop for Alcohol Safety Action Project Leaders, Proceedings. Alexandria, Human Resources Research Organization, 1971, pp. 115-118.

Joscelyn, K. B. and Jones, R. K. The Problem Drinking Driver; A Legal Perspective. Interim Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1970.

Joscelyn, K. B. and Jones, R. K. A Systems Approach to the Analysis of the Drinking Driver Control System. Vol. I Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1971.

Joscelyn, K. B. and Jones, R. K. A Systems Approach to the Analysis of the Drinking Driver Control System. Vol. III - The Problem Drinking Driver, A Legal Perspective. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1971.

Joscelyn, K. B. and Jones, R. K. A Systems Analysis of the Traffic Law System. Reference Vol. I. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1972.

Joscelyn, K. B. and Jones, R. K. A Systems Analysis of the Traffic Law System. Reference Volume II. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1972.

Joscelyn, K. B. and Jones, R. K. A Systems Analysis of the Traffic Law System. Reference Volume III. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1972.

Joscelyn, K. B., Maikel, R. P., and Goldenbaum, D. M. The Drinking Driver: Guidelines for Court Personnel. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1971.

Joscelyn, K. B., Maikel, R. P., and Goldenbaum, D. M. The Drinking Driver: A Survey of Legal Issues. (Court Procedures Survey, Reference Vol. II). Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1971.

Joscelyn, K. B., Maikel, R. P., and Goldenbaum, D. M. A Survey of Court Procedures for Handling Problem Drinkers Convicted of Driving While Intoxicated. Summary. Final Report. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1971.

Joscelyn, K. B. and Swanson, T.E. Systems Analysis of the Traffic Law System. The Traffic Law System: Overview of a Risk Management System. Bloomington, Illinois, Indiana University, Institute for Research in Public Safety, 1970.

Justice (Society). Trial of Motor Accident Cases. London, 1966.

Kaestner, N. "Human Abilities and Driver Improvement", in Forbes, T. W. (ed.), Human Factors in Highway Traffic Safety Research. New York, Wiley-Interscience, 1972, pp. 348-379.

Kaestner, N., Howard, V., and Warmoth, E. J. Oregon Study of Drinking Drivers. Salem, Oregon Department of Transportation, 1969.

Kaestner, N., Warmoth, E. J., and Syring, E. M. The Effectiveness of Warning Letters in Driver Improvement. Salem, Oregon Department of Motor Vehicles, 1965.

Kaestner, N. "Research in Driver Improvement - The State of the Art." Traffic Quarterly 22(4): 497-520 (1968).

Kerlan, M. W., Mortimer, R. G., Mudge, B., and Filkins, L. D. Court Procedures for Identifying Problem Drinkers. Vol. I. Manual. Ann Arbor, Michigan, Highway Safety Research Institute, 1971

Kielty, J. "Will Cars Say No to Drinking Drivers?" Traffic Safety 72(4): 10-13, 39 (1972).

Kraus, A. S., Steele, R., Ghent, W. R., and Thompson, M. G. "Pre-Driving Identification of Young Drivers with a High Risk of Accidents." Journal of Safety Research 2(2): 55-56 (1970).

Leeming, J. J. Road Accidents. London, Cassels and Company, 1969.

Levin, G. S. "Traffic Courts - the Judge's Responsibility." American Bar Association Journal 46: 143 (1960).

Little, J. W. "A Theory and Empirical Study of What Deters Drinking Drivers, If, When, and Why?" Administrative Law Review 23(1) 25-57 (1970).

Little, J. W. "Administration of Justice in Drunk Driving Cases." Paper delivered at Advanced Traffic Court Seminar, American Bar Association, New York, N.Y., 1971.

Little, J. W. "Challenges to Humanitarian Legal Approaches for Eliminating the Hazards of Problem Drinking Drivers." Paper delivered at Community Response to Alcoholism and Highway Crashes Conference, Ann Arbor, Michigan, 1969.

Little, J. W. "Who Is the Deadly Drinking Driver?" Journal of Criminal Law, Criminology and Police Science 59(4): 619-623 (1968).

Little, J. W. "Control of the Drinking Driver: Science Challenges Legal Creativity." American Bar Association Journal 54: 555-559 (1968).

Lodge, T. S. "Criminal Statistics." Journal of the Royal Statistical Society 116: 283-297 (1953).

Logan, C. H. Legal Sanctions and Deterrence from Crime. Bloomington, Illinois, 1971.

Lower, J. S., Mortimer, R. G., and Filkins, L. D. Court Procedures for Identifying Problem Drinkers. Vol. III: Scoring Keys. Ann Arbor, Michigan, Highway Safety Research Institute, 1971.

Lundsgaard, E. "Procedure in Denmark for Dealing with Drinking Drivers." Alcohol and Road Traffic, 2nd International Conference, Proceedings. International Committee on Alcohol and Road Traffic, 1955, pp. 75-78.

MacKay, G. A Review of Road Accident Records. Birmingham, Birmingham University Press, 1965.

MacKay, G. Selected Bibliography of Road Accident Research. Birmingham, Birmingham University Press, 1965.

Management Workshop for Alcohol Safety Action Project Leaders. Proceedings. Alexandria, Human Resources Research Organization, 1971.

Mancuso, J. C. "Utility of the Culpability Concept in Promoting Proper Driving Behaviour." Marquette Law Review 55: 85 (1972).

Marsh, W.C. Modifying Negligent Driving Behaviour: Evaluation of Selected Driver Improvement Techniques. State of California, Department of Motor Vehicles, Report No. 36, Sacramento, 1971.

Martin, J. A. An Annotated Bibliography of Literature on Drinking and Driving. Alberta, 1969.

Maxwell, I. "Drinking and Driving." Canadian Bar Journal 9: 279 (1966).

McBride, R. S., and Peck, R. C. Modifying Negligent Driver Behaviour Through Warning Letters. Sacramento, State of California, Department of Motor Vehicles, 1969.

McGonegal, J. "The Role of Sanction in Drinking Behaviour." Quarterly Journal of Studies on Alcohol 33(3): 692-697 (1972).

McGuire, F. L. "Psychological and Educational Methods of Influencing Driver Behaviour." International Symposium on Psychological Aspects of Driver Behaviour. Papers Presented. Division II Section II.2.C. Voorburg, Institute for Road Safety Research, 1971.

McGuire, F. L. "Psychological Comparison of Automobile Drivers. Accident and Violation Free v. Accident and Violation Incurring Drivers." United States Armed Forces Journal 7: 1741 (1965).

McWilliams, P. K. "What is Dangerous Driving?" Criminal Law Quarterly 7: 297 (1964).

Michigan Conference on the Problem Driver and Traffic Safety: Resolutions and Task Force Reports, 1971-72. Michigan, Conference on the Problem Driver and Traffic Safety, East Lansing, Michigan, 1972.

Middendorff, W. "The Effectiveness of Punishment and Other Measures of the Law Relating to Traffic Offences." Collected Studies in Criminological Research, Vol. II, Council of Europe, Strasbourg, 1968.

Middendorff, W. "Criminology of Traffic Offences." Federal Probation 27: 36 (1963).

Middendorff, W. "Desirable Developments in the Administration of Justice." Proceedings of 4th European Conference of Directors of Criminological Research Institutes, Strasbourg, 1966, p. 96.

Miller, R. S. "The Needs and Potential for Co-operation Between Human Factors Specialists and Lawyers in Research and Development of Automobile Accident Law." Human Factors 14(1): 25-33 (1972).

Minor Traffic Violations - A New Approach." Maine Law Review 19: 261 (1967).

Moppert, A. "Sentencing for Traffic Violations." Schweizerische Zeitschrift fuer Strafrecht 80(4): 402-422 (1964). German.

Mortimer, R. G. "Identification of Problem Drinkers." Management Workshop for Alcohol Safety Action Project Leaders. Proceedings. Alexandria, Human Resources Research Organization, 1971.

Mortimer, R. G., Filkins, L. D., and Lower, J. S. Development of Court Procedures for Identifying Problem Drinkers: Final Report. Phase II. Ann Arbor, Michigan, Highway Safety Research Institute, 1971.

Mortimer, R. G., Kerlan, M. W., Filins, L. D., and Lower, J. D. "Identifying a Major Hazard on the Highways - The Problem Drinking Driver." Police 16(8): 17-24 (1972).

Mudge, B., Kerlan, M. W., Post, D. V., Mortimer, R. G., and Filkins, L. D. Court Procedures for Identifying Problem Drinkers. Vol. II: Supplementary Readings. Ann Arbor, Michigan, Highway Safety Research Institute, 1971.

National Academy of Engineering. Traffic Safety - A National Problem. Proceedings of Symposium. Washington D.C., 1966.

National Safety Council, U.S.A. Too Long at the Wheel - A Study of Exhaustion and Drowsiness as they Affect Traffic Accidents. Chicago, 1935.

Neilson, G. D. "Traffic Courts Should Educate While They Adjudicate." Federal Probation 28: 18 (1964).

New York State, Department of Motor Vehicles. Licenses and Restrictions Placed on Their Driving Privilege in New York State in 1963. New York, State Department of Motor Vehicles, 1964.

Niekirk, P. H. Motoring Offences. London, Butterworths, 1967.

Norman, L. G. Road Traffic Accidents: Epidemiology, Control and Prevention. Geneva, World Health Organization, 1962.

O'Neall, P. A., and McKnight, K. Effectiveness of Individual and Group Driver Improvement Interviews. Washington, Department of Motor Vehicles, Olympia, 1970, (Report No. 027).

Packer, H. The Limits of the Criminal Sanction. Stanford, Stanford University Press, 1968.

Page, L. The Problem of Punishment. London, Clarke Hall Fellowship Lectures, 1946.

Parker, G. E. "Law and Order on the Highway." Chitty's Law Journal 18: 150 (1970).

Parker, G. E. "Sentencing - Is It the Function of the Courts Alone?" Criminal Law Quarterly 5: 405-409 (1963).

Parry, J. "Criminal Traits in the Road Offender." London, Observer Weekend Review (5th May, 1963).

Parry, M. H. Aggression on the Road: A Pilot Study of Behaviour in Driving Situations. London, Tavistock, 1968.

Peck, R. "The Effectiveness of Warning Letters in Reducing Accident and Citation Frequency." Traffic Safety Research Seminar Proceedings, California Transportation Agency, 1967, pp. 9-15.

Pomerant, D. L. "Drunk Driving, Impaired Driving and Duplicity." Criminal Law Quarterly 11: 348 (1969).

Popkess, A. Traffic Control and Accident Prevention. London, Chapman and Hall, 1951.

Preston, B. A Plan for Road Safety. London, Fabian Society, 1962.

Pretzel, P. W. "Automobiles and the Courts in the Seventies - A Forecast and An Invitation." American Bar Association Journal 512: 1970.

Pyle, H. "Getting the Alcohol Story to the People." Traffic Safety 70: 22 [1970].

"Regulation of Motorists and the Law of Arrest." South Dakota Law Review 9: 198 (1964).

Research Triangle Institute. Speed and Accidents - Final Report. Duke University, Durham N.C. Indiana, 1970.

"Revocation of Suspension of Drivers' Licences." Washington and Lee Law Review 21: 163 (1964).

Roberts, H. J. Causes, Ecology and Prevention of Traffic Accidents. Springfield, Illinois, 1971.

Roberts, R. E. Alcohol Safety Study - Social Ecology of Violent Death in a Metropolitan Community; A Comparison of Traffic Fatalities and Other Causes of Death. Final Report, Houston, Texas, 1968.

Rohac, W. J. "Regina's Juvenile Bicycle Safety Court." Canadian Journal of Corrections 6: 374 (1964).

Rose, A. M. and Prell, A. E. "Does the Punishment Fit the Crime? A Study in Social Valuation." American Journal of Sociology 61:247 (1955).

Rumar, K. et. al. Studies in Traffic. Copenhagen, Muuskgaard, 1966.

Sackman, H. "Prototype Community Demonstration Programs on Re-Educating the Drinking Driver." Management Workshop for Alcohol Safety Action Project Leaders. Proceedings. Alexandria, Human Resources Research Organization, 1971, pp. 67-71.

Samuels, A. "The Motoring Offender: What Can We Do About Him?" Criminal Law Review 129: 1969.

Santa Maria, J. N. "Treatment of the Drinking Traffic Offender." Excerpta Criminologica 8: 1637 (1968).

Schlesinger, L. E. and Marx, B. "The Computer, Newest Tool in Driver Improvement." Traffic Safety, February 1964.

Schmidt, W. S. and Smart, R. G. "Alcoholics, Drinking and Traffic Accidents." Quarterly Journal of Studies on Alcohol 20: 613-644 (1959)

Schmidt, W. and Smart, R. G. "Review of the Present State of Knowledge of Alcohol, Alcoholism and Driving." Alcoholism 5(4): 17 (1958).

Schmidt, W. and Smart, R. G. "A Note on Alcoholics and Drunk Driving." Criminal Law Quarterly 1: 419 (1958-59).

Schmidt, W. and Smart, R. G. "Problem Drinking as a Factor in Drinking - Driving Offences." Canadian Journal of Corrections 3: 153-158 (1961).

Schuster, D. H. "Follow-up Evaluation of the Performance of Driver Improvement Classes for Problem Drivers." Journal of Safety Research, 1: 80-87

Schuster, D. H. and Guildford, J. P. "An Analysis of Accident Repeater and Chronic Violator Drivers." Proceedings of 47th National Safety Congress and Exposition, Report No. 1. Los Angeles, 1959.

Schuster, D. H. "A Two-Year Follow-up of Official Action Taken Against Problem Drivers." Paper presented at 79th Annual Convention of the American Psychological Association, Washington D.C., 1971.

Schwartz, R. D. and Orleans, S. "On Legal Sanctions". University of Chicago Law Review 34: 274.

Scottish Home and Health Department. Statistics Relating to Police Apprehensions and Criminal Proceedings. Edinburgh, H.M.S.O., Annual.

Sellin, J. T. The Protective Code - A Swedish Proposal. Stockholm, Department of Justice, 1957.

Selzer, M.L. and Weiss, S. "Alcoholism and Fatal Traffic Accidents: A Study of Futility." (a) Municipal Court Review 5(3): 15-20 (1965). (b) Addiction 12(3): 11 (1965).

Separovic, Z. "Elements of Criminology in Traffic." Yugoslavia, 1966.

Shannon, L. P. Motor Vehicle Offences and the Summary Conviction Court. Toronto, Canada Law Book Company, 1964.

Shaw, L. Accident Proneness; Research in Occurrence, Causation and Prevention of Road Accidents. Oxford, Pergamon Press, 1971.

Simeone, J. J. "Search and Seizure Incident to Traffic Violations." St. Louis University Law Journal 6: 506 (1961).

"Some Psychological Aspects of Sentencing." Canadian Journal of Corrections 3: 66-86 (1961).

Spiegelenberg, J. W. "The Normal System - The Separation of Traffic Violators From Other Prisoners." Holland, 1964.

Stapleton, B. "Dangerous Driving and Mens Rea." University of New Brunswick Law Journal 16: 49 (1966).

Steer, D. J. and Carr-Hill, R.A. "The Motoring Offender - Who Is He?" Criminal Law Review 214: 1967.

Steinburg, D. "A Study of the Effects of Alcohol on Mental Functions." Criminal Law Quarterly 7: 343-360 (1964).

Stewart, E. I. Rehabilitation of the Drunken Driver. Teachers' College, Columbia University, 1970.

Strachan, J. G. Impaired Drivers' Project: A Working Policy and Procedure Manual. (3rd Revision). Edmonton (Alberta, Canada), Alberta Attorney-General's Office, Queen's Printer, 1971.

Sweden, Department of Justice, Symposium on the Human Factors in Road Traffic. Proceedings. Stockholm (Sweden), Department of Justice, 1971.

Tallquist, A. "Therapeutic Measures and the Traffic Offender." Proceedings of Symposium on Human Factor in Road Traffic. Stockholm, Department of Justice, November 1969, p. 96.

Teplitsky. "The Continuing Controversy; The Nature of the Offence of Dangerous Driving." Criminal Reports [New Series] 8: 309 (1970).

Thal, S. A Descriptive Analysis of Driver Licensing in the State of New York. Ann Arbor, Michigan, University of Michigan, Law School, 1966.

Thompson, R. S., and Murphy, T. C. "Toward a Rational Vehicle Code." California State Bar Journal 41: 508 (1966).

Tillman, W. A. et. al. "Group Psychotherapy Amongst Persons Involved in Frequent Automobile Accidents." Proceedings of Symposium on Prevention of Highway Injury, University of Michigan, 1967.

Tillman, W. A. and Hobbs, G. E. "The Accident - Prone Automobile Driver - A Study of Psychiatric and Social Background." American Journal of Psychiatry 106(5): 321-331.

Timberlake, W. E. A Study of Procedures Used to Deter Driving While Under Revocation or Suspension. Evanston, Illinois, North Western University, Traffic Institute, 1970.

"The Traffic Holocaust: A Possible Partial Solution." Chitty's Law Journal 16: 198 (1968).

"Traffic Court Reform." Columbia Journal of Law and Social Problems 4: 255 (1968).

U.S. Senate, 90th Congress, 2nd Session, Committee on Commerce. Automobile Insurance Investigation. Senate Report No. 1086. Washington D.C., 1968.

U.S. Task Force on Drunkenness, Report of Washington, U.S. Government Printer, 1967.

"Validity of Greater Fine Than Minimum for Failure to Respond Promptly to Traffic Tickets." [Berger v. Denver (Colo.)]. Oklahoma Law Review 14: 543 (1961).

Vaupel, C. F. Jr. "Driving Violators' Opinions of Police." Police 16(6): 18-20 (1972).

Vernon, H. M. Accidents and Their Prevention. Cambridge, Cambridge University Press, 1936.

Villetorte, P. "A System of Penalizing Road Traffic Offences." Chroniques Internationales de Police 19(108): 9-11 (1971).

Wagner, M. H. "A Legislative Approach to Alcohol and Highway Safety." National Safety Congress Transactions 24: 29-32 (1971).

Wagner, M. H. "When We Stand on Drinking-Driving Legislation." Traffic Safety 72(1): 16-17, 35-36 (1972).

Waller, P. F. "The Youthful Driver: Some Characteristics and Comparisons." Behavioural Research in Highway Safety 1(3): 143-154 (1970).

Waller, J. "Drinking Drivers and Driving Drinkers - The Need for Multiple Approaches to Accidents Involving Alcohol." Prevention of Highway Injury. Highway Safety Research Institute, University of Michigan, 1967, pp. 30-37.

Walls, H. J., and Brownlie, A. Drink, Drugs and Driving. London, 1970.

Ward-Smith, H. "Drinking and Driving." Criminal Law Quarterly 3: 65 (1960-61).

Weber, K., and List, B. A Bibliography of University of Michigan Reports and Publications on Highway Safety Since the Establishment of the Highway Safety Research Institute, December 17th, 1965. Ann Arbor, Michigan, University of Michigan, Highway Safety Research Institute, 1972.

Wilkinson, G. S. "Road Traffic 1954-63." Criminal Law Review 348-360 1964

Wilkinson, G. S. Road Traffic Offences. London, Solicitors Law Stationary Society. (No date).

Whitlock, F. A. Death on the Road: A Study in Social Violence. London, Tavistock, 1971.

Willcock, H. D., and Stokes, J. Deterrents and Incentives to Crime Among Youths Aged 15-21 years. 2 Parts. London, H.M.S.O., 1968.

Willett, T. C. Criminal on the Road. London, Tavistock, 1964.

Willett, T. C. Drivers After Sentence. [expected date of publication by Heineman, London, December 1972].

Willett, T. C. "Research Concerning the Characteristics of Motoring Offenders." Proceedings of Council of Europe Conference, Strasbourg, 1966.

Willett, T.C. et. al. Relation Between Social Maladjustment and Traffic Offences. London, Reading University Press, 1967.

Willett, T. C. "Criminological Aspects of Road Traffic Offences." Collected Studies in Criminological Research, Vol. II, Council of Europe, Strasbourg, 1968.

Williams, C.A. Traffic Accidents. London, Thomas, 1954.

Wright, J. De. P. "Driving While Licence Under Suspension." Criminal Law Quarterly 9: 278 (1967).

Wright, K. "Does Traffic School Make Safer Drivers?" Road Test 4(2): 31-33 (1968).