PORTRAYALS of DRIVING and ALCOHOL in POPULAR TELEVISION PROGRAMMES SCREENED in AUSTRALIA

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1. EXECUTIVE SUMMARY

In 1987 the Federal Office of Road Safety (FORS) commissioned a research project to monitor and analyse the road safety content of children's television. The study developed from an interest in whether implicit and explicit road safety messages in television programmes affect attitudes to road safety, and possibly, road safety behaviour. The report of the study made a number of recommendations of relevance to producers and programmers of children's television.

The study reported here was commissioned by FORS, with the objective of monitoring a comprehensive sample of adult television programmes and analysing its content in relation to positive and negative road safety messages.

An additional objective was to examine in detail a comprehensive sample of alcohol advertisements, in order to assess any content which may relate directly or indirectly to road safety issues. Alcohol has been identified as the single most important contributing factor to road fatalities and injuries in Australia. The way in which alcohol is depicted in television advertisements is of interest in this context.

A comprehensive content analysis of the portrayals of driving incidents and alcohol incidents in popular television programmes has been conducted. In addition, all alcohol advertisements screened in the week November 9 to November 15 1989, were analysed. Thirty-three unique advertisements were each screened several times and produced a total of 155 alcohol advertisements for that week.

1.1 Portravals of Driving

[Based on AGB: McNair viewer demographics and the content analyses carried out], males are more exposed to portrayals of driving than are females. In addition, males aged 17 or more years see most of the driving portrayals shown on television.

Two-thirds of driving portrayals were screened in television advertisements for cars (47% of all incidents), or were seen in other non-car advertisements (20% of all incidents).

The great majority of driving (87%) was portrayed in Australian productions. 25 driving incidents (13% of the total) were screened in American television productions. However, relative to Australian productions, American programmes showed fewer car drivers with seat belts worn or buckled up; twice as much speeding; half as many again incidents of endangering driving; but fewer portrayals of inattentive driving.

Such results make it clear that, as far as portrayals of road safety are concerned, the real problems relate far more strongly to imported American television programmes,

than to Australian productions. Results of the literature review indicate that Americans also voice more concern about the possible impact of television on viewers, than their Australian counterparts. Results obtained in the present content study indicate that American television programmes could be monitored by Australian television licensees for portrayals of driving, which it could be argued are likely to influence viewers. It may be possible to construct a programme classification system, in terms of driving portrayals, which warns viewers when they are likely to see Australian traffic rules violated.

1,2 Comparisons with Previous Driving Studies

It is difficult to make coherent comparisons between results obtained in the present study and those previously reported in the literature. One of the principal reasons for such difficulties relates to whether content studies have included advertisements, which the current study has done. In addition, very few content analyses have been performed of televised portrayals related to road safety issues. Nevertheless, examination of the two main studies, which do exist, indicate that American prime-time television from 1975 to 1979 portrayed much more driving in television fictional programmes than did comparable Australian screened television programmes in November 1989. These studies are comprehensively reviewed in the report.

1,3 Alcohol Advertising

In the week sampled, thirty three unique alcohol advertisements were screened, a total of 155 times. As might be expected, because of regulation of such advertising, 93% of these alcohol advertisements were screened after 8.30 p.m. Beer was most frequently advertised and accounted for nearly half (47%) of the alcohol advertised. Spirits were next most frequently advertised (32%), followed by wine and champagne (16%), and cider (5%). Nearly three-quarters of the alcohol advertisements (72%) showed people actually consuming alcohol on screen, but female-only drinking was completely absent in comparison to the 56% depicting male-only drinking. There were no instances where drinkers were driving or planning to drive in the sampled week. However, one advertisement did show people both boating and drinking (but not concurrently). Celebrities appeared only in beer-related advertisements and were employed in onequarter of all alcohol advertisements. Moreover, nearly half of the alcohol advertisements depicted rich/professionals consuming the product, which is surprising considering that fictional programmes depicted mainly blue-collar workers in alcoholrelated scenes. This result does, however, reinforce the methods employed by alcoholadvertising which attempt to associate their product with particular 'ideal lifestyles'. Beer, for example, utilised celebrities and emphasised mateship or social events (depending on the age of the targeted audience) which were aimed at males. Spirits appealed to both sexes by emphasising romance and suggested sexual intimacy.

A comprehensive literature review of television advertising is incorporated within this report, and a number of the recommendations which conclude this report derive from this section. This review includes an examination of the effects of advertising generally, the legislation and codes which regulate alcohol advertising on Australian television, and the results of studies which have attempted to relate alcohol consumption to alcohol advertising.

1.4 Alcohol Portrayed in Television Programmes

In this study, alcohol was screened 143 times in the most popular 54.5 hours of T.V. programmes. The majority of these events were in fictional programmes (42%). One-fifth (21%) were screened in non-fiction programmes.

Younger audience members (13-17 years) of both sexes, were more exposed to alcohol in their favourite T.V. programmes, than were older audience members. Alcohol is frequently consumed in soap opera clubs and bars, which tend to be more popular with younger audience members. Older audience members tend to orientate more to non-fiction programmes on television, than their younger counterparts. As mentioned above, more alcohol is screened in T.V.'s fiction, rather than non-fiction, but alcohol appears as frequently per programme hour in non-fiction as in fictional programmes.

Three-quarters of all alcohol presentations in T.V.'s fiction is screened in popular series programmes. Three-quarters of all alcohol drinkers are adults. While one-third of alcohol presentations show main characters drinking alcohol, another one-third of such characters are seen drinking soft drinks in places where alcohol is served.

All incidents of under-aged drinking (8%) were followed by negative consequences, and 5 cases occurred where alcohol was utilised in crisis situations. These incidents appeared in programmes rating highly amongst younger (13-17 year old) viewers.

Most drinking occurred in the company of both males and females, but female-only drinking was seen only in 5% of all alcohol depictions, in comparison to male-only drinking which occurred in 32% of alcohol displays. Blue-collar workers were involved in more drinking episodes (33%) than other socio-economic classes and, not surprisingly, beer was the most frequently appearing beverage, which reinforced the male and blue-collar image of alcohol.

1.5 Comparisons with Previous Alcohol Content Studies

No systematic content studies, relating to the portrayals of alcohol on Australian

television, were located. Alcohol content studies were located and described from New Zealand, the United Kingdom and the U.S.A. Generally, there was a fair degree of concurrence between the results of the present study and those described in New Zealand. However, major differences were found between the current results and those reported in American studies, which in the main showed a much higher rate of drinking than was evident in this study.

1.6 Organisation of the Report

The report commences with a summary of the current thinking related to the theories which attribute influence to television. More precise literature reviews follow, relating to previous studies of driving behaviour on television and to portrayals of alcohol. Methods and samples for the content study are reported, followed by the results. The findings of the study are related to those of previous studies for both driving and alcohol. A number of recommendations are made.

2. EFFECTS OF TELEVISION

2.1 Introduction

"The power which poetry has of harming even the good (and there are very few who are not harmed), is surely an awful thing?"

'Yes, certainly, if the effect is what you say.'

"...Poetry feeds and waters the passions instead of drying them up; she lets them rule, although they ought to be controlled, if mankind are ever to increase in happiness and virtue"."

(Plato, 1987, p.437)

Plato's vehement attack on the ability of poetry or literature, and any other communicative medium, to 'feed' and 'increase the passions of mankind' undoubtedly opened a Pandora's box of disputes, debates and accusations over the effects of watching any impassioned play or reading an immoral poem. Ever since his famous discourse on the effects of poetry (then the most popular form of entertainment) in Book II of The Republic, philosophers, parents, teachers, politicians and academics have been arguing about the effects of various communicative media on the public. The argument that Plato purports is not irrelevant in the society of the 1990s: claims are often made that violence on television contributes to and may cause shocking crimes. It is useful to put the question of 'effects' into perspective, and to look briefly at one or two theories and arguments utilised centuries ago: regardless of the method of communication, often the same hypotheses and reasoning appear. The question of television's role in providing a model for such behaviours as violent murders, reckless driving or unrealistic perceptions of the world in general can be linked directly to Plato's original fears of the effects of 'poetry' on even the virtuous in society.

Aristotle was the first philosopher to coherently refute Plato's claims. In his Poetics, Aristotle argued that all art, but particularly tragedy, purgates disturbing and often antisocial passions. Watching a play excites pity or fear in the viewer and enables the individual to leave the theatre "in calm of mind, all passion spent" (Aristotle, 1965, p.50). This counter-argument to Plato's 'feeding' postulate is known as catharsis. It is due to the cathartic process that the violence and terror of a play such as Oedipus Rex (or a "Rambo") become therapeutic for the viewer rather than potentially destructive. Recent studies into the effect of televised violence often cite this catharsis argument as a justification for levels of violence in children's' programmes (e.g., Baldwin & Lewis, 1982; Feshbach & Singer, 1971).

Aristotle's greatest contribution to the debate on the effects of viewing is his

catharsis hypothesis. Yet, his was not the only mind that pondered on the question of 'effects'. Centuries later, an Elizabethan writer, Sir Phillip Sidney, added an important dimension to the already hotly contested issue. Sidney argued that viewers of a tragedy will not be 'moved' to imitate what they see unless they are able to identify with both the character and the emotion (Sidney, 1986). Evocation of an identification response also depends upon the form and the style of the play, or poem, in question. Thus, viewers will not be inspired to act upon what they have seen unless they perceive they have a degree of similarity with the character or unless they have an appreciation of the aesthetic quality of the work. Once again, a similar approach resurfaces in the work of Bandura and his theory of identification modelling (Bandura, 1979).

Even from a selectively condensed overview as the above, it is possible to ascertain both the significance and the controversy of the debate over the effects of viewing. When television became a popular and widespread entertainment medium, psychologists and many others instinctively began to query what effects this new media would have. Would watching happy but rowdy drunks encourage people, regardless of age, to drink themselves into a similar state of inebriation? Would watching an action-packed movie, brimming with dangerous car chases lead to an increase in road deaths?

Research into the effects of television has generally concerned itself with the potentialities of negative behaviours, such as aggression, but has recently begun exploring possibilities for fostering socially positive behaviours, such as sharing (Liebert, 1982). Because so much investigative speculation has channelled itself into the television violence-aggression debate, it is useful for the purposes of the present project to draw upon this literature in search of any parallels. The fundamental question that all the studies on television violence and aggression address is akin to Plato's concerns in reference to poetry: what effect on people's attitudes and behaviour, if any, does viewing have?

2.2 Evidence from Television Violence Studies

Content analyses of television programmes have consistently found a high occurrence of violence across many different types of programmes (Gerbner, 1982). It is due to this high violence content that researchers have so enthusiastically attempted to establish the existence of a causal relationship between television violence and increased aggressive behaviour in viewers. The plethora of studies on this topic in recent years reveals three fundamental theoretical viewpoints and four typical research approaches. These viewpoints and research approaches can also be considered as methods of investigating the effects of television viewing on drinking and driving behaviours.

The first theoretical viewpoint maintains that watching a violent programme will have a cathartic effect on the aggressive levels of the viewer. Many members of the

entertainment industry are adherents of this Aristotlian concept. One spokesperson for the television industry maintains:

Human culture is a thin shield superimposed over a violent core. It's better to crack it fictionally than to see it explode in the streets. Exposure to properly presented violence acts as a therapeutic release for anger and self-hatred which are present in almost everybody.

(Baldwin and Lewis, 1982, p.349)

Despite this popular belief, the catharsis hypothesis has never been fully supported by research (Averill, 1982; Goldstein, 1983; Tavris, 1988). For example, the effects of watching aggressive sports on both the players' and the spectators' levels of hostility has been researched. Male spectators at a football game and a gymnastics tournament were interviewed before and after the game. Football fans were more hostile after the game than they had been before the game, regardless of either which team they supported or which team won (Goldstein and Arms, 1971). Those who had seen the gymnastics did not feel anger or more hostile after the tournament.

Spectator hostility does not solely depend upon the type of sport that is watched. The viewer's own perceptions and many other variables influence the response that viewing will elicit. Even the seemingly simple catharsis argument becomes complicated when the unique past experiences and personality of the viewer are taken into consideration. Similarly, the catharsis hypothesis as applied to other types of television viewing encounters limitations. For example, proving that watching reckless and dangerous driving behaviour can purge the desire to perform such behaviour in viewers is almost impossible. Some viewers may enjoy watching programmes with risky driving scenes and never consider doing likewise when they sit behind the steering wheel.

The second theoretical argument in the TV violence debate argues that watching violent television neither stimulates or retards a viewer's aggressive levels. This argument sees the viewer as a rational creature, able to distinguish between what is televised and what is real, and between what a fictional character does and what is socially accepted to do in reality. Psychiatrist Markowitz neatly synthesises this second approach to the effects debate:

I don't believe that TV violence - repetitive or not - is harmful. Violence in life exists. People have to understand this. But they also have to understand that there are resources for coping with it. They must know their own resources.

(As cited in Andison, 1977, p. 315.)

Most of the research literature, however, does not begin from a premise such as this. Literally all of the research begins from the assumption that is embodied in the third theoretical viewpoint.

This third argument asserts that television violence has the potential, and often

fulfills the potential, to stimulate aggression in viewers. To cite but one example, the National Institute of Mental Health in the United States issued a two volume report on television violence and concluded that there was a definite negative effect with watching violent programmes, and there also was the chance that prosocial behaviours could also be acquired through watching the appropriate programme (Pearl, Bonthilet, & Lazar, 1982). The Surgeon General's Report (1972) also reported "a causal relation between viewing violence on television and aggressive behaviour" but that the causal relation operates only on some children and in "some environments" (pp. 18-19).

The findings of these two influential reports thus support the view that television has the potential to adversely affect viewers and to cause increased levels of aggression. Many other studies have reached a similar conclusion (Evan & McCandless, 1978; Belson, 1978; Friedrich-Cofer & Huston, 1986 for instance). "If the effect is what you say", these findings indicate that television has the power to directly influence behaviour. Obviously, a statement such as this needs qualifying. Such a qualification can be achieved through an examination of the research on television violence and its effects. There have been four major approaches:

- (a) laboratory experiments;
- (b) experimental studies in field settings;
- (c) field research involving correlations and predictions over time; and
- (d) surveys of increases in the incidences of suicides, acts of violence, or dangerous driving following extensive media coverage of such events. (Singer and Singer, 1988.)

2.3 TV Violence: Laboratory Studies

Laboratory experiments provide the most relatively consistent set of findings in an area of research plagued with inconsistencies. Most studies indicate that showing children or adults violent programmes can produce, in the short term at least, increases in aggressive behaviour. This short term effect may also be found in relation to drinking or driving behaviours as seen in programmes. Children, adolescents and young adults have been found to imitate filmed aggressive behaviours, and the question arises as to whether or not such imitation also occurs with other types of behaviour. Bandura, Ross and Ross (1963b) provide evidence for this result and set the precedence for many subsequent studies.

Working from Mowrer's (1960) drive-reduction theory, Bandura and his colleagues hypothesised that subjects who observed aggressive models on television would display significantly more aggression when subsequently frustrated than those subjects who were equally frustrated but who had no previous exposure to an aggressive model. Ninety-six children between the ages of 3 and 6 years were used as subjects. Three

experimental groups were created. The first group were exposed to real-life aggressive models, one male and one female. The second group watched the same models on film, and the third group watched a film depicting an aggressive cartoon character. The recognition of this differentiation between live models and filmed models has relevance for other portrayals of behaviour on television. The splitting of live and filmed models directly attempts to address the effect of viewing televised behaviour, be it aggression, drinking or driving. After seeing either film or live-model, the children were then measured on the amount of imitative aggressive behaviours they displayed. Because many of the aggressive behaviours were novel (such as the model attacking a Bobo doll with a mallet), the experimenters were able to identify the number of initiated aggressive behaviours the children exhibited.

The results of this experiment were quite conclusive: those children who had been exposed to both the real-life and filmed aggression scenes had a higher number of verbal and physical aggressive behaviours. Bandura concluded:

The results of the present study provide strong evidence that exposure to filmed aggression heightens aggressive reactions in children (p. 9, 1963b).

More importantly, one exposure was sufficient in this study for the children to imitate what they had seen. Aggression, once considered to be purely an instinctive drive, would thus seem to be better understood as a socially stimulated behavioural response (Singer & Singer, 1988). Other behaviours, such as driving, may also be understood as a social and behavioural response.

Following the Bandura, Ross and Ross (1963b) study, many others have reported similar significant findings between viewed aggression and subsequent behaviour (e.g., Berkowitz & Rawlings, 1963; Andison, 1977). But, these laboratory studies should not be taken as absolute evidence of a causal relationship between televised violence and aggression. Findings in the laboratory do not necessarily imply a carry-over effect into situations outside the laboratory. As Freedman (1984, 1986) notes, laboratory studies introduce what is known as 'experimenter demand'. Because the film has been chosen by the experimenter, an authority figure, subjects often assume that the content of the film is in some way acceptable. It follows that subjects believe the behaviours filmed are intended to be approved of - and essentially, is that not what the experimenter does expect? The types of aggressive behaviours that are used in laboratory research (such as punching a Bobo doll) are "not usually measures of aggression as usually defined" (Freedman, 1984, p. 228).

Watching a television programme in the laboratory also tends to focus attention on that programme; a situation that does not always occur in the loungeroom of most viewers. Studies have shown that viewers tend to do other activities around the TV, such as ironing,

talking, cooking, etc. (Losciuto, 1982). Furthermore, all taboratory studies present one violent programme in isolation, when in reality viewers are exposed to an almost bewildering barrage of violent, and nonviolent programmes. These points merely illustrate the limitations of laboratory studies, and findings, in the investigation of human behaviour. At best, only generalised statements can be drawn from laboratory studies. In this case, it would seem that the laboratory studies reveal the possibility of a causal relationship between viewing a violent programme and concurrent levels of aggression.

2.4 TV Violence: Experimental Field Studies

Field experiments are simply those experiments that have been conducted in a 'natural' setting such as a school or home. The central idea of field experiments is to assign some people to an environment where they will see a lot of violent TV, and to assign other people to a situation where they will see less violent TV. Differing levels of aggression, if they exist, can then be measured across the two situations. Obviously, such experiments are both time-consuming to run and complex to analyse, but there have been some good field experiments done. Two such studies which both arrived at a similar conclusion, are those by Feshbach and Singer (1971), and Milgram and Shotland (1973).

The Feshbach and Singer (1971) study was conducted over a six week period and involved 625 boys aged between 12-16 years. The boys were randomly assigned in groups to watch either non-violent or violent television for the duration of the study, and measures of aggression were recorded. In three of the seven groups, it was found that the boys watching the non-violent programmes were significantly more aggressive than those boys who had seen violent programmes. Conversely, those boys who had a violent television diet were not generally more aggressive. Watching violent programmes for "certain types of boys" actually decreased levels of aggression.

These findings seem to suggest some sort of cathartic response, but the experiment does have methodological weaknesses, which are acknowledged by the authors themselves. For instance, the boys on the non-violence diet protested against the exclusion of one of their favourite shows, 'Batman', from their viewing. Consequently, 'Batman' was included in those boys' viewing. There are other methodological hiccups in this experiment, and the authors surmise:

...the most modest conclusion we can make from the data is that exposure to aggressive content in television over a six-week period does not produce an increment in aggressive behaviour. (p.140)

One interesting aspect of the effects of violence on a boy's behaviour worth noting is that a boy's imagination tended to mediate whatever effect viewing violence had. What occurred in the boy's mind interacted with what he had seen: this finding places emphasis

upon the viewer's response and has only recently been further investigated. Such a finding also applies to the viewer watching drinking scenes or hair-raising car chases through the streets of New York. Viewer cognitive processes are slowly beginning to be recognised as an important component of the viewing experience.

One of the other major field studies was conducted by Milgram and Shotland (1973). This study posed the question of whether or not viewing someone commit a particular kind of antisocial act (such as stealing from an unattended charity box) will increase the probability of that viewer committing a similar act under similar conditions. A similar question could be applied to exposure to reckless driving: would viewing an incident of driving foolhardiness increase the probability of that viewer performing a similar act under similar circumstances? Various types of programmes, with the same antisocial act, were used. These included a news story on a person who had stolen money from a charity box and a dramatised version of the same act, seen in a popular TV series. Thus, both dramatic and real-life precedents were set. Despite the range of conditions and the substantial number of subjects (around 600), no initiative behaviour, in the time period of the experiment, was found. There was no consistent trend across the studies and Milgram and Shotland (1973) concluded that the viewing of a violent and antisocial act did not increase subsequent aggressive behaviour.

Other field experiments have been conflicting in their findings: while some report a small but positive relationship between violence viewing and aggressive behaviour (Loye, Gorney & Steele, 1977; Friedrich & Stein, 1973 for example) others report no findings or even negative ones. When a positive relationship has been found, often the relationship only holds for specific types of aggressive behaviours, for certain subjects or for a short time only. The effects of television viewing on alcohol related behaviour and driving behaviour is also subject to these problems. Obviously, these inconsistencies stress the complexity of fully gauging the effects of television on viewers.

2.5 TV Violence: A 'Natural' Field Study

A felicitous study by Herrigan, Heath, Wharton, Del Rosario, Cook and Calder (1982) capitalised on the 'freezing' of television introduction in the United States of America between 1949 and 1952. The Federal Communications Commission's (FCC) withholding of broadcast licenses to some American communities meant that some cities received TV broadcasts while others did not. Herrigan et al. (1982) looked at patterns of crime over many years, with the assumption that:

If the introduction of television caused an increase in crime, the level of crime in the prefreeze communities should increase more than in postfreeze communities shortly after the prefreeze communities began to receive television. (p. 464)

Furthermore, the increase in crime in the postfreeze cities should be matched and then disappear in the cities without TV when broadcasting commenced. In terms of measuring the long-term effects of television viewing on crime, this study is both unique and promising support for the causal hypothesis.

Results, however, showed "no consistent evidence of an increase in violent crime due to the introduction of television" (p. 473). Homicides, aggravated assaults (aggressive crimes), burglary and auto theft crimes did not substantially or significantly increase when television was available. An effect was found, however, for larceny crimes (i.e., shoplifting, pocket-picking, bicycle theft and other petty offences). This finding was explained by the authors in terms of an imbalance between the affluent television world and the less-affluent world of the viewer. Seeing relative affluence on TV may have prompted viewers to attain what they can by deviant means.

The significance of this study primarily lies in its realistic nature: viewers were able to watch a complete and continuous diet of both violent and nonviolent programmes, rather than one or two violent programmes seen in isolation. And yet, no strong findings between viewing violence and behaving aggressively appeared. Whether or not it can be concluded that TV has little or no effect on such behaviour is still ambiguous.

2.6 TV Violence: Correlational Studies

Most correlational studies attempt to measure levels of TV viewing and aggression, or other behaviours, to see if they are related. What emerges throughout these studies is that watching violent television is positively related to aggression: those who watch a lot of violent television also tend to be aggressive. The data consistently supports this relationship between viewing and behaviour (McGuire, 1985).

Perhaps the most extended study over time in this area was that by Eron, Huesmann, Lefkowitz and Walder (1972), Lefkowitz, Eron, Walder and Huesmann (1977), and Huesmann and Eron (1984). Over 800 third-grade children were involved in the study, 427 of whom were again involved ten years later. This intensive research together spanning 20 years revealed a positive correlation between heavy TV viewing at age 9 or 10 and aggressive behaviour, including acts of child abuse at age 30. These results were obtained for boys only. For girls, the correlations were lower and generally less consistent. The differences between sex and aggression levels can probably be explained in terms of social roles: it is more acceptable for boys to be aggressive than girls. But, in a similarly designed study, effects for both sexes were found (Singer & Singer, 1981). Gender based differences in television effects also need to be appreciated in an analysis of driving and drinking portrayals.

Friedman and Johnson (1972) compared 41 nonaggressive and 39 aggressive

children from both the 8th and 9th grades. The aggressive group was found to watch more TV, and their favourite programmes were more violent. Robinson & Bachman (1972) surveyed 1,500 15, 16 and 17 year old boys and found those who favoured violent programmes were involved in more aggressive behaviour as compared to those whose favourite programmes were less violent. Belson (1978) studied over 1,500 adolescent boys and found that boys who watch more violence on TV tend to commit more violent and serious acts than those who watch less violence on TV. The list of studies goes on, and all, to varying degrees, arrive at the same conclusion: Children and adolescents who watch more violent programmes, or who prefer to watch violent programmes, tend to be more aggressive. The relationship between the two is only small (accounting for, at the most, 9% of the variation between viewing and aggression according to Freedman, 1986) but nonetheless positive.

Belson's (1978) study also introduces an important consideration for any attempt to measure the effects of television viewing. Many studies on effects presume that all television violence is the same, that a cartoon where violence occurs is equivalent in effect to a battle scene of a war movie. Belson (1978) differentiated between different types of violence on the hypothesis that the differing types would have differing effects. Categories included 'fictional violence of a realistic kind', 'violence in news or newsreel programmes', 'violence that is gruesome, horrific or scary', 'science-fiction involving violence' and so on. The findings are well worth enumerating, as they have direct relevance for the present project: alcohol or driving as represented in non-fiction, fiction or in advertising is going to produce a different effect on the viewer.

Belson (1978) concluded that certain types of programmes are more likely to stimulate aggressive behaviour. These included:

- (a) programmes where violence is implicitly sanctioned, where violence is seen to be 'justified';
- (b) programmes where the subject matter is on a large, impersonal scale:
- (c) programmes in which violence is presented as directly functional and normal in personal relationships.

Conversely, programmes that were found less likely to stimulate aggression included:

- (a) programmes where violence is shown 'far beyond' the experience of the viewer science-fiction and cartoons;
- (b) programmes where the violence is seen as ridiculous, farcical;
- (c) news broadcasts, provided they were not edited to highlight particularly violent contents.

Thus, the 'effect' of television violence is not unidirectional. Depending upon the

nature of the violence, or of the presentation of alcohol or driving, and the context in which it occurs the effect, if any, will be different (compare these qualifications with Sidney's previous qualifications on the effects of literature).

Noble (1975) also stressed the importance of acknowledging the dependency of effects on the type of violence that is viewed. Realistically portrayed aggression affected child viewers more than 'stylistic' portrayals (i.e., where violence is stereotyped, ritualistic and 'obviously set in historical times'). Four different types of film were seen: realistically filmed aggression where the victim was seen; realistically filmed aggression without the victim, a documentary on war; stylistically filmed aggression where the victim was seen; and stylistically filmed aggression without sight of the victim, a scene from Henry V.

Results revealed a clear distinction between the different types of violence. The sight of the victim coupled with either realistic violence or stylistic violence proved the most distressing film for the children to watch. Overall, the realistic representations of violence were more disturbing. This finding on effects of viewing has been replicated in studies using adults. Tavris (1988) notes that responses to deaths and violence in serials differ depending upon who dies. Tavris cites an estimated 5,000 killings are seen by viewers in one year without public concern; yet when the more meaningful death of a popular character such as Col. Blake in 'M*A*S*H' is seen, viewers respond to producers in their droves to register their sadness and anger. Such qualifications are crucial in any endeavour to examine the effects of television on behaviour. An alcohol advertisement could be less persuasive than seeing a favourite character quietly sip an alcoholic drink in the local pub or club.

2.7 Beyond Correlations and Recent Research

Establishing the existence of a relationship between television viewing and any behaviour, such as aggression, does not imply that one causes the other. The possibility always exists that some other third, extraneous factor causes the relation. Several studies have attempted to extend the discovered correlational relationship to a causal relationship. Longitudinal studies, designed to measure the cumulative effect of TV violence and aggression, support a small, but consistent, and positive effect (Friedrich-Cofer & Huston, 1986). One study investigated the possibility of a third, or fourth and fifth, factor causing the relationship (Huesmann, Eron & Lagerspets, 1984). Measures of the perceived realism of TV aggressive fantasy, parental aggression, social class, sex role identification, aggressive predispositions, parental viewing habits, and the child's achievement levels were all used in a regressive analysis. Although the study found a relationship between violent TV viewing and aggression for girls in the USA, boys in both Finland and USA, most of the variables were not found to be intervening factors.

Correlational relationships were found between, for example, an aggressive mother, low socio-economic and low education, but once again, no causal relationship can be concluded from the available data.

More recent research reveals a subtle shift in emphasis, but is still riddled with the same controversy. Both Field (1988) and Gunter (1988) stress the importance of discovering how viewers use and respond to what they see. Different viewers often extrapolate different meanings from the same programme. In any investigation into the effects of TV, this surely must be the most demanding, but simultaneously the most potentially fruitful, exercise. The question of whether viewing violent TV further contributes to concurrent and later aggressive behaviour may then be answered.

2.8 TV Violence: 'Contagion Effects'

In comparison to laboratory, field and correlational studies there have been very few studies of the effects of extensive media coverage on events such as suicide, homicide or reckless driving. Much of what has been done, focuses on adult viewers, in contrast to the emphasis placed on children and adolescent viewers in the other studies. Phillips (1974) showed that suicides in the USA increase after publicised suicide stories, in all the media, not specifically television. This study, however, was later criticised on many arounds. Comstock (1977) reviewed the current literature on media effects and concluded that violent stories, where the violence is rewarded, exciting and justified, were likely to elicit an increase in aggressive behaviour. Using the competitive and aggressive championship heavyweight prize fights in another study, Phillips (1974) concluded that "media violence does provoke aggression in the real world as well as in the laboratory" (p.567). Most of these types of studies, however, do not focus on television. Rather, the print media is analysed; but as Comstock (1982) has noted, studies of this kind provide some of the clearest cases that mass media content can be associated with subsequent incidents of violence in daily life. Perhaps other behaviours are also associated with daily life.

2.9 Prosocial Television

The literature on effects of television is dominated by the debate on aggression. This preoccupation, socially important as it is, tends to ignore other effects and presents television as a threatening, potentially destructive element in the loungeroom. Only recently has research begun to examine television's potential as a positive media: to encourage preventative health, to draw attention to injustices in the community or to provide models of altruistic behaviour. "A Country Practice" falls into this category of 'prosocial' television as it presents behaviour that is socially desirable (the doctor who does not drink and drive but who still goes to the pub to socialise) and in some way benefits another person, or society at large, (the policeman's wife who establishes a

counselling service).

Studies into television's prosocial effects began in the laboratory. Bryan and Walbeck (1970, as cited in Liebert, 1982) demonstrated that children can learn to share after watching a programme where sharing occurred. The limitations of laboratory research, as discussed earlier, also apply to prosocial studies. Problems arise, however, in attempting to review other studies simply due to the small number that have been done. Most studies have, as with the aggression studies, focused on children. Hearold (1986) summarised various studies on prosocial effects and found that the average 'effect size' of watching prosocial TV was 0.63 - a stark comparison to the 0.30 effect size for antisocial television. She concludes:

Although fewer studies exist on prosocial effects, the effect size is so much larger, holds up better under more stringent experimental conditions, and is consistently higher for boys and girls, that the potential for prosocial effects overrides the smaller but persistent negative effects of antisocial programmes.

(Hearold, 1986, p.116)

Pearl et al. (1982) also concluded that television is a potential source of good, thereby simultaneously purporting the view that TV does effect its viewers. Few studies have found a negative effect for prosocial programmes. Why this occurs may be, as Cook et al (1983) believe, that the "everyday world more often models and rewards prosocial than antisocial behaviour" (p.169). If the 'everyday' world also models and rewards good driving behaviour, then the type of driving seen on television is crucial as an educative tool. If viewers see safe driving on both television and on the streets, then it is more likely that they will partially adopt those behaviours into their own life.

2.10 Summary

The controversy surrounding the effects of television has essentially existed for thousands of years. Despite many different approaches and many different theoretical views, we are still no closer to understanding fully the effects of watching television. Short-term or long-term effects have been found, but have not always been replicated in subsequent investigations. It would seem that many other factors (such as cognitive processes, the type of programme, viewing environment and so on) influence the effect of viewing on the viewer. That some effect exists seems certain: the problem is qualifying that effect across multiple variables and different behaviours.

3. THEORETICAL PERSPECTIVES

Some researchers have argued that television is a source of socialization as it provides models and information that influence individual beliefs, values and expectations. What is uncertain is the degree of its influence and whether that influence is positive or negative (Comstock 1982). Some research has investigated the amount of television viewed and the content itself. The implication is that television had the potential to supplement as well as reinforce socialization. Such studies have included information that viewers derive from television. The common element in these findings is the reliance on television for information not available in the viewers own environment. Other researchers have conducted laboratory experiments that observe the behavior of people. The implication is that television can alter the repertoire of possible behaviours by modifying behaviour through modelling. Given the media's ability to take viewers beyond the boundaries of their immediate social life and introduce them to attitudes and actions they might not directly experience two major concerns about the effects of the mass media on viewers are still to concentrate on whether or not viewers were influenced by the actions of successful television characters and what social implications the context of media presentations have on viewers.

There are a number of major theoretical frameworks for analysing television's influence on the social behavior of viewers such as social learning theory (Bandura 1979) which includes modelling and observational learning, and Gerbner's sociological cultivation theory. This includes mainstreaming and effects framework. The following sections review a number of the more important and relevant theories and suggest their relevance for the possible influence of driving and alcohol portrayals on television viewers.

3.1 Social Learning Theory

Social learning theory argues that people model themselves on what they see and they imitate the behaviors of models which they observe. This theory focuses on responses portraying human models, the learning of behavioural enactment sequences and reinforcement contingencies (Atkin 1989).

In this view, the frequency of a behavior's occurrence not the viewer's perceptions of its function or significance within the narrative, is socially influential; the most frequently occurring images determine the major effects of television. Viewers whether children, youth or adult, are implicitly pictured as passive recipients of a series of salient images from which they make no attempt to extract unique social meanings.

(Collins 1983 p.11 in Atkin 1989)

Bandura (1979) was concerned to demonstrate that children were just as able mimics of what they saw on television as they were of what they saw in real-life.

Influenced by previous studies which confirmed that social behavior was learned and modified through direct reward and punishment, Bandura and associates have revealed that new responses can be rapidly acquired and existing behavioural characteristics considerably changed by viewers observing the behaviours and attitudes exhibited by models (e.g. Bandura 1962). This imitation theory which suggested that there was a tendency for a person to match the observed behavioral attitudinal and emotional reactions by actual or symbolized models was the basis for their study. Seventy-two nursery school children from the university creche were randomly assigned to two experimental groups and one control group. Half the children in each group were males, and half were females. Rewards were induced through the manipulation of material, social reinforcements and verbal comment. It was made clear that it was a privilege for the child to be permitted to use the wonderful collection of play materials.

In the first group one adult assumed the role of the controller of positive reinforcers, a second adult was the consumer of the resources and the child, a participant, was largely ignored. In the second group the one adult again controlled the resources but this time the child was the recipient of positive reinforcers, the second adult being assigned to a subordinate role. The two adult models exhibited divergent patterns of behaviour in order to test the influence of the modelled behaviour on the child. For half the boys and girls in each group the male model controlled and dispensed the resources, simulating the husband dominant family. For the remaining children a female model mediated the positive resources as in a wife dominant home. At the completion of the social interaction, the experimenter left and the controller removed the toys and set up the imitation task apparatus. During the trial each model exhibited a different set of relatively novel verbal and motor responses which were totally irrelevant to the discrimination problem to which the child's attention was directed. The two sets of responses, one aggressive, one not aggressive, were counterbalanced by the models displaying each pattern with half the subjects in each of the three groups.

At the completion of the imitation phase the children were interviewed in order to determine their model preferences. The control group was included to determine the model's relative effectiveness as modelling stimuli. The control group data revealed that the two models were equally effective in eliciting imitative responses. The data however failed to support the interpretation of identificatory learning as the outcome of a rivalrous interaction between the child and the adult. Children identified with the source of rewarding power rather than the competitor of the rewards. Male and female models produced cross-sex imitation particularly in girls. Both boys and girls had a decided preference for the masculine role. It was suggested by Bandura that the external social learning variables such as distribution or rewarding power within the family at the time may have been highly influential in the formation of invented sex role behavior. Findings from the study showed that children primarily patterned their behaviour on the model

who possessed the rewarding power rather than the competitor for rewards.

This data suggested that learning principles based on an individual behavior model may be subject to strict limitations, since the introduction of additional social variables into the stimulus complex can produce significant changes in the functional relationships between relevant variables.

In another experiment Bandura et al (1963c) studied the amount of imitation shown by 80 nursery school children from the same university creche. Because it was becoming increasingly apparent that social learning could not be adequately explained in terms of direct reinforcement principles, the experiment was designed to study the influence of response-consequences to the model on the imitative learning of aggression. There were four groups. The first were exposed to aggressive modelling which was rewarded, the second to aggression modelling which was punished. Two control groups were used. One was shown highly expressive non-aggressive modelling and the others were shown no models at all. It was predicted that the relatively severe physical punishment modelled would display no more imitative aggressive responses than the control group children who had no exposure to aggressive models. Children in the first group saw no aggressive adult. Children in the second group viewed a real-life adult attacking a bobo/bozo doll with a mallet. The third group watched a three and a half minute film of an adult attacking a bobo doll. In the fourth group an adult dressed as a cat relentlessly attacked the bobo doll. Children watched the attack by themselves. After observing the models the children were tested in different experimental situations. For twenty minutes their behavior was rated. The measure of imitated aggression was obtained by counting the frequency with which the child performed the following responses. Kicking the bobo doll, lassoing it or striking it with a ball or baton, shooting darts at the cars or plastic farm animals and repetitions of specific verbal aggressive responses emitted by the model.

Most girls in the two control groups received very low imitation scores, boys were much more imitative. Children who observed the model accumulate rewards through aggression, displayed significantly more imitative aggressive behaviour than children in the other three groups.

Not only were children more inclined to reproduce the behaviour of the rewarded model, but they also preferred to emulate the aggressive model more frequently when he secured attractive rewards through physical aggression than when he was punished. (1963c p.604)

Children therefore who observed the positively reinforced aggressive behaviour showed more imitative aggression than the children who observed the negatively reinforced behaviour. One finding of the study with important implications for the possible impact of television simulation on children's attitudes and social behaviour was

that successful villainy may outweigh the viewer's value system. This experiment only involved a single episode of aggression. Through television, viewers have opportunities to observe repeated incidents of specific behaviours. It was substantiated in this experiment that aggressive behaviour could be transmitted through the influence of models. Bandura concluded that film models were as effective in teaching aggressive behaviour as real-life models.

Implications of this modelling theory are that viewers inhibitions are likely to be reduced after exposure to an aggressive film model and as the child hit the doll even when the model was no longer present, exposure to an aggressive film model can shape the form of a viewer's future behaviour. Modelling is strongest when the behaviour is rewarded. It is the variety of behaviours which television is able to present which is so important.

Berkowitz (1963) on the other hand has suggested that viewers are more likely to react aggressively if they find themselves in situations similar to those seen on films. This aggression was inhibited by the viewer if the environment was inappropriate. Like Bandura he also claimed that certain types of filmed aggression were more likely than others to induce aggression. He maintained that viewers who saw filmed aggression which they considered justified were subsequently more aggressive.

The problem with the Bandura/Berkowitz positions is the generality of the research findings, the viewing of films alone in a laboratory, the representativeness of the sample of people studied, the representativeness of the films seen and the methods used to assess aggressive behaviour. Is the behaviour of children in a controlled laboratory experiment the same as it might be outside this environment?.

Tannenbaum (1972) has called into question the mainstream of Berkowitz's findings, he argues that fast-moving action on the screen arouses the viewer physiologically not the aggressive electric shocking which the research displayed. The assumption made is that television violence injects violence into the viewer. This imitative theory could be viewed from another perspective. It could be argued that aggressive films may have a cathartic effect on aggressive viewers (Noble 1975 Feshbach and Singer 1971). The influence of televised aggression may be more subtle than either Bandura or Berkowitz suggest.

Noble argued that viewers relate what they have seen on television to what they see in life. In his study, Noble (1975) tested the hypothesis that rather than imitating the action children played with toys which were similar to the objects seen in films. After children viewed a puppet film they played with puppet-related toys 40% of the time and war-related toys 13% of the time. After viewing a war film they played with war-related toys 21% of the time and puppet-related toys 40% of the time. The war film seemed to activate the child's interest in war toys. But the children appeared to find puppets more

interesting to play with. Aggressive films can cause the viewers anxiety rather than prompt aggressive drive or imitative aggression, (Noble 1975). It appeared that aggressive films induced more imaginative play amongst working-class children. Few investigations seemed to be concerned that different types of filmed aggression would have different effects on different types of viewers. The results of this study (Noble 1975) indicated that Bandura and Berkowitz had over-estimated the likelihood that children will imitate aggressive film heroes. It was the view of Noble that only certain types of aggressive films had adverse effects on child viewers.

This imitation approach concentrates on what mass media does to people. What is missing is the way television is used by its viewers. Eron (1963) concluded that in the manipulative laboratory studies (e.g. Bandura's studies) it was possible to speculate that televiewing does affect real-life behaviour and that the modelling variable is a crucial one. Television provides

very necessary social learning in industrial societies where not all the social roles to be occupied in the future are clearly visible in the real-life family group (Noble 1975 p.218)

Bandura presents a convincing case for the strong influence on behaviour by the observation of the behaviour of others especially when the behaviour is seen to be pleasurable and strongly rewarded. An observed model may influence the viewer to believe that a particular behaviour is acceptable. His theoretical and experimental work suggests that modelling is an important factor in learning. Bandura's original definition of observational learning was narrow and specifically behavioural. Today his definition has been expanded to include all processes by which observed behaviour influences the viewer.

An application of his modelling theory to this study is the fact that an important determinant of drinking rate in young people is peer example, conforming to the drinking rate modelled by companions. Bandura has pointed out that the behaviour of models often served merely as discriminative cues for observers in facilitating the expression of previously learned responses that ordinarily are not subject to negative sanctions.

Garlington (1977) in a survey of university students found that 84.4% of the 741 students surveyed reported drinking once a month or more. The young people reported that peer drinking was the most important influence on their alcohol consumption. Using a single subject design Garlington investigated the effects of modelling over a number of drinking sessions and investigated the effect of both high and low consumption modelling on the same subject. Sessions took place in a simulated tavern and subjects were told that they were participating in a study of normal drinking patterns. A significant change from Bandura's experimental laboratory work was the attempt to provide a natural setting. Subjects were instructed to drink at their usual rate. In the first encounter, two or three

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experimenters modelled a fast rate of drinking. A third experimenter modelled a rate less than the subject. The second intervention reversed these conditions. At the end of each intervention drinkers returned to a baseline rate. Sessions were continued in each condition until stability was reached. The results showed that modelled drinking rates dramatically influenced the subjects' rate of beer consumption. Modelling was not instantaneous. Sessions required to reach the first criterion point varied.

Fictional characters and incidents depicted on television could also establish models of desirable health-related behaviour. The Surgeon-General in his report on health promotion and disease (Pearl et.al.1982) emphasised that maladaptive behaviours rather than communicable diseases now account for the bulk of national health hazards.

Interested in the implications of new developments in cognitive and affective research Singer (1985) was particularly interested in the paradigm shift from the stimulus-response model of learning to the broader cognitive orientation. In his view the media could be important in creating a social climate that encouraged sound health-related personal decisions. He acknowledged that television had helped reduce smoking because of reduced advertising but his report indicated that "taking a drink" had replaced the lighting of a cigarette on television. Singer (1985) suggested that realistically the most powerful conveyer of health habits were the day and night-time soap operas or the dramatic/adventure programmes.

As Americans are watching television more than ever before television has the potential to be a very influential communication link. Currently 99% of American families own at least one television set. In 1983 families watched an average of seven hours of programming a day. Of concern was the growing number of hours of television viewing among teenagers. During the week the average young adult (12 to 34 years of age) watched Music Television for sixty three minutes per day. Pre-teenagers (10 to 12 years of age) watched approximately five hours a day. Many were watching adult-oriented programmes. Approximately 56% of college students in the studies sample watched soap operas at least once a week.

As more than 5,000 teenagers were killed yearly by automobile accidents due to driving while drunk Singer investigated alcohol use among young people together with their television viewing habits in terms of hours and kinds of programmes watched. Although the young drink less regularly than older people they tend to consume larger quantities and are more likely to become intoxicated. The study based on 4,400 males and females from public schools in 1978 and 1980 reported that the younger the teenagers were at the time they started using their first drug, the higher the number of different substances they used. The research suggested that American children and adolescents generally had well-developed expectations about the pleasurable affects of alcohol and it's

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ability to increase power, relieve tension, and transform their experiences. These attitudes were apparently acquired by observing drinkers in the family, amongst their peers and role models in the media. A study by Singer (1985) of 1,580 youths aged 12 to 19 years which focussed on the transition from non-drinking to adult drinking practices, found that childhood notions about alcohol actually influenced the extent to which young people drank and the effect that drinking had on them. This research further suggested that in order to prevent problem drinking adolescents' expectations about alcohol should be modified. The reasons for drinking were explored. Adolescents exposed to adult models who used alcohol in a festive and relaxing way often used alcohol as a coping device. Of note was the fact that the National Institute of Alcohol Abuse and Alcoholism Survey (see Singer 1985) estimated that 50% of today's alcoholics had parents who were alcoholics. Feelings of inadequacy and of isolation were two of the reasons they cited for the increase in alcohol consumption among teenagers. Character role models on television portrayed alcohol in several ways. Some sipped alcohol, some were portrayed as drunk, and some drank in the background of the scene. Bars were sometimes used as the central part of each week's stage set. Some people were shown drinking before driving. Ill affects of alcohol were rarely shown. Refusals of a drink were rare and sometimes drinking was preceded or followed by a verbal reference to alcohol.

Breed and DeFoe (1981) who analysed the top 15 situation comedies and top dramatic shows of the 1976 to 1977 season during the fourteen week period discovered that men drank more than women, that approximately 76% of the drinkers were males, that only two minors were shown to be drinking and that more than half of the drinking was characterized as potentially problematic. About 40% of the major drinking incidents involved heavy drinking, which consisted of five or more drinks.

In his other study, Singer (1985) examined fifteen of the most popular primetime programmes and found that 12 of the 15 demonstrated either actual use of alcohol or verbal references. The use of alcohol averaged 2.1 times per programme whereas verbal references averaged 4.8 times per programme. The single most frequent beverage, which included coffee, tea, soda, beer, wine and water, was alcohol. Even without the visual presence alcohol was prominently portrayed on television.

Alcohol was conspicuously present in the ten prime-time and two soap operas which Greenberg (1981) examined during the 1979,1980 season. Analysis was carried out on 16 hours of these top programmes. He concluded that young people who watched television were exposed to ten drinking incidents during one day's viewing.

Reasons for drinking varied. Most frequent were portrayals of personal crisis or tension. Heavy drinking was couched in humour and drinks were consumed by characters in settings of hospitality, celebration, enjoyment and stress reduction. Despite the

relationship between drinking and driving Breed and DeFoe (1981) found that out of the eighteen drinking and driving instances only four were involved in accidents. Because of the modelling effect of television Breed and DeFoe urged writers to de-glamorize drinking and suggested that alcohol should not be associated with manhood or with the notion of drinking as a norm in society.

Bandura's work suggested that modelling was an important factor in learning. It was Garlington's (1977) argument that constant exposure to alcohol consumption on television might well influence drinking habits which created a new focus for researchers. Kotch et al (1986) and Sorbell et al (1986) (as cited in Hansen 1988) using the same experimental design did not find clear evidence of correlations of exposure to televisions alcohol images and attitudes and behaviours. Despite elaborate experimental designs, meticulous controls and in some cases sophisticated statistical analyses these studies failed to demonstrate any of the effects which are usually invoked with reference to modelling theory (Hansen 1988 p.252).

The fact that subjects viewed the programme in isolation rather than in a social context was one of the key factors. The main criticism of experimental research was the clinical nature of such research and the expectation of immediate short-term effects (Sorbell et al 1986). A particularly influential alternative was the cultivation approach as it had a broader cognitive orientation. It recognized the fact that human beings played an active and selective role in their approach to each new environment.

In contrast to modelling theory cognitive theory determines how individuals perceive, interpret and assimilate the forms of television as an integral part of their viewing experience. It investigates how they come to acquire knowledge and what impact it has upon their general mental processing. The approach focuses upon the thoughts that the receiver generates while processing messages. According to Atkin (1989) rather than passively consuming information, the individual actively relates the content to prior knowledge and experiences. The extent to which viewers incorporate or generalize television forms to their own mental and social development is dependent upon the combination of circumstances which enhance or detract from comprehension. Some viewers link ideas portrayed on television with their personal experiences. Others aggressively resist persuasion by the media.

The implication which modelling and observational theory have for driving is the nature of television's depictions of driving, the basic processes that mediate observational learning and the conditions of television portrayals. According to observational learning theory viewers extract information from observed depictions and transform it into symbolic representations that subsequently serve as guides for further action (Roberts 1989). Critical elements are the attributes of the stimulus, how television portrays

driving; how interested the viewer is in driving and the environments in which the viewer's drive. Retention of the modelling is dependent on how the viewer is able to symbolically code and cognitively manipulate a complex driving sequence.

Any analysis of the impact of television portrayals of driving on adolescent viewers needs to explore the predisposition attributes of teenagers that are most likely to influence how the process modelled information.

(Roberts 1989 p.17)

Considerable research suggests that both aggressive and prosocial behaviour patterns can be learned from television (Bandura et.al, 1963a,b,c; Berkowitz, 1977; Gerbner, 1982). The following are criteria from modelling theory which have relevance for this study.

Models may be live or symbolic (Bandura et al.1963b)

Modelled events which appear to be useful, successful and relevant are better attended to and remembered (Garlington 1977).

Attitudes, beliefs and behaviours are learnt incidentally (Christenson and Roberts, 1983; Comstock, 1977; Roberts and Maccoby, 1985).

Although what is learned can be incidental to the story it can be quite central to viewers' day-to-day social behaviour (Roberts 1989).

Incidental learning is quite common (Christenson and Roberts, 1983; Comstock, 1977; Roberts and Maccoby 1985).

A modelled event may influence responses in different viewers. As all viewers come with a relatively detailed framework within which to fit newly observed information (Roberts 1989).

Observer attributes that mediate the acquisition of modelled behaviour include cognitive, perceptual and physical capabilities, arousal level and predisposition such as preferences, expectations, and perceptual sets. Capabilities limiting what can be learned and performed, predispositions influencing what is likely to be learned and performed (Roberts 1989).

Television has helped to create new kinds of mass national markets and provided the opportunity for advertisers to inject their products into the national consciousness (Adler et al.,1977).

The Surgeon General's report (1982) suggests that the effect of television takes place indirectly and over time, and that they are strongly conditioned by the environment of which television is a part.

The effect is also influenced by the past and present experiences of the viewer (Liebert et al. 1973).

Not only does the environmental context determine whether the necessary conditions to enable a behaviour exist, but much of the incentive to perform comes from the immediate environment (Roberts 1989, p.17).

3.2 The Uses and Gratifications Approach

While the uses and gratifications approach was systematically developed in the late sixties and the seventies, it does have its origins in the forties, when in the midst of the empirical research tradition of short term effects, a number of studies investigated the gratifications that mass media provide their audiences. Thus Herzog (1944) investigated the uses and gratifications for the audiences of quiz shows and radio soap operas; Wolfe and Fiske (1949) considered children's uses of comics; Berelson (1949) investigated the functions of newspaper reading. These early approaches elicited media functions from respondents in an open ended way and adopted a qualitative approach to their data. They also did not attempt to explore possible interrelationships among the various media functions to lead to the eventual formulation of theoretical statements.

The uses and gratifications approach can be seen as one which attempts to explain something of the way individuals use communications among other resources in their environment to satisfy their needs and achieve their goals and to do so by asking them. The approach does make a number of assumptions. It assumes that the audience is active in its approach to media rather than passive sponges soaking up what is provided; that the media compete with other sources of need satisfaction and with each other; that people are self aware enough to be able to verbalise their needs and uses for media. Perhaps most importantly it calls on the researcher to suspend value judgements about the media content and to explore the audiences' perceptions in their own terms (Blumler and Katz, 1974).

Studies in the uses and gratifications mode have ranged from comparison of uses of different media types, uses for one particular media, uses of a particular media genre or even uses for one particular programme. Back in 1948 Lasswell proposed four functions for the media in terms of the society in which they operated. These were surveillance, correlation, entertainment and cultural transmission. This formulation was extended by Wright (1960) to refer to both the societal level and to the individual level. However, more recent studies have extended the range of uses that can be found for the media in general and television in particular.

Brown (1976) used a set of 13 function or use statements and asked children between the ages of seven and fifteen to say which media (including books, radio, comics, records and television) they usually turned to for these reasons. Television was the most used medium and appeared to be multifunctional. It was used to give information about different people and places, to tell you things not learnt in school, what it's like to be grown up. It also makes you think about things, is used to talk about with friends and can be used when you are bored.

Greenberg (1974) found similar results. His study was concerned only with

television and children aged between nine and fifteen. Following a pilot study, where similar aged children wrote essays on 'why I like to watch television', a set of clusters or major independent reasons for watching were found. These were used to construct a questionnaire administered to 726 children in London, UK. Greenberg applied factor analysis to the questionnaire results and found a set of six distinct uses for television. The first of these was for learning, not differentiated between learning about things or self, or between school type and more general social learning. The second reason was a general habit one, including enjoyment of what television can offer. A third reason was for excitement or arousal, a fourth was for companionship, when there was no one else to play with. A fifth reason was for relaxation, including to calm down and a final factor was to pass time.

Closer to home, a study of nearly 300 Sydney school children aged six to eleven (Noble, Freiberg and Crabtree, 1980) found positive and negative uses for television mentioned nearly equally. The most popular reasons for watching television were for relaxation, companionship, to pass the time, to learn and for arousal. Children reported that they learnt about social issues, behaviour and relationships from television programmes. Sex differences in the use of television for arousal emerged. Boys wanted to use television to get excited and stir themselves up while girls preferred to watch more placid family shows that portray how to behave in the future. The use of television to pass the time, both as giving you something to do or to relieve boredom, was not a major use of television. Television was used more to learn from than as a way of passing time.

The classic study of uses of a particular media genre is the study by Herzog (1944) of the uses and gratifications of daily radio serial listeners. Three major types of gratification were found. For some listeners the serials provided emotional release, the chance to have a good cry. A second gratification was the opportunity provided for wishful thinking. The third and important gratification was the provision of a source of advice about problems and the opportunity to learn appropriate patterns of behaviour.

Finally the uses made of a particular programme can be studied. One example is the uses made by teenagers of the programme, Happy Days (Noble and Noble, 1978). This programme was found to provide opportunities to learn how to be 'spunky', how to be cool, how to relate to friends and the opposite sex, how to behave on a date and even how to get on with parents. Younger teenagers learnt more from the show, thus indicating its use as a means of anticipatory socialisation. These studies imply that children and adults use television and are not just passive recipients of it's messages. They can use television as a source of information about social behaviour and see it as having some application to their daily lives. It would appear tenable that perceived messages regarding road safety behaviour as put forward by television productions, albeit with little purpose, can be utilised as sources of learning by audiences. The usage by younger audiences may be

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anticipatory in that they are learning what type of drinking and driving behaviours are appropriate for the future. For adults, such portrayals may be used to rationalise their own behaviour and provide a back-up to attitudes.

3.3 The Agenda Setting Function of Media

Agenda setting as a description of the influence of the media has attempted to map the relationship between issues emphasised by the media and the issues given salience by the public. Its original emphasis was on the long term learning effects of the media rather than their persuasive influence (Blood, 1989). The approach stems from McCombs and Shaw (1972) who examined the 1968 American Presidential campaign and related researcher identified issues of prominence in news magazines and compared these to public opinion poll data giving respondents views on the most important issues facing the country. Moderately high correlations were reported between media rankings of issues and public ranking of these same issues.

Agenda setting can be linked to the uses and gratifications approach through the concept of need for orientation, or in Lasswell's terms, the surveillance function of media, for the society and the individuals making up that society. From the individual perspective, interest and uncertainty may make the media a potent source of what to think about, if not what to think. Thus the media have the potential to bring forward road safety issues. The horrific crashes on the Pacific Highway in the months prior to Christmas '89 were newsworthy and received much attention. Current affairs shows added to the debate by discussion of the various issues involved. Such an issue was close to becoming an issue in the March '90 Federal election. It is thus possible that television, as a medium, could be utilised by the road safety authorities to highlight such issues on occasion with the possibility of public response. However, this may not work.

A major criticism of agenda setting studies has been the emphasis on aggregate data across groups of individuals when the original hypothesis was framed in terms of individual influence. Such aggregate data, in masking individual differences in the degree of influence, has led to mixed evidence with regard to the hypothesis that the mass media are in fact setting the public agenda. There has also been a move to single issue analyses ideally over time, following criticism that aggregate media agendas identified by researchers are more likely to be artifacts of these methods rather than objective fact.

However, some researchers have chosen to adopt a paradigm focusing on ideology and meaning, and have assumed the power of the media in setting agendas based on the media's supposedly powerful role in society. Thus Bell, Boehringer and Crofts (1982) in their study of the role of television in the 1980 federal election refer repeatedly to TV's role in creating the agenda, and base this solely on a reading of television texts, while Barrat (1986) sees agenda setting as a process whereby the terms of reference for

debate are fixed to suit the interests of the powerful. However, as Sless (1986) has commented "the media per se do not have any agenda. It is the readers of the media who bring such agenda into existence" (p 33). These readers can be researchers; they can also be the public.

3.4 Semiotics

This notion of the reading of texts stems from a body of thinking called semiotics that considers the ways we represent the world to ourselves and each other, through signs or symbols. It is concerned with all the elements that make up the communications environment, what they have in common and what makes them different (Sless 1986). Put another way, according to Eco (1976), semiotics is concerned with everything that can be taken as a sign. A sign is everything which can be taken as significantly substituting for something else, thus, "semiotics is in principle the discipline studying everything which can be used in order to lie" (p 7). A key concept is that of semiosis, the process by which communication and understanding occur. This process involves three elements, the signified, the sign and the signifier and the relationship between these.

The word 'rose', spoken or written, is the sign. The signified is the particular botanical species of flower. The signifier is myself who has used this example. It is also anyone else who happens to read this and who makes this connection. Stat rosa pristina nomine, nomina nuda tenemus. A second example might be a large letter P printed on a board next to an empty space or a space filled with motor cars. The sign, the P, in this case stands for or signifies parking. The signifiers are the people who come along and interpret its meaning. One further example will suffice. In a later section a content study is referred to that considers the meanings of different types of alcoholic drink in television drama (Hielbronn, 1988). Thus the sign beer is taken to signify working class, brandy sophistication or reflection. The signifier in both cases is the content analyser. Signs or symbols not only denote the obvious but can promote a subtle and learned range of meaning.

Within semiotics two paradigms of semiosis have jostled for recognition. The first is a transmission model which bases itself on electronic transmission networks and puts the researcher outside what is being studied; the second is a sharing model (based on Saussure) which assumes the sharing of a common language within a culture which puts the researcher on the inside.

This latter approach appears to have been applied to television texts with the adoption of the view that 'only one reading of the any text was considered necessary'. The possibility of a reading being determined by the position of any one reader relative to others never arose' (Sless 1986, p 103 though with a slightly different meaning). Eco, perhaps unfortunately, has, according to Sless, stated that this research develops out of

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the belief that what the researcher sees on the video is not what the common viewer sees (p 104), it is much more concerned with the objective structure of the message rather than merely reacting to it.

However, from another signifier's point of view such a reactive reading may be as valid as the supposed objective meaning of the researcher, which is perhaps only another reaction after all. Yet while there may be individual idiosyncratic readings of texts, there should also be common elements in the readings based on the common language and culture shared by members of groups within the society. Such a position appears to be held by Gerbner whose theories of cultivation and mainstreaming are discussed in the following section.

3.5 Cultivation theory and mainstreaming

Theories of cultivation and mainstreaming have stemmed from studies of the content of television, but with the perspective that television content constitutes an environment of symbols. In an early paper, Gerbner (1976) begins with the notion that human existence is distinguished by an environment of symbols, that in traditional societies these symbols are present in myth and ritual, and that myth and ritual are means of symbolic socialization, because they show how society works by dramatising its norms and values. These symbolic systems are now produced by means that are industrialised, specialised and centralised, and come from the mass media, particularly television.

Television is now the most pervasive and most central of all mass media. It is used relatively non selectively, being watched by the clock rather than by the programme. The individual is introduced virtually from birth to its powerful flow of messages and images. As Gerbner et al (1980) have commented "The television set has become a key member of the family, the one who tells most of the stories most of the time. Its massive flow of stories showing what things are, how things work, and what to do about them has become the common socialiser of our time" (p14). Moreover, as the central cultural arm of American society, television is the agency of the established order and serves to extend and maintain, not threaten or alter, conventional conceptions, beliefs and behaviours. Thus its chief cultural function is to spread and stabilise social patterns, to cultivate not change but resistance to change.

The flow of images on television presents a mixture of fact and fiction, representations of reality, facts and impressions about people and the world. While we are not unaware that the television world is a pseudo real one it also takes on its own kind of reality. Thus Marcus Welby has received a quarter of a million letters concerning people's medical problems over five years; in Australia A Country Practice characters are similarly regarded as having a real existence, reinforced on occasion by the inclusion in

their pseudo world of celebrities from really real life, like Bob Hawke or John Farnham. Even when we remain fully aware that such serial characters and events are not real it is difficult to distinguish between these and the accumulation of background information presented. Few people have seen an operating theatre, a court, a police station or jail, a boardroom; what do people really know about different places of work? The background of TV drama gives a wealth of incidental information on these topics.

Gerbner's research consists of two interrelated parts, message system analysis and cultivation analysis. Message system analysis is the monitoring of samples of prime time and weekend daytime network dramatic programming, trying to reflect what large groups are absorbing over time. Having carried out such analysis annually since 1967-8 Gerbner et al (1980) have described the world of television as one in which men outnumber women three to one, young people comprise one third and old people one fifth of their real numbers, professionals and law enforcers dominate the occupations, and an average of five acts of violence per prime time hour (and four times that number per weekend daytime hour) involve more than half all leading characters.

Cultivation analysis is the investigation of viewer conceptions of social reality associated with the most recurrent features of the world of television, the consequences of this ongoing and pervasive system of cultural messages. As part of this the amount of exposure to television is an important indicator of the strength of its contribution to ways of thinking and acting. For heavy viewers television is central and more important than other sources of information and ideas. Thus it is suggested that the "more time one spends living in the world of television the more likely one is to report perceptions of reality which can be traced to (or are congruent with) television's most persistent representations of life and society" (Gerbner et al, 1980, p 14).

Within this broad effect there appear to be different patterns of associations for different social groups between viewing and certain conceptions of social reality. The mainstream can be thought of as the relatively common outlook television tends to cultivate. This common outlook is shared among heavy viewers in those groups whose light viewers tend to differ. For example, more educated higher income groups have opportunities for more diverse cultural activities, and therefore tend to be lighter viewers of television and less imbued with the television view of the world. They diverge from the mainstream. However, when higher education, higher income groups are heavy television viewers they fend to respond to questions like other heavy viewers, most of whom have less education and income. Gerbner et al have also introduced the concept of resonance, where what people see on television fits closely to their everyday reality and thus the combination produces a double dose of the television message.

To illustrate these two concepts Gerbner et al (1980) present data from a survey

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by the Opinion Research Corporation collected in 1979. Positive responses to the statement 'fear of crime is a very serious personal problem' were looked at in terms of demographic variables like income, race, sex and place of residence for light and heavy viewers. For low income respondents, there was no difference between light and heavy viewers, both medium and high income heavy viewing respondents are in the mainstream in giving a similar number of positive responses (25 and 26 per cent respectively). When looking at responses by race, for whites heavy viewers give more fearful responses (27 per cent) while the relationship between viewing for non whites is slightly negative in that more light viewers are fearful than heavy viewers (46 compared to 40 per cent). It is suggested that heavy non white viewers are in fact moving closer to the mainstream. Heavy viewers among women and city dwellers give more positive responses to the statement (32 and 46 per cent) and fear may be most salient to these respondents. Thus real life circumstances can resonate with television messages and augment them.

The series of annual surveys carried out by Gerbner and his colleagues were initially focused on television's violent portrayals and the view this would be cultivating, particularly in heavy viewers. Gerbner et al (1980) report on a survey of two samples of adolescents, one from a public school in suburban/rural New Jersey (N=447), and one from a New York City school (N=140). Each subject filled in a questionnaire which sought information on viewing habits and demographic characteristics; they also chose one of two answers to a series of questions, one based on facts or statistics and one 'television answer' expressing the 'facts' as shown on television. The analyses showed that "adolescent heavy viewers see the world as more violent and express more fear than do light viewers in a variety of ways, ranging from estimates of the number of people involved in violence, to perceived danger, to assumptions about the use of violence by the police" (Gerbner et al, 1980, p 22). They comment that the most significant and recurring conclusion from this range of studies is that television viewing cultivates a heightened and unequal sense of danger and risk in a mean and selfish world. Yet the most vocal concern has been over TV incited violence, over the likelihood of imitative aggression, rather than the view of the world that television may be cultivating in both children and adults.

Gerbner and his colleagues have in later studies moved beyond a concern with violent portrayals and their cultivation effects to other aspects of the television world. Gerbner et al (1980) considered the distribution of roles in television programmes in prime time and daytime weekend television drama, looking at sex, age class and type of role. They conclude that the distribution of age roles by race and gender show the value structure of television's symbolic world. Young and old people are under-represented, while the middle groups are over-represented. More than half of TV's dramatic population is aged between 25 and 45. As women on television age they are cast in roles that decrease their romantic possibilities, and they 'age' faster than men.

Survey results overall showed that heavier viewing makes a negative contribution to the image of the personal characteristics of the elderly and their quality of life. They are seen as unhealthy, in worse financial circumstances, not active sexually, closed minded and not good at getting things done. Television also seems to be telling people that old age begins relatively early in life, around 55, especially for women.

In a complex analysis of television content and political attitudes Gerbner et al (1982) characterise television dramatic content as striving for the broadest and most conventional appeals, cultivating moderate or middle of the road presentations and orientations. Thus, for example, seven out of every ten characters are portrayed as middle class. This appears to have cultivated a perception in heavier lower class viewers that they are middle class. In addition significantly more heavy than light viewers call themselves moderates, and significantly fewer call themselves conservatives. attitudes to homosexuality, abortion and marijuana, while light viewing liberals and conservatives show a considerable spread of attitudes, heavy viewing liberals and conservatives are much closer together. On questions relating to the restriction of free speech, heavy viewers among conservatives, moderates and liberals are more likely to agree to restrict the speech of 'left' or 'right' nonconformists than are light viewers of all political persuasions. Gerbner et al (1982) summarise by arguing "Viewing blurs traditional differences, blends them into a more homogeneous mainstream, and bends the mainstream towards a more 'hard line' position on issues dealing with minorities and personal rights. Hard nosed commercial populism, with its mix of restrictive conservatism and pork chop liberalism, is the paradoxical - and potentially volatile contribution of television to political orientations "(p 126).

As part of the 1982 National Institute of Mental Health report to the Surgeon General, Gerbner and his colleagues were asked to undertake a pilot study of television health related messages and images drawing on their Cultural Indicators data bank. To briefly summarise, the picture television gives of the world as it relates to health and sickness is one of crime and violence, with few natural deaths. Mental illness is characterised by unpredictability, danger and sin. The mentally ill are most likely to commit violence or be victimised. Their image is in fact further removed from characteristics established by mental health professionals than the image of the general public, thus television's images are reinforcing in the direction of traditional prejudices.

Television's health professionals dominate the television professional world, but there are few sick characters. Many health professionals appear in daytime serials where sickness and injury is a pervasive problem. Talk dominates daytime serials and health is the most frequent topic. Such serials may well comprise the most prolific source of medical advice in America.

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Food products are found in both commercials and in programming. In prime time eating drinking or talking about food occur about nine times an hour. Nutrition, however, is neither balanced or relaxed. Grabbing a snack is nearly as frequent as breakfast lunch and dinner combined. In spite of this prime time characters are healthy if vulnerable to inflicted injury, stay slim at all ages, hardly ever need glasses and rarely suffer any impairment of function. Obesity claims few victims on television, and they are limited to certain characters and roles. However, only 11 per cent of men and 2 per cent of women smoke. In contrast, alcohol is hard to escape (as a later section documents).

Gerbner et al present the re-analysis of other data to show some examples of television's impact on perceptions of the world and the mainstreaming effect. Heavy television viewers are most likely to say they are not concerned about weight and eat and drink what they like, they are complacent regarding diet and nutrition. However the percentage of those in the low income group who are complacent differs little whether they are heavy or light viewers, while in the high income group, who might be expected to more health aware, light and heavy viewers differ greatly, so that high income heavy viewers are similar to the low income heavy viewer group. College education and drinking shows a similar pattern, in that there are bigger differences between light viewers who have or have not been to college than between heavy viewers who are college or non-college educated.

Though presenting a persuasive and elegant argument backed up often by large scale surveys on which the application of statistical techniques produces significant results, Gerbner is not without his critics. Several have pointed out that when multiple controls are employed to control for third variable causes—some of the relationships reduce to little more than zero. However, some still remain, giving rise to the problem of why some variables are related and not others. One hypothesis suggested is that television affects general beliefs about how the world is but not how it will affect oneself. This latter depends more on personal experience and social networks, while the former depends on more vicarious experience which television can provide. There is also the problem of whether the variables being considered are the right ones, and whether there are variables, eg psychological withdrawal as an overriding variable to explain fear of the world, which would better explain the processes.

Gerbner's mainstreaming hypothesis is in part a result of these sorts of criticisms, to account for some of these shrinkages in correlations. But it should be pointed out (Cook et al, 1983) that there are still three inferences made. One is that content analysis is used to infer the mainstream; second that surveys are used to infer the social groups which believe in the television mainstream; and third a graph is presented showing more similarity between heavy viewers from expected divergent groups than between light viewers in those same groups. However, Cook et al suggest that impressive

data is assembled to support the hypothesis, some of which are mentioned above. They cite also a study by Morgan (1982) which showed that television portrays boys and girls behaviour in a stereotyped way, that girls (from a survey) tend to have less gender stereotyped beliefs than boys and that heavy girl viewers have more stereotyped beliefs than lighter viewing girls and are closer to both viewing types among boys.

It is worth noting here that a study by Wober (1978) concludes that in the UK there is little relationship between heavy television viewing and the perception of a fearful scary world. However, he is testing the overall notion that heavier viewers are more inclined to see their inhabited world as more fear inducing, without the benefit of the modification of mainstreaming that Gerbner has since introduced. A second study worth noting is that of Pingree and Hawkins (1981) carried out in Perth and including just over a thousand children between grades two and eleven. Questions on the likelihood of being involved in violence in any given week, the percentage of police officers, whether strangers or acquaintances of the victim commit more murders and the percentage of crimes involving violence were asked and a diary method used to assess television viewing. A variation of Gerbner's mean world index, asking subjects to agree or disagree with statements like 'you can never be too careful in dealing with people', and 'mostly people are just looking out for themselves' was also used. The authors note that"the most significant and strongest correlate of television biased answers to questions about social reality is one specific type of US programme; crime-adventure programmes" (p103). However they also note that most of the imported American programmes are of this type. Their tentative conclusions are that television viewing is related to conceptions of social reality, in that those who watch the most television are most likely to give television biased responses. They also conclude that heavier Australian child viewers are judging their real (Australian) worlds as similar to the world of television as portrayed in American prime time offerings.

The most reliable conclusion that can be suggested is that certain people will be more susceptible to the world presented on the television screen, possibly in line with the general/specific hypothesis suggested in the Cook et al (1983) reference above. It is also worth bringing to mind Dorr's view from an analysis of interviews with people of a range of ages that television reality tends to be judged in multifaceted ways, and can be at times seen as probable and at others possible. Thus where there is enough individual experience against which to judge the world of television or where that world appears so appropriate then television reality can be assessed as to its probability; where there is only general feeling gleaned from vicarious experience then the television world can only be judged as a possibility and as such is liable to revision.

4. DRIVING AND TELEVISION

What kinds of driving behaviours are portrayed on television? According to Roberts (1989) it is important to know how frequently risky driving behaviours are portrayed, how salient they are and how simply and clearly the driving behaviour is shown. In his view possible positive and negative responses by the viewer should also be assessed by the perceived appropriateness and legitimacy of the scene to the viewer. Although television is considered to be an influential force across many domains of adolescent and adult attitudes and behaviours, very few empirical studies directly address these questions. Greenberg and Atkin (1983) suggested that frequent exposure to depictions of certain types of driving behaviour in entertainment programming might encourage behavioural modelling on the part of the viewer and influence viewer perceptions of appropriate behaviour - particularly the perceptions of new drivers and driver trainees.

4.1 American Content Studies

The Greenberg and Atkin study (1983) conducted a content analysis of a week of prime-time commercial programming for each of the three major networks, coding the occurrence and characteristics of all scenes portraying driving. All programmes were fictional and classified as either 'action/crime', 'general adventure' and 'drama/comedy'. The primary and one secondary major vehicle in each driving scene were coded for the following factors;

- (a) the duration of driving.
- (b) the characteristics of the people who drove,
- (c) the type of vehicles driven and of the surrounding environment which included locality, the driving terrain and the weather conditions,
- (d) how the drivers and passengers behaved with a special emphasis on seat belt use.
- (e) the depiction of illegal acts such as drinking, speeding and other acts of irregular driving,
- (f) the consequences of driving including social and legal sanctions, personal harm and property damage, and
- (g) the purpose of the driving.

The scenes were also distinguished according to:

whether driving was important to the plot;

whether driving was a device primarily to move the plot across time or space; and whether driving was the central development of a plot around a vehicle which was not in motion.

The sample consisted of 223 shows of single episode fictional programmes selected between the hours of 8 to 11 p.m from one week of prime-time commercial programming in 1975, 1976, 1977 and 1979 respectively. A total of 174.5 hours of programming were analysed and 784 driving scenes of at least five seconds duration documented. This was an average of 3.5 scenes per programme or 4.5 scenes per programme hour. Sixty-five percent of scenes lasted for half a minute or less, 20% ranged from 30 seconds to one minute and 15% were one minute or longer. It is important to note that one driving scene often contained more than one driving act and that a scene was defined as beginning when a vehicle appeared on the screen, concluding when it was no longer visible.

Of the 784 driving scenes across the 223 programmes analysed approximately 50% of all shows contained one or more driving scenes. The average number of scenes being 7.2 per hour.

Eighty-seven percent of the drivers were male, 93% were white and 72% were in their twenties and thirties. Drivers and passengers were demographically similar. One third of the drivers were stars of the show, one third heroes and one fourth villains.

Driving occurred most often in urban streets (31%) and in off-road areas (21%). Most driving was uncomplicated with 83% of driving taking place on flat terrain. Eighty seven percent of the driving was undertaken in light traffic conditions and weather conditions were normal in 99% of the sample. The length of driving scenes was highly variable. 65% were half a minute or less, while 15% were more than a minute long.

Irregular or illegal driving was measured by the following variables. Quick breaking which appeared in 25% of the driving scenes, quick acceleration in 19%, screeching tyres in 23%, squealing brakes in 24% and 20% of the scenes portrayed speeding. Other irregular driving habits measured autobatics and aggressive driving. Table 4.2 below reflects hourly rates of driving acts and driving consequences by programme type. The vast majority of driving scenes occurred in a serious story setting (97%) and only a few cases occurred in humorous contexts. Most driving was portrayed as routine business (69%), a significant proportion (19%) depicted chase and escape, emergency driving accounted for 4% while 8% portrayed pleasure driving. Predictably the highest number of irregular driving acts occurred in action/crime programmes (14.2 hours). General adventure programmes (7.95 hours) and to a much lesser degree drama/comedy (0.78 hours).

Generally, driving acts which endangered people were portrayed 0.7 times per hour and included driving which endangered passengers (4%), driving which endangered motorists (5%) and driving which endangered pedestrians. Consequences of risky driving included damage to the drivers vehicle (4%), damage to others vehicles (2%) and

property damage (4%). Irregular driving acts were portrayed 7.44 times per hour and in the 784 scenes, 1,301 acts of irregular driving were presented. While the greatest number of irregular driving acts occurred in urban streets or freeways, the highest rate per scene occurred in rural and highway locations.

Death and injury due to driving were coded separately with 14 driving related deaths and 24 injuries portrayed over the four years which were analysed. None of the concurrent activities monitored with the driving such as drinking occurred in more than 3% of the driving scene. Legal penalties imposed on bad drivers were minimal (3% of all driving scenes) and in 11% of the cases drivers who were exceeding the speed limits were penaltized. In those scenes where pedestrians were endangered or where autobatic stunts occurred penalties were incurred less than half of the time. The buckling of seat belts was portrayed by four of the drivers, only three drivers and three passengers were shown wearing seat belts as they drove. No children were wearing a restraining device. Sedans and police cars were the most frequently appearing vehicles.

The greatest amount of irregular driving occurred in urban streets and freeways (411), the highest rate per scene occurred in rural and highway locations. Dangerous driving most frequently occurred in rural/highways and for dangerous driving the highest rate per scene was also found in rural/highways. Driving in suburban streets had the lowest frequency and rate of dangerous driving acts. Most irregular dangerous driving acts were programmed for more than a minute. Sedans, being the most frequently appearing vehicles, were also most frequently involved in irregular driving. However, vans, trucks and sports cars were involved in proportionately more irregular driving acts than sedans. Dangerous driving acts most often occurred in vans and trucks, and least often in police cars. The 1979-1980 season had the highest rate of irregular driving (9.49 acts per hour), the 1975-1976 season the highest rate of endangering acts (0.85 per hour), and in the 1976-1977 season the highest rate of death and injury (0.40 per hour).

Drivers who most frequently drove irregularly and dangerously were males in their teens and twenties. Most were white non-stars and non-heroes and the rate of dangerous driving involving damage, Injury or death did not vary consistently by age of the driver.

A well documented study of these findings by Greenberg and Atkin (1983) suggests that viewers who watch one hour of prime-time fictional programming each evening for a year, would be subjected to 2,700 irregular driving acts, and more than 250 acts in which people were endangered. Since the average viewing levels exceed one hour of prime-time series per evening, television could significantly influence the viewer's perceptions of driving behaviour.

An update of the Greenberg and Atkin study (1983) was undertaken by Atkin in 1989. This study particularly focussed on high-risk driving and seat-belt portrayals in prime-time television content, the impact of alcohol advertising on drinking and driving; and the effects of entertainment programming on drunk driving intervention orientations. To update the description, several findings from an informal examination of twenty-four 1988 programmes and almost 150 driving-oriented commercials were cited.

The four to five driving scenes per hour on prime-time television were almost all in serious story contexts. One-fifth of the scenes depicted chase and escape driving and one-twentieth involved emergency driving. Irregular driving acts appeared in these scenes at a rate of 7.5 per hour. The five most prevalent were quick braking (25% of driving scenes), brakes squealing (24%), tyres screeching (23%), speeding beyond the apparent limit (20%), and quick acceleration (20%). Less frequently depicted acts included weaving through traffic (5%), leaving the road (5%), aggressive driving (5%), "autobatic" stunts (4%), and other illegal driving such as reckless driving, forcing a car off the road, or changing drivers while moving (8%). Driving acts that endangered people included endangering motorists (6%), passengers (4%), and pedestrians (3%).

For this informal study Atkin selected 24 programmes and almost 150 driving-oriented commercials. In contrast to the earlier study driving was categorized as either noisy, which accounted for 26% of all driving scenes, or risky driving where 22% of the scenes depicted excessive speeding, erratic weaving, autobatic stunts, aggressive driving and other illegal acts which could endanger the occupants of the cars or other people. Significant social outcomes for the driver such as impressing other people, escaping from pursuers, emotional satisfaction, or power were depicted in 9% of the driving scenes. In less than 1% of the scenes the negative side of dangerous driving was portrayed. Damage to the driver's vehicle (4% of scenes), property (4%), or other vehicles (2%), occurred once every two hours. Few legal penalties were imposed, only 1% of speeding incidents and 25% of illegal driving behaviour resulted in police apprehension.

As stated in the Greenberg and Atkin study (1983) 90% of drivers were male and 75% were in their 20s or 30s. These under thirty drivers performed the most dangerous driving acts. Although both star and hero drivers performed irregular or dangerous driving acts, the highest portrayal of dangerous driving was by under thirty year old villains. In contrast to the 1983 study only one casualty occurred as compared to the 14 driving related deaths and the 24 injuries portrayed over four years of the earlier study. In both studies 10% of the risky driving acts resulted in legal penalties. In the 1975-1980 study four drivers of the 869 driven characters were shown buckling their seat belts, only three drivers were seen wearing seat belts as they drove, an average of less than 1% of all scenes. Seat belt usage was substantially higher in the 1988 follow

up, 23% of the drivers were buckled but only two of the forty seven drivers entering the car were shown buckling up before driving. Of the 146 commercials, where discernible, 86% of the drivers were clearly buckled.

From this study Atkin (1989) concluded that the socializing influence of television was modest and mixed in directionality. Alcohol commercials seemed to slightly increase the incidence of drunk driving. Certain fictional role modelling portrayals appeared to stimulate drunk driving intervention intentions while other entertainment depictions apparently taught reckless driving patterns. In Atkin's view the increased depiction of seat belts probably promoted buckling to a limited degree.

4.2 Australian Content Studies

Bell (1987a) analysed the way Australian television represented traffic-related incidents by focussing on programmes watched by school-aged children. The sample included 380 hours of programmes screened on weekdays between the hours of 4.00 and 8.00 p.m. This content analysis relates audiences to particular types of depictions and suggests the locus of causal relationships between representations and behaviour. Also addressed are the issues concerning the quality of the often complex traffic-related incidents which the selected television fiction and news depicts.

The study focussed on television programme genre comparing the 4.00-6.00 p.m. afternoon programmes with the 6.00-8.00 p.m. evening programmes. The study analysed

- (a) what traffic incidents were depicted,
- (b) who was involved (age, gender, hero or villain),
- (c) of the consequences of dangerous and safe driving,
- (d) the country of origin of programmes,
- (e) driving in relation to types of programmes and viewers and
- (f) the setting of driving incidents.

Traffic-related incidents were classified as driving a vehicle, riding a bicycle or a motorcycle, pedestrians near or on a public roadway or footpath, some other vehicular machine such as a cartoon version of a futuristic car and the preparation for travel, or consequences of travel. Only incidents which were a focus of the narrative or of the expository structure of the programme were analysed. Generally incidents were considered to be about one and only one type of activity. Driving, cycling or other actions which clearly violated rules of the road or which involved risky vehicle or persons safety, were judged as dangerous, as were all incidents where injury, accidents or near misses occurred.

In the 4.00-6.00 p.m. period 247 focussed traffic-related incidents were analysed with 526 in the following two-hour period. Of these 95% in the earlier period

and 81% in the later period were classified as either dangerous, safe, and/or showing an accident or its aftermath. Children's programmes depicted traffic incidents only half as frequently as evening programmes but the incidents shown were more likely to involve danger or accident. If the cartoon "Inspector Gadget" had been included in the earlier time slot it would have accentuated the tendency.

Traffic related incidents were found to be more than twice as frequent in programmes between the hours of 6.00 and 8.00 p.m. than the earlier 4.00 to 6.00 p.m. broadcasts. Most popular amongst school age viewers were the early evening hours, soap operas and family adventure series. In the earlier programmes traffic incidents were most frequently found in adventure, comedy, music-video and children's magazine and cartoon programmes. Cartoons shown between 4:00 and 5:00 p.m were relatively free of incidents with the exception of "Inspector Gadget" which rated very highly with children and portrayed many dangerous incidents involving accidents. However children watched more television in the 6.00-8.00 p.m. period than the late afternoon.

In the earlier programmes (4:00-6:00 p.m.) adult males and children were the most visible role models with adult males being given higher profiles in dangerous driving practices or situations. Only infrequently were teenagers involved. Males outnumbered females nine to one and were visible in dangerous incidents in a similar ratio. Heroes were almost invariably male, and were frequently the medium of dramatic interest. Although villains were frequently shown in dangerous incidents, there was no clear relationship between the status of a character as hero/villain and their meaning in the context of traffic-related incidents. A similar pattern was also evident in the 6.00-8.00 p.m. period. Male adults predominated dangerous driving and dangerous cycling. Again they outnumbered women nine to one in accidents. Fewer children were shown in dangerous incidents and in the portrayal of safe incidents males outnumbered females two to one. Females were almost never shown in or in relation to accidents and virtually all twenty-four accidents shown involved adult males.

Dangerous traffic-related incidents appeared in cartoons (105 incidents), news (196 incidents), and adventure programmes (113 incidents). Whether dangerous or not, driving and motorcycling were the means of dramatic interest in the relationship between hero and villain or hero and hero. Only two accidents involved villains whilst twelve involved heroes. Generally dangerous incidents occurred up to seven times an hour although there was a very great range across genres. In many programme types no traffic-incidents were portrayed.

Australian programmes showed no more dangerous incidents than those from other countries but dangerous driving incidents occurred approximately once every two hours. Most motorcycle incidents involved trail bikes in off-road pursuits or "stunts" in the

context of adventure stories. Only Australian produced programmes included explicitly safe incidents (16 in all). Australian non-news programmes could be argued to be less inclined to show accidents than either their U.S.A counterparts. No screened accidents showed the negative human consequences of the incidents. Accidents did not lead to injury, punishment or death in the children's programmes, and cycling and pedestrian accidents were rare.

Bell suggested that as accidents always appeared to happen to someone other than the hero there was a tendency for viewers to see factual depictions of accidents as distant and unrelated to their own lives.

television creates a complex symbolic environment in which vehicle use, road safety and related issues "make sense" as well as creating excitement, danger, fear and vicarious victories over obstacles and villains.

(Bell 1987a p.60)

The origin of traffic-related incidents between 4.00 and 6.00 p.m illustrated that Australian productions showed no more dangerous incidents than USA, UK and other countries. However, every twenty minutes of local programming contained a dangerous motorcycling incident and dangerous driving incidents occurred almost once every two hours. Half of all programmes before 6.00 p.m. were Australian productions.

Data from 6.00-8.00 p.m. was consistent with these findings. Excluding "Inspector Gadget" virtually all Incidents (in Australian produced programmes) were found in the evening period studied. Dangerous incidents were proportional to the amount of programming from the respective countries of origin. Genre not nationality was a better predictor of such incidents and of the few accidents depicted more showed negative human consequences. Motorcycle incidents were very common in Australian programmes. Many incidents involved trail bikes in off-road pursuits or stunts in the context of adventure stories. Of the evening programmes studied 85% were Australian, and overall 70% of the programmes were Australian.

Dangerous incidents in non-news programmes were located in rural settings as was motorcycling in Australian programmes. Safe driving and cycling occurring most frequently in suburban settings (3) as were accidents (6). Cycling and pedestrian accidents were very rare.

This study described the portrayal of traffic-related incidents and road safety aspects of programmes most frequently watched by Australian children. It was the symbolic environment rather than the precise frequency of dangerous or illegal driving incidents which were so influential. Bell suggests that

both qualitatively and quantitatively, care, safety, caution and skill are relatively powerless against the active and powerful significance of driving for the purpose of advancing the hero's narrativised goals. (p.64).

The content of programmes which are seen as possible or probable can be used by children as a basis not only for evaluating real life, but as a basis for their own behaviour. Symbolically vehicles were shown "as weapons, status symbols, magical extensions of super-human powers, toys and sometimes mere models of transportation". In the flow of television's action, safety is often regarded as an intrusion, vehicles are used to further the action of the story, to add excitement to incidents, to demonstrate a hero's skills, and in the case of cartoons vehicles are magically transformed into weapons or aircraft. This is all part of television's construction of interpretations of the real world not merely a reflection of it. As television is a significant source of social experiences for the developing child (Noble and Noble 1987), any child watching the average 18-22 hours of television a week will be exposed to numerous representations of realistic road traffic related incidents suggesting that it is highly probable that they will be influenced by the sociable accepted behaviour portrayed (Gerbner et al. 1980).

5. ALCOHOL AND TELEVISION

5.1 Previous Studies

Many researchers have addressed the question of television and alcohol from a number of different perspectives. For many of these researchers the topic is a salient one because, according to Singer (1985) "The publication of the Surgeon- General's Report (1979) on health promotion and disease emphasised that maladaptive behaviors rather than communicable diseases now account for the bulk of national health hazards" (p 668). Studies have ranged from straightforward counts of alcohol related incidents in various types of programmes, to some consideration of the qualitative nature of the incidents, to consideration of the 'meaning' of different incidents for the plot and the relationship between television alcohol portrayals and audience behaviour.

According to Room (1988) there is now some dissatisfaction among researchers who have been 'counting sips and mentions' that such studies are no longer sufficient in themselves. Often such studies have compared the frequency of television drinking with that in real life. This tends to depend on the assumption that television entertainment is aiming to represent real time real life, without consideration of the complex relationship that exists between viewers' perceptions of real life and the reality of television images. Yet it must also be noted that given social learning theories of the power of television images that the relationship of these images to real life should be the focus of systematic study.

There are a number of studies that have catalogued alcohol related scenes or acts in a variety of programme types. Greenberg, Fernandez-Collado, Graef, Korzenny and Atkin (1979) found that prime time and Saturday morning viewing depict alcohol incidents more than two times per hour. While later studies have extended this type of analysis to include for example, the types of characters involved, the situation, motivation and consequences, the rationale for the first type of study has been expressed by Garlington (1977) as follows

If television can under certain circumstances influence drinking behaviour, information is needed as to the actual frequency or rate of drinking-related events portrayed on television today. (p2200).

Garlington's study attempted to establish a baseline on the rate of drinking events found in soap opera and game shows, shown on late morning and early afternoon US television. An interval count procedure was used to assess the rates of alcoholic and non-alcoholic beverage related events in both programmes and commercials. Target events were recorded at the end of each minute interval, and included data on drinking or reference to alcoholic beverages, type of drink, verbal reference, actual drinking or

background drinking, and setting of the event. A total of 79 half hour periods of soap operas and 60 of game shows were analysed (a total of 79.5 hours).

Results showed that an alcohol related event occurred in soap operas on average during three 1 minute intervals per 21 minute programme. Game shows averaged only a tenth of this. Alcohol was presented infrequently in commercials during either type of programme. A total of 236 incidents were found in the soap operas, 18 in the game shows and 19 in the advertisements. The rate per programme was 2.99, 0.3 and 0.14 respectively. Using these figures to calculate rough hourly rates for the programmes gives an average of nearly six incidents per hour in soap operas and 0.6 incidents per hour in game shows. Garlington also found that the home was the most popular place for alcohol use, and that straight drinks were the most popular, followed by wine.

A New Zealand study of the indigenous soap opera Close to Home (Casswell, Mortimer and Smythe 1983) looked at a total of 72–30 minute episodes, over 35 hours of programming. The main unit of analysis was the location, of which 276 were found that included reference to or consumption of alcohol. Within each location a number of incidents could occur and an average of 3.8 incidents per 30 minute episode were identified, giving 7.6 incidents per hour. Drinking was for the most part moderate (372 incidents) with only 30 incidents categorised as heavy/intoxicated. It was middle aged men as opposed to younger men, and women who were depicted as consuming alcohol most frequently. Attempts to classify reasons for alcohol use are reported only tentatively due to lower rates of inter coder reliability. They show around 17% of reasons to be tension reducing related. Most incidents (61%) however, were rated as incidental to the ongoing scene. The use of the Princess Tavern for many scenes appears to be the reason for the high incidence of drinking incidents.

Lowery (1980) also focused her analysis on afternoon soap operas but went beyond these previous analyses to include data on reasons for drinking and consequences of drinking. Focusing on the drinking scene she found a very similar rate to Garlington, 1.5 per 30 minutes of programming (giving a rate of three incidents per hour). She also found that 47% of recorded incidents were for social facilitation (ritualistic or tension reducing), 30% were for escape from reality and 23% were for crisis management. In addition she found that 70% of incidents were reinforced, both positively or negatively or had no consequences, while 30% of incidents were punished.

Hansen (1986) believed that it was necessary to look beyond the research focus on the content and effects of persuasive communication to examine the images of alcohol in television programmes generally. MacAndrew and Edgerton, (1969, in Hansen 1986) suggested that drinking behaviour and the norms and values associated with alcohol generally were culturally and socially defined. In order to understand how drinking

practices and beliefs are developed, Hansen (1986) studied the social systems which sustain alcohol Images and behaviour - namely the medium of television;

In modern western societies television provides the most widely shared and continuous flow of drinking images. It provides a pool of readily available values, norms, information and frameworks of understanding through which social reality may be interpreted.

(Hansen 1986 p.127).

However, where most analyses of alcohol on television focus on persuasive communications such as advertising, Hansen preferred to study the framework of fictional and non-fictional programmes which provide the context for advertising;

It is probable that the success or failure of alcohol advertising and education campaigns depends on the degree to which they are consonant with the images which are given currency and prominence in the media as a whole.

(Hansen 1986 p.127)

Hansen videotaped and analysed all programmes (no advertisements) broadcast on the four national television stations in Great Britain between 6.00 p.m. and 10.30 p.m. for two weeks. The alm was to analyse the extent and type of alcohol portrayal, the portrayal of effects and consequences associated with alcohol consumption and the characteristics of the drinking characters. These factors were coded by analysis of the scenes portraying drinking, uninterrupted verbal references to alcohol and speaking characters who were consuming alcohol within the scene. It must be noted that a scene with visual reference to alcohol was also coded as a drinking scene if it included a character(s) consuming alcohol. Consumption of alcohol was therefore recorded under two categories.

Visual and verbal references to alcohol appeared in approximately two-thirds of all prime time programmes while alcohol consumption was shown much less frequently (one third of the programmes). Alcohol was depicted 121 times (88%) in fictional programmes, with 99 of these cases actually portraying consumption.

Fictional programmes contained approximately 5 portrayals of alcohol per hour with non-fiction depicting significantly less hourly rates. Despite these figures however, very few programmes referred to any negative aspects associated with alcohol consumption. For example, Hansen noticed the lack of reference to alcohol when accidents or violence were reported in news programmes but was readily depicted in relation to celebrations concerning entrepreneurship, victory and achievement. Similarly, Hansen's study also suggested that while alcohol and excessive drinking played a clear narrative function by adding suspense and complexity to fictional stories these portrayals in some ways fostered and sustained the double-standards found in real life. For example, Hansen refers to two portrayals of car accidents which were initially associated with Intoxication

as a cause of the events, was played down and resolved in relation to another cause.

These depictions don't seem conducive to learning about the real-life role of alcohol in relation to crime, accidents and violence.

(Hansen 1986:129).

Of the 138 fictional programmes in the sample none had alcoholism as its main theme but 3 programmes dealt with alcohol abuse. Hansen noticed that two cases explained this abuse in relation to external or social pressures whilst the third focused on tack of self-confidence and ignored external influences. Male drinkers outnumbered female drinkers by a ratio of 2 to 1. Indeed Hansen suggested that the consumption of alcohol and women were commonly portrayed as a hallmark of manhood.

Codes within British television stipulate that no drinkers seen in advertisements should be under 25 years old but the programmes forming the context of advertising portray 13% of drinkers as under-25's. Hansen's argument concerning the contextual importance of persuasive media is certainly accurate according to these findings.

Drinking seems to be portrayed as an aspect of rich and luxurious lifestyles as 46% of the drinkers on are depicted as belonging to the higher financial echelons of society. Typically, Hansen found that most drinking occurred in the home or in a public drinking place but a significant proportion drank at work. Needless to say however, this was not depicted as creating any adverse effects on efficiency.

Wine was the drink most frequently consumed in fictional programmes followed by spirits and beer. In addition, drinking characters varied in their choice of alcohol, wine was particularly associated with women drinkers, beer and spirits with men. The wine drinkers and to a lesser extent spirit drinkers were portrayed as upper middle class characters. The workers on the other hand were typically depicted as beer drinkers. According to Hansen these drinking patterns suggest that television may be a contributory factor to the way in which sexually differentiated drinking patterns are developed and maintained in society.

Alcohol is mainly depicted as a celebrational drug and it is rarely utilised for instrumental purposes such as business, manipulation and to facilitate romance. Less than 4% of the drinking characters were drinking alone.

Conclusions from this content analysis suggests that research into the social role of television images of alcohol should include:

the extent to which television cultivates and reinforces beliefs that alcohol consumption is the norm rather than the exception in social interaction, that alcohol consumption is portrayed as a manly behaviour, that alcohol consumption is a mark of an affluent lifestyle, that different types of alcoholic drinks are linked differentially to the social class and the sex of the drinker and that alcohol

consumption rarely contributes to accidents ,violence or ill-health.

(Hansen p.131)

In the tradition of showing the extent of alcohol portrayal on television is a British study by Pendleton, Smith and Roberts (1988). These authors studied a systematic sample of 50 programmes broadcast on British television over a 5 month period in 1986. Eight of the programmes were foreign made. Programmes broadcast at different times of day were included in the analysis. The main units of analysis were verbal and visual references to alcohol and the drinking scene, defined as a scene showing actual or implied alcohol consumption by a speaking character.

In 52% of programmes drinking scenes were shown, while alcohol was referred to either visually or verbally in 84% of programmes. The rate per hour for drinking scenes was 3.3, while there was a total of 10.6 references per hour to alcohol, 6.7 of which were visual and 3.9 of which were verbal. These show an increase on Hansen's results, of a doubling of drinking scenes and visual references to alcohol and a 25% increase in verbal references. However, Hansen's results relate only to prime time television. Like Hansen this study found fictional programmes to be the main source of alcohol images, with fictional programmes twice as likely to contain a drinking scene, and having an hourly rate four times that of non fictional programmes. Overall drinking scenes occupied 14% of fictional programme time compared to 3% of non fictional programme time.

Frequency of alcohol images was similar for BBC and IBA and for home produced and foreign made programmes. Interestingly, alcohol portrayal was more prominent in programmes with larger audiences, and as might be expected were more common in programmes starting after 6.30 pm. Verbal references were more common in programmes screened between 6.30 and 9 pm than those starting after 9pm, but drinking scenes and visual references were similar over both time periods (5.2 compared to 2.8, 3.9 compared to 3.8 and 7.6 compared to 7.9 respectively). As with other studies, wine and spirits are shown being consumed more often than beer and as with other studies the effects and consequences of alcohol consumption were rarely shown. Intoxication was the most commonly shown effect, on average 0.5 times per hour, with two thirds being only verbal references, and a third being comical.

Pendleton et al conclude that the picture of alcohol given on British television is neither neutral nor realistic, in fact, they suggested, it is often a reversal of what happens in the real world. They further point out:

if drinking scenes were costed at the rate for prime time advertisements...... then the portrayal of alcohol consumption during the top 100 programmes would be worth, on the basis of our data, £533 million of free promotion to the alcoholic drinks industry per annum (p271).

Breed and DeFoe (1981, 1984) have reported results of a content analysis of incidents of alcohol consumption in selected television programmes, both for the 1976-7 season and over a five year period. As well as logging the number of incidents they attempted to look also at the motives, context and outcomes of drinking.

During the 1976-7 season they focused on two types of prime time television shows, situation comedies and one hour dramas, taking the top 15 rating shows in each category, and selecting ten episodes of each of the situation comedies and five episodes of each of the drama series. In all a total of 150 hours of programming was analysed. Scenes that had a significant relation to alcohol or drinking were studied in detail. Significant scenes were so classified if they:

portrayed heavy drinking,

showed a purpose in drinking beyond social sipping,

showed a consequence that would have been absent if non alcoholic drinks had been consumed.

showed a response to drinking activity by another person,

evaluated drinking as good or bad,

contributed to plot or characterization and

contained humour related to any of the above.

Interestingly social sipping and drinks ingested seemingly by habit were excluded.

In the 150 hours sampled a total of 701 TV drinking acts were identified, giving an hourly rate of 4.7. Drinking of alcohol was far more frequent than drinking of soft drinks, tea, coffee or water, in direct contrast to daily life. These drinking acts were contained in 233 scenes. A total of 396 characters were involved, with 226 classified as drinkers, 125 as disapprovers, and 45 being neutral. Of the drinkers, the majority (76%) were men, from a variety of socio-economic backgrounds. While just over 90% of disapprovers were good characters, just under half of the drinkers were 'good', and only 9% were 'bad'. The vast majority of drinkers(78%) were settled adults, that is they were people with established career paths and families. Fifteen percent of drinkers were young adults.

Breed and DeFoe further classified drinking as light (two drinks or less), moderate (three or four drinks) and heavy (five drinks or more). They found that some forty percent of drinking occasions could be classified as heavy, these heavy imbibers were most frequently the regular leads, and that 'bad guys' drank heavily less often (relative to their numbers) than did good or mixed characters. Hard liquor was drunk on 62% of occasions, wine on 22% and beer on only 16% of occasions. The two most frequent purposes for drinking were in personal crises, or as a social lubricant, something to do while talking, with crises being the catalyst for 61% of the drinking acts coded.

Breed and DeFoe specifically looked for episodes that combined drinking and driving. Of the eighteen such episodes there were four that contained accidents, five with near misses and nine that were problem free. All four accidents involved people who had been drinking heavily.

Breed and DeFoe point out that several of the television depictions of drinking appear to contradict accepted cultural norms and standards of public health. Characters frequently use alcohol to face a crisis, even though alcohol decreases motor skills and decision making ability. Few serious consequences of alcohol abuse are shown. And while young people are almost never seen drinking on television their attitudes to alcohol suggest an eagerness to start.

Following on from this study Breed and DeFoe (1984) report the results of a monitoring of TV programmes over a five year period, 1976-82. Again the ratings were used to determine the most popular programmes and focused on situation comedies and one hour dramas. A total of 615.5 hours of programming were analysed. Again the focus was on the drinking scene and the drinking act. Over the period there was an average of 5.66 scenes per hour in which some form of alcohol was observed, with few differences between sitcoms and dramas. The five year low for such scenes was 4.9, and the high 6.4 per hour. More drinking acts were found in dramas than in sitcoms, with an overall average of 6.97 per hour. In sitcoms drinking acts rose from just under five per hour in 1976-7 to more than eight in 1981-2. For dramas, the rate was the same in 1976-7, peaked at about ten in 1978-9 and ended at about nine per hour. Again, young people were rarely seen drinking. Characters under eighteen engaged in drinking acts on an average of eleven times per season, or 0.28 acts per hour. Most of these involved characters who later showed they had learnt their lesson and would attempt to control their drinking.

A variety of consequences was seen in many cases of alcohol abuse. These ranged from minor (a hangover) to status loss, danger to the drinker's health and safety, strained social relations and harm to the self or to others. However, on numerous occasions, especially in sitcoms, intemperance was excused, usually with a joke.

Breed and DeFoe also mention that a qualitative analysis of the behaviours showed patterns of which most experts on alcohol would disapprove. These included: young people anticipating the time when they too could drink; glamourising drinking; miraculous recoveries from alcoholism; drinking to escape or cope with crisis or stress; gratuitous drinking; omitting the reaction of others to alcohol abuse; and denying characters the opportunity to decline a drink' (p660).

In the same mode, Futch, Lisman and Geller (1984) conducted a content and functional analysis of alcohol use in some fifteen popular prime time programmes. "that

portion of television heavily viewed by children and adolescents" (p405), during a one week period. Observers coded videotapes of the programmes for instances in the following categories - duration of alcohol on camera, frequency of appearance, reference to alcohol, length of programme, type of beverage, type of programme, reason for drinking, characters involved in drinking, place of drinking and consequences of drinking.

Overall, results showed that twelve of the fifteen programmes demonstrated alcohol related events, either use of or verbal reference to alcohol. Alcohol appeared at a rate of 2.20 incidents per hour, verbal references were made at a rate of 5.30 per hour, giving a total of 7.50 incidents per hour. Reasons for drinking were celebration, 33%, enjoyment, 29%, hospitality, 25% and tension reduction, 13%. These results are in contrast to Breed and DeFoe's comment that a primary use for alcohol in television prime time is in times of crisis. The authors comment that only one alcohol incident had an observable or readily inferable consequence attached to it, and this was classified as positive. Again in contrast to Breed and DeFoe spirits comprised only 18% of categorisable beverages, though these authors are not clear whether this category includes all beverages or just alcoholic ones.

Unlike many other researchers Futch et al conclude that

many of the qualitative aspects of alcohol portrayals on television seemed consistent with appropriate, societally approved forms of consumption. Male and female characters typically drank for pleasure, consumed alcohol at home and rarely drank 'straight distilled spirits, preferring wine, beer and mixed drinks. (p409).

Attempts to relate the alcohol content of television programming to different types of viewers' real life behaviour and expectations have been undertaken as part of the Cultural Indicators ongoing research project. The cultural indicators approach examines the contribution television makes to the cultivation of common perspectives, reflecting the hypothesis that heavier viewers of television are more likely to understand social reality in terms of the facts of life they have seen on television, and further that television viewing brings people who traditionally would have different views together (Signorielli, 1987, p247). This latter phenomenon is known as mainstreaming.

Signorielli (1987) reports on a two pronged study that examines the portrayal of alcohol, alcoholics and drinking in prime time—dramatic television programmes and heavy, medium and light viewers' drinking behaviour. The theoretical perspective informing this approach is one seeing the television world as both mirroring and informing society, and the stories of television as being sources of learning about the world.

The data used for the analysis of television programming were drawn from samples of prime time network dramatic programmes broadcast between 1969 and

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1985, and 1978 and 1985. A total of 1215 programmes were included. The shorter time series examines presentation of characters who drink; the longer series examines presentation of alcohol in programmes and the portrayal of alcoholics. The audience surveys are drawn from the NORC General Social Surveys of 1977, 1978, 1980 and 1983.

In terms of television content, Signorielli points out that since 1969 the number of references to alcohol (talking about or characters drinking) has increased dramatically, from a low of 10% of programmes in 1969 to over 70% in the later years. More than half the programmes in the whole sample contained references to alcohol, and references are more common in action adventure and general dramatic programmes (60% and 70% respectively). The characters who drink on television are not that different from other characters, and given the number of male and female characters on television males and females are seen drinking in proportion to this, though fewer young people drink, given their television numbers. When alcoholics are shown, and the number portrayed is small, they tend to be very different from other characters. They are more likely to be involved in violence, to be married, to be men, to be older, and to smoke.

To relate these images to what people learn from television is attempted in an imperfect way by using data from the NORC General Social Surveys, where two relevant questions have been "Do you ever have occasion to use any alcoholic beverages such as liquor, wine or beer, or are you a total abstainer?" and "Do you sometimes drink more than you should?". Almost three quarters of the national sample say that they do use alcoholic beverages, and there is a small negative correlation with television viewing, which becomes positive when controlled for age, sex, eduction, income and race. When light, medium and heavy viewers are separated Signorielli claims to find some evidence for mainstreaming. "That is, the difference between college and non-college respondents and white and non-white respondents who say they drink is smaller among heavier viewers than among light viewers" (p256). Occasional overindulgence in alcohol shows no relationship with television viewing.

An earlier study by Gerbner et al (1982) found a similar pattern of results. However, Hansen (1988) has critisised the findings if not the approach. While he acknowledges that Gerbner et al's approach has many advantages over the earlier traditional experimental studies (that have tried to link drinking behaviour on an experimental occasion to exposure to one selected television programme) he finds the variable definitions crude and the application of results selective. He also points out that while the cultivation hypothesis focuses on beliefs and perceptions, the results Gerbner is using focus on behaviour.

Wallack and Breed (1987) was convinced that television serves as an educational medium therefore warranting study as to the portrayal and extent of alcohol on primetime television. The chosen sample consisted of all routine network programmes appearing within prime-time (8.00 - 11.00 p.m.) viewing hours. The resulting sample, totalled at 122.5 hours, consisted of 127 episodes and was categorized as situational comedy (16.5 hours), dramatic series (68 hours), movies made for television (23 hours), theatrical movies (8 hours), and others (7 hours). The largest category, the dramatic series (53% of all programmes), featured police and private detectives as well as nighttime soap operas.

Alcohol appearances included all visual and verbal references to alcohol and drinking. These were divided into incidental and significant appearances. To qualify as an alcohol-significant scene any one of the following eight categories had to be present. These were: heavy drinking, consequences of heavy drinking, drinking as a response to problems or as a means of coping, a response from another character about drinking, drinking as central to the plot or character development drinking in association with high-risk activities drinking or desiring to drink by youth and drinking jokes. Any other form of alcohol appearance was incidental. Alcohol acts were classified as ordering, pouring, accepting or holding a drink. Nonalcoholic beverages were also counted for purposes of comparison.

78% of the 116 episodes coded contained at least one alcohol appearance. In addition, 92% of the 12 movies made for television made references to alcohol. In situation comedies alcohol appeared in 52% of the 33 episodes studied. The majority of movies made for television (83%) and dramatic series (73%) showed characters actually drinking. Overall, 60% of all programmes on television showed at least one character ingesting alcohol. The total sample of fictional programmes contained an average of 10.65 drinking acts per hour. The average rate per hour for 'foreground' and main characters drinking totalled at 4.32 incidents per hour. Wine was the most commonly consumed beverage accounting for 46% of all alcohol consumption followed by spirits (28%) and beer (26%). Males drank twice as often as women but females drank proportionately as much as their male associates. Only 6 characters under 18 years of age were observed drinking and at least 50% of alcohol acts were performed by lead players.

While drinking was frequent fittle emphasis was placed on alcohol as a social problem. Indeed, Wallack reported that the higher incidental occurrence and lower depiction of actual drinking suggested that alcohol was an essential if not prominent aspect of society.

Wallack found that alcohol was the most commonly consumed beverage on

television followed by coffee and tea, soft drinks and water. However, 'real world' figures indicate that water is the most prevalent and alcohol is the least consumed beverage. Wallack concluded that such unrealistic portrayal of alcohol had several consequences. Television images suggested that alcohol is a necessary and routine part of life which is particularly associated with glamourous lifestyles. The lack of negative consequences of alcohol led to the conclusion that alcohol is not presented in balanced or realistic fashion on prime-time television.

These images (of alcohol) are at variance with the problematic nature of alcohol in society.......The overall impact may contribute to the normalisation of drinking in American life.

(Wallack and Breed 1987).

It seems clear that in looking at the relationship between alcohol TV portrayals and the audience it is in the realm of perceptions and values associated with alcohol that the most salient influences will occur. A study by MacDonald (1983), quoted in Hansen 1988, examined the frequency of drug use, and the context, motives and consequences associated with drug use in popular soap operas. However, rather than undertaking a traditional content analysis, MacDonald interviewed 165 long term soap opera viewers about the portrayal of alcohol and other drugs in the soap operas they watched. These viewers mentioned alcohol as being seen more often than other drugs; they also judged negative portrayals of alcohol to be more frequent than positive - in contrast to the results of the studies mentioned above which have counted 'sips and mentions'. It may be that many of the alcohol references in soaps are part of the background and that viewers focus more on alcohol references when they are directly linked to the plot. In soap opera often this involves the problems associated with heavy drinking.

However, while viewers may focus on plot relevant alcohol references when specifically asked, it still remains likely that the overall incidence and generally positive image of alcohol shown in television programmes is having an influence. Hielbronn (1988) used 77 prime time continuing series episodes already coded for their drug and alcohol content to examine the uses of alcohol within the television text. She feels that

most (alcohol appearances) when considered within the full discourse of symbols on television, play a role in the plot which the substitution of another substance or action would not satisfy because these substances and acts have non-equivalent meanings (p230).

Within these series alcohol is used for three purposes;

to create a context for action.

to create a sense of character and

to aid plot development.

Briefly to summarise elements of these, in setting the context the appearance of alcohol depends on the association of certain types of alcohol with certain types of lifestyles. Use

of alcohol in scenes on TV, rather than glamourising alcohol, could be said to to use alcohol to glamorise settings. In creating a sense of character, wine tends to be drunk by ladies as a cocktail, though when accompanying a meal it suggests higher class. Brandy can indicate sophistication, when drunk alone at night it indicates reflection, it is also offered after a shock has been suffered. Beer is generally associated with the working class. Vodka tends to be associated with problem drinking. Drinking may be used to suggest a victim or a victimizer. The consequences of drinking are often highlighted in episodes with anti-drinking messages. Often these episodes show little actual drinking, but rely on verbal references. The long term health problems associated with heavy drinking are not a focus, rather heavy drinking is shown as a response to stress, sign of character weakness or the product of some earlier, unknown problem.

However all of these uses are not equivalent and draw selectively on different cultural pools of images and associations. In addition, as Heilbronn puts it

The skilled reader of the television textin general recognises alcohol's 'denatured' character in many of its appearances. Such a reader need not interpret alcohol's appearances as an incitement to go forth and create a similarly constituted world for his/herself (p 247).

In considering alcohol and the media four different aspects of its functioning in this area can be distinguished (Partenan, 1988). These are;

alcohol advertising,

alcohol education.

images of alcohol and drinking on the media and their relation to the audience's everyday life and

the media as a forum for alcohol issues, the social climate.

Most of the work reported in this section has concentrated on images presented in programmes and to some extent advertisements. The clarification of the relationship of these images to audiences is a much less developed area. However it is also noteworthy that none of the studies cited is Australian in origin, or deals with Australian media. Thus the present study breaks new ground.

6. HOW ADVERTISING WORKS

This chapter commences with an examination of the general principles of advertising, and their application to television. A general introduction to the area of social marketing then follows. In the remaining, major component of the chapter the concepts and principles introduced in the general section are applied to the specific areas of driving behaviour and alcohol, in that order.

6.1. Advertising as a Persuasive Communication.

The aim of advertising is to change people's behaviour. In the case of commercial advertising, this generally means increasing the number of people who regularly buy an offered product. However, advertising researchers (e.g. Rossiter, 1983) and major marketing organisations (e.g. Hearne, 1984) agree that advertising effects this behavioural change by first modifying the potential purchasers' attitudes toward the product. The desired behavioural modification follows, as the target person adjusts their behaviour to match the new attitude.

Attitudes have three major components. These can be referred to as belief, emotional, and behavioural components (Kelman, 1961), and each can be targeted in the advertising message. The belief component of an attitude reflects the person's rational ideas and opinions about the advertised product. The feeling component contains the more emotional reaction to it, and the behavioural component is how the person intends to act with reference to it, e.g. to buy or not to buy.

Although identifiably separate, each part of the attitude does relate to each other. Therefore, changing one component of an attitude, such as the opinion of the product, or the feeling about it, will exert pressure on another element, such as the behavioural, to change in line. The extent to which the attitude is readjusted in this way will depend upon the amount of change accomplished in the particular component, and in the relative contribution of each component to the attitude. The technique used to present the message also has a different effect on the different elements.

Not surprisingly, the belief component of an attitude is most readily influenced by messages which present factual, informational details about the product and which are delivered with an air of authority and expertise. The attitude change which such messages induce tends to be much more durable than other forms of change, but is often more difficult to obtain over a short term. This is because the process of changing a person's beliefs and opinions requires the person to compare the new arguments against their own established views, which in turn, may be related to their opinions on other issues. All

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new beliefs need to be incorporated into the person's complete belief structure and for this reason, attitude change which is accomplished through the belief component generally is referred to as Internalisation.

The feeling component of an attitude is more readily influenced than the belief component. However, any change which is accomplished in it is less durable than that in the belief component. Messages which stress the attractiveness of the product, which associate the product with someone or something liked by the target person, or which present the product in a way which seems to match the target's self Image, are likely to affect the feeling component. **Identification** is the term given to this form of persuasion which depends heavily on an accurate assessment of the target's own self image, and their likes and dislikes.

The low durability of change induced through identification reflects two features of it. First, a person's likes and dislikes are very changeable. Unlike opinions, which are tied to an inner belief structure, feelings have few ties to other parts of the self. A person can readily decide they no longer like a particular personality or object without any logical reference to any other aspect of themselves. Accordingly, an attitude which has been modified through association with such a person or object can also change just as quickly, as the product no longer matches the revised set of feelings.

The second influence on attitude change induced through identification reflects the fact that a person's self-concept can be broken down into a "Real Self" and an "Ideal Self". Research suggests that more intense liking is associated with aspects of the ideal self, rather than with those of the real self, which represent the "warts and all" view of life. However, people appear to identify more readily with products which match the real self image when those products are intended for private consumption, e.g. toothpaste. Publicly "consumed" products, such as motor cars, are more likely chosen to match the ideal self (Hughes, 1976). A further consequence of this effect is that people tend to report greater liking of advertisements which have been directed at the ideal self, and which therefore are promoting "public" products, than those featuring the real self. An example of this is the frequent appearance of toothpaste, cleaning, and analgaesic advertisements among the lists of most disliked television advertisements reported in the trade media (e.g. B&T, 25/2/82, pp33-35).

6.2. Television as an Advertising Medium.

Because of its high penetration into the population, television is a popular medium for advertisers. Messages presented on television, at any one time, have the potential to reach more consumers than those on any other medium. However, the high penetration is

not a guarantee that an advertiser's message will actually be **watched** by all those who **see** it. People may leave the room, or talk, during the "ad' breaks", or simply not pay attention to the message being presented.

In recent years, the profusion of remote-control devices, and video recorders, has increased the probability that an advertiser's messages will not be watched. It is now very easy to change channels to see what's on the other station, while the advertisements are presented, or, to "shuttle" over the ad' breaks in recorded material. Of particular concern to advertisers, is the fact that the audience segment most prone to such behaviour is the so-called young adult, which is also the target of most advertisements (Heeter and Greenberg, 1985). Because of this an extraordinary amount of creative time must be invested in a television advertisement to make it "eye-catching" and thereby to enable it to gain the viewer's attention long enough for the message to be presented (Clemenger in B&T, 1982). Viewers actually like well-presented, "creative" advertisements (McCormick, 1989).

Television is also better suited to some forms of advertising than others. It is what McLuhan called a "cool" medium because it does not require a great deal of cognitive effort to watch and enjoy. In contrast to the radio listener, who must create an "image" of the presenters, characters, and action on the basis of what they hear, the television viewer is provided with all the details, with nothing left to the imagination. Because of these low cognitive demands, television has its greatest impact on the emotions, rather than on beliefs. Put another way, television "appeals less to the mind than it does to the heart" (Courtenay, 1986). When television is used for anything other than an emotional appeal the information it presents needs to be brief and to the point.

In the context of advertising, the emotional power of the medium means that television advertisements are most likely to have their greatest impact through the process of identification, rather than internalisation. Accordingly, the most effective, and most frequently used, formats incorporate characters who are "liked" and/or establish a fundamental similarity between the product, and the target's real or ideal self image. Only the so-called "retail" advertisements, for supermarkets etc, are likely to benefit from primarily informational advertisements, since prices fit the category of brief and to-the-point information. Such informational transmission, however, is not associated with the necessary "liking" which characterises identification. Typically, the informational-based retail advertisements are disliked by viewers (*B&T*, 25/2/82, p33).

The major limitation with harnessing the powerful forces of identification lies in the poor durability of attitude change induced by this process. To overcome the relatively rapid decay of an advertisement's message, it needs to be exposed on a regular basis to the target audience. Repetition needs to be an important component of any television campaign.

6.3. Regulation and Control of Television Advertising.

In recognition of their powerful position in society, the broadcasting media in most countries operate under some form of legislative control. In Australia, the relevant body is presently The Australian Broadcasting Tribunal (ABT). Its function ranges from regularly reviewing radio and television station licences, to setting standards for programme and advertising content of broadcasts. These standards include specified hours during which certain types of material can be broadcast, or in the case of children's material, must be broadcast, as well as other matters such as the amount of Australian content to be included in programme schedules. They are determined after lengthy processes of inquiry and once established, are legally binding on the media.

In conjunction with its function of setting the standards for the media, the ABT operates a complaints section which receives comments from all levels of the community regarding possible breaches of these standards. The Tribunal responds to such complaints by first determining if the complaint relates to one of the standards. If it does not, the information is passed directly to the transmitting station concerned. If the material does relate to the standards, the Tribunal will investigate and, where necessary, issue remedial directives.

In addition to the ABT, the advertising industry itself has its own voluntary bodies which oversee the standards of advertisements which are broadcast. Such bodies describe their function as ensuring that all advertisements presented by participating members adhere to self-imposed ethical guidelines. Their existence is encouraged by the ABT who, themselves, set few specific guidelines for the content of advertisements.

The Media Council of Australia (MCA) represents most of the major media outlets, including all commercial television stations through the Federation of Australian Commercial Television Stations (FACTS). Advertisements appearing on the participating stations are required to adhere first to the Council's general Code of Ethics, and in the case of specified commodities, to a further Product code of ethics. All the respective codes are normally ratified through the Trade Practices Tribunal which, legally, is the relevant body. Until 1974, adherence to the codes, and investigation of breaches, was supervised by the MCA itself. However, in 1974 a further industry body was established to carry out the investigation of breaches. This body, known as the Advertising Standards Council, contained so-called public involvement, as well as participation from the major media and advertising bodies. Following an appeal lodged to the Trade Practices Commission, by the Australian Consumers' Association in 1987, various structural changes were

implemented in the Council, including an increase in the "public" representation on the Council from seven members to nine (in a total of tifteen) (Advertising Standards Council Twelfth Annual Report).

The function of the Advertising Standards Council is described as providing "public involvement in the interpretation, application, and where necessary, amendment or extension of (the) existing (MCA) codes through a central authority which could advise on any and all aspects of advertising that from time to time might require regulation" (B&T Yearbook, 1989). In practice, this function is carried out through investigation of complaints lodged by the public or by community groups. The Council reports its deliberations in monthly summaries and in an Annual Report.

6.4. Incidental Effects of Television Advertising.

As has been pointed out in other sections of this report, television plays a significant role in incidental social learning. The advertisements, as well as the programmes, provide a continual source of information which the viewer uses to formulate their understanding of the world. The representation of "life" in television advertisements readily becomes a frame of reference by which a viewer may construct their own life. For this reason, all the discussion on this aspect of television, reported elsewhere, is equally applicable to advertisements.

6.5. Social Marketing.

Social marketing is the term currently used to describe the application of conventional marketing tactics to promote socially beneficial behaviours. Such applications typically do not restrict themselves to advertisements in the media, but also extend into the community through direct intervention programmes.

Although the term is a relatively recent one, social marketing has a long history which can be traced to the traditional "public information" campaigns typically conducted by governments from time to time, with varying levels of success. In 1952 Weibe reflected the contemporary uncertainty of the value of such campaigns when he asked "Why can't you sell brotherhood and rational thinking like you sell soap?" (p.679). His plea was answered by many subsequent writers who argued that the marketing of abstract, intangible social values, and socially beneficial behaviours, was indeed possible. Perhaps the most valuable aspect of these subsequent papers lay in their analyses of the similarities and differences between conventional, commercial marketing efforts and their social equivalents. The least satisfying aspect was the relatively few reports of objective evaluation of the effectiveness of attempted social marketing in actually

changing people's behaviour.

In some ways, social marketing has increased its similarity to commercial advertising over the years. The change of emphasis from "information" to "marketing" in the title, reflects the realisation that the powerful forces of identification, employed so effectively in the commercial arena, can be relevant to these more abstract issues. Hence the emphasis in such campaigns is less toward information transfer, and more toward modification of emotional response (Noble and Noble, 1988). This is consistent with the most effective use of television, detailed above.

However, the differences between the social and commercial applications are significant. Bloom and Novelli (1981) and Elliott (1987) have provided extensive descriptions of the major differences which have emerged over the years. Bloom and Novelli emphasise the difficulties found when attempting to transfer conventional marketing principles to the new domain. For example, they refer to the problems of determining market segmentation in the case of the social advertisements, the difficulty associated with establishing a product identification, and the fact that even now, the campaign typically requires relatively large amounts of information to be transferred.

Elliott (1987) describes more practical considerations in his discussion of the differences between the two forms of marketing. For example, he points out that unlike most commercial advertising, where the product is being promoted as likely to bring satisfaction to the consumer, social marketing often requires the target to undertake a modification of their behaviour with no immediate positive effect. Indeed the message may be advocating action which many consider as a restriction on their present behaviour, e.g. wearing seat belts or bicycle helmets, or making the journey to a medical centre for inoculation.

Another of Elliott's points is that social marketing must involve more than "social advertising". Because, as implied in Weibe's question above, it involves promoting positions which community members may often accept as "right", but which they do not themselves adhere to, the advertising campaign must be supported by direct intervention into the community. In some cases legal enforcement is relevant while in other cases such activities as personal contact and publicity displays in shopping centres may be necessary.

It is clear from the vast literature on the matter, that social marketing is a rapidly growing area of research and application. Many advertising agencies now perceive it as an increasingly profitable part of the "government bickie jar" (Miller, 1990). The research has shown that the principles of marketing can be applied to the

presentation of issues which are considered in the best interests of the community. However, such application must be made with full awareness of the differences between the commercial and social commodity in order to have an effective impact on people's attitudes. Furthermore, it is important that all advertising is accompanied by additional supporting activity at the level of the "consumer", and the activities are followed up by methodologically sound evaluations of their effectiveness in obtaining the desired effect.

6.6. Indirect Advertising and Sponsorship,

Indirect advertising refers to all instances where an advertiser's message is exposed ostensibly as incidental to some other activity. On television, the most common form of this occurs during the broadcasting of sporting events or other activities which are sponsored by the company concerned.

Sponsorship of various activities has long been a part of commercial activity. It has been argued that such sponsorship benefits the company by creating "good will" among potential consumers of the sponsor's product. In the past, it was believed an appropriate acknowledgment of financial support was sufficient to inform the public of the company's generosity, and this in turn would create the appropriate feeling of "goodwill" (Way, 1980). However, over recent years, sponsoring companies, particularly of events covered on television, have required increasing amounts of exposure of their product's name. The process which is being tapped by this frequent exposure is well suited to the "emotional" power of television, and the associated role of repetition discussed above. Our knowledge of its effectiveness has developed through extensive psychological research on the effects of "mere exposure" to an object.

Psychologists working with a wide range of stimulus material, have shown that more frequent exposure to an object leads a person to feel more positive toward it, and even to 'like" it. Some examples will reveal the power of this effect. In one of the earliest experiments in the area, Becknell, Wilson and Baird (1963) showed that women who had been exposed to different meaningless words for a different number of times subsequently chose stockings which were labelled with the word they had seen most often, rather than those carrying labels of the other words they had seen. The frequent exposure to one particular word had made the women feel more positive, and perhaps more familiar, with the word, and this had influenced their subsequent response to an item bearing the word. The same effect has been found for frequently presented faces. People feel that a face shown to them more frequently than other faces, would be of a "nicer" person, and that they would probably like that person more than they would others they had seen (Zajonc, 1968).

More recent research has shown that such familiarity effects can operate entirely without the awareness of the person involved. Wilson (1979) conducted an experiment which carefully controlled participants' awareness that they were being presented different musical tunes at different exposure rates. People subsequently reported significantly greater liking of the tunes they had heard most often, even though they could not recognise having heard them before.

With the psychologists' data readily available, it is not surprising that over recent years sponsorship has moved its goal from "acknowledgment" to "exposure", particularly exposure on television which is so well suited for the emotional effect being manipulated.

7. TELEVISION ADVERTISING AND DRIVING BEHAVIOUR

7.1. Regulation of Driving Depictions in Television Advertisements.

In 1983 the Australian Government body The House of Representatives Standing Committee on Road Safety examined the relevant Impact of advertising standards on road safety (HORSCORS, 1983). In their conclusions they acknowledged that much more of a viewer's time is spent watching programmes than advertisements, and hence, that any concern over advertising content should not be expressed independent of an equal concern over programme content. Nevertheless, the Standing Committee felt that because of the explicitly persuasive nature of advertisements, they would be particularly likely to have a potential influence on viewer's driving attitudes.

The Standing Committee expressed concern that the ABT did not have a detailed standard for controlling the depiction of road behaviour in advertisements. However, despite the Standing Committee's call for the development of a set of such standards, none has yet been devised. The Tribunal appears to encourage industry self-regulation where possible. This means the Media Council of Australia continues to play a central role in regulating the depiction of driving in advertisements.

As noted above, the Media Council of Australia is the industry's major self-regulatory body, and it has a general code of ethics, and specific codes relevant to particular commodities. The code relating to alcohol is considered in a later section of this chapter. As with the ABT's standards, the MCA does not have a specific code to cover the depiction of safe driving. Driving is referred to in the clause covering any "dangerous behaviour". This clause requires the advertisement to "not encourage illegal or unsafe road usage practices" (Media Council of Australia, 1989, Clause 4). A little more guidance on how an advertisement might be judged with reference to the clause is provided in an additional set of principles for the promotion of motor vehicles which has been developed by the Federation of Commercial Television Stations (see HORSCORS, 1983, p10).

Adherence to the MCA code implicitly requires a commercial to include belted drivers and other signs of conformity to relevant laws when the driving is depicted on public roads. However, the additional FACTS guidelines for the promotion of motor vehicles, have established the acceptability of "trick" driving sequences filmed on test tracks or, frequently, disused aircraft runways, provided they are subscripted with an appropriate warning that the depicted driving is exceptional in some way. The impact that such subscripts have on the viewer's absorption of the depicted driving is yet to be

empirically tested, and is referred to below in the context of a process known as the "sleeper effect".

Reports of recent judgments of the Advertising Standards Council indicate that complaints regarding depictions of unsafe road behaviour are relatively infrequent. The House of Representative's Standing Committee was told the relevant figure for 1982 was two complaints among the 198 received. Examination of the Annual Report for 1988 gives more details on two complaints considered by the Council in that year. One concerned an advertisement for the Ford Telstar. In the commercial, the vehicle was shown overtaking another by crossing an unbroken white centre line on the road. This action is illegal in a number of States and hence conflicts with the Code of Ethics. The complaint was upheld by the Council and the advertisement was changed. The judgment, and the resulting action, reveals the effective power of an appropriate self-regulatory body.

By contrast to the case above, another complaint received in 1988 referring to an advertisement for Bridgestone tyres, was not upheld by the Council. In the advertisement a taxi was seen to pull up at a pedestrian crossing to permit the passage of a person. The taxi passenger's comment of "don't hit her mate" draws the driver's response, "not without a bull-bar, mate". The Council argued that such a comment did not imply that the driver would have hit her if the vehicle did have the bull-bar. They dismissed the complaint that the scene depicted a dangerous attitude to driving on the basis that it represented "laconic Australian humour". In fact various complaints to the Council are dismissed on this basis, not just those containing driving sequences, even though there is no specific mention in the code to humour acting as a modifier.

The Council's use of the criterion of humorous intent, to judge adherence to the Code of Ethics, raises the need for more research into the impact on viewers of dubious behaviour which is justified on the grounds of being a humorous exaggeration, or as noted above, with a subscript qualifying the visuals in some way. This is not only because of the importance that observational learning plays in the cognitive structuring of an individual's world. It also relates to the fact that over time a person dissociates details of the source of information from the information itself (Kelman and Hovland, 1953). This could mean, for example, that behaviour observed in an obviously humorous, or satirical context, may be recalled at a later date without recollection of the fact that it was not intended to be "real". Research in the area of persuasion processes has established that information which was initially rejected (for whatever reason) can have a subsequent "sleeper" effect on a person's behaviour (Gruder, Cook, Hennigan, Flay, Alessis and Halamaj, 1978). In the present context, this "sleeper effect" would lead a viewer to forget that the unsafe behaviour they saw was, in fact, humorous exaggeration (or, with reference to the previous point, qualified by a subscripted comment). The viewer's

subsequent tendency to imitate such behaviour may be no less than if the humour or subscript had not appeared.

7.2. Research on the Depiction of Driving Behaviour in Commercial Advertisements.

As has been noted elsewhere in this report, the amount of research on the representation of driving behaviour (as distinct from alcohol and driving) on television is somewhat limited. It is virtually non-existent when considering only the commercial advertising content.

The Greenberg and Atkin (1983) study did not report any analysis of driving depictions contained within advertisements. The analysis was restricted to programme content material. However, in his follow-up to the 1983 paper, Atkin (1989) did make reference to the frequency with which seat-belts were shown being worn by characters in advertisements. He examined 150 "driving-oriented" commercials. These were mainly advertisements for motor cars, but also included those for other products when driving was included. He reported that in many cases it was difficult to discern whether the driver was "buckled" or not, due to distance, window glare etc. However, where the driver was clearly visible they were generally represented as wearing a seatbelt (86% incidence). This was notably more frequent than he found among the programme content.

The consistently frequent depiction of seat-belt wearing in advertisements, particularly for motor vehicles, has a number of implications. First, it can contribute to the viewer's cognitive view of the world as being a place where people wear seat belts when in cars. However, if this message is contradicted by few such depictions in the programme content it may be of only limited value.

A second implication reinforces a point made above. The existence and adherence to a self-imposed code of ethics, found in the USA as well as Australia, together with appropriate guidelines can result in positive depictions of safe road behaviour. However, to be of maximum value, such codes and guidelines themselves, must be comprehensive in their direction and advice. Regular updating of the codes, after consultation with relevant road authorities, would appear to be the most effective means of ensuring that they did reflect contemporary concerns of the authorities. In this context, an observation made by Atkin himself, could warrant some consideration. He noted that there were few depictions, in advertisements or programmes, of people actually putting on their seat belts. He suggested that this meant that any impact on the viewer of the depicted seat belt wearing would be incidental, and may even go unnoticed. The impact of such depictions may be greater if the act of putting the belt on is displayed more explicitly. This is another

researchable matter which should be pursued by relevant authorities.

A third point arising from Atkin's analysis relates directly to the advertising context in which the safe road behaviour occurred. The consequences of **not** wearing a seat-belt are unlikely to appear in an advertisement, since positive promotion of the product is the goal. So, although they make a passive contribution to an overall safe image of driving, they can not have an impact on the more negative effects which are most effectively presented through the depiction of the consequences of unsafe driving. This comment applies equally to all forms of unsafe behaviour, not just the wearing of seat belts. Safety, and the potential consequences of accidents, is a consistent and prominent theme in very few motor vehicle advertisements. The promotion of Volvo cars is a notable exception to the general observation (e.g. the "Staying Alive" series of 1989; *B&T*, 26/5/89). However, even in this case the emphasis understandably is on the features of the car, rather than of the driver.

7.3. Social Marketing of Safe Road Behaviour - The Need For Evaluation.

Throughout the world government agencies are charged with the responsibility of reducing road accidents through education as well as regulation. The educational function typically involves a variety of approaches, but frequently incorporates media campaigns. In Australia the situation is no different, with bodies such as the State Traffic Authorities, and various Road Safety groups engaging in diverse activities which range from the production of posters and school kits, through to the development of expensive television advertisements.

Unfortunately, often because of limited budgets, the effectiveness of the media campaigns frequently is not assessed in any systematic way. As early as two decades ago Haskins (1969, 1970) argued for greater recognition of the need for both pre-testing and post-exposure evaluations of safety campaigns. By 1977 an OECD report (cited by Elliott and South, 1985) also concluded that very little systematic data were available in the area. That report concluded that there were only three legitimate ways of assessing the effectiveness of the campaigns, each being an objective measure of actual behaviour, including the number of accidents. In addition, sound methodology requires the inclusion in any research, of an appropriate "control" group who have not been exposed to the message.

Given the limited budgets of most authority groups, and the desire to maximise the output per dollar, it is not surprising that many believe they can not afford the obviously expensive procedure of including a sound assessment survey in the campaign. Yet, ironically, it is only through the use of such assessment procedures that the sponsoring

body can be sure their output has had any effect at all. Fortunately, this fact is now being recognised more widely and, although the number of published, methodologically sound evaluations still falls far short of the number of campaigns which are mounted, the figure gradually is rising.

Although there are numerous inconsistencies in the data, the general conclusion which arises from the published reports is that television campaigns can be effective, with some qualifications. First the authorising body must be clear as to what aspect of the viewer's behaviour, or attitude, is being targeted, so appropriate evaluations can be made. Second, to be effective the advertisements should be part of a broader campaign employing the features of community intervention mentioned in the previous discussion on social marketing generally. In the case of many aspects of driving behaviour, a prominent component of this intervention may be a period of increased, visible enforcement, although the more conventional posters and personal contact also are important.

The range of issues covered by safety campaigns is basically wide, including pedestrian behaviour, pushbike riding, and defensive driving, yet universally two issues have dominated the television budgets. These are the wearing of seat belts in vehicles, and drink-driving. It is not surprising then that the published evaluative studies also focus on these matters. Each of the issues will be considered respectively in the following sections, commencing with advertisements which have promoted seat-belt wearing.

7.4. Social Marketing and Seat-Belt Use.

One of the earliest studies of the effectiveness of a seat-belt campaign, and still one of the most rigorous, was conducted in the USA by Robertson (1974, 1976). He reported that the screening of a number of advertisements had no effect on the behaviour of his target audience. The study was conducted in a highly controlled manner, employing cable television which was able to selectively transmit the advertisements to identifiable target groups. The behaviour of these groups subsequently could be observed. The advertisements themselves were well researched and produced, and some even won industry awards for their production quality. They also were carefully placed in programmes which were appropriate to the target audience.

In his evaluation Robertson arranged for observers to count the number of vehicle drivers who were wearing seat belts as they drove past designated sites. By referring to the vehicle licence plates he was able to determine whether the driver belonged to the group who could have been exposed to the advertisement. The observers remained "blind" to this information and hence could not be influenced by their own expectations.

Robertson compared the observations of the exposed group with those of the control group who had not seen the advertisement, but who did not differ in any systematic way from the others. His conclusion of "no measured effect whatsoever" (Robertson, 1974, p.1077) reflected the fact that there was no significant difference between the counted frequency of seat-belt use in each group.

Atkin (1981) has argued that Robertson should not have restricted his evaluation to the observed behaviour, but also should have considered additional conventional measures for assessing advertising effectiveness. Such measures would include recognition and recall of the advertising message, which provides information on the ability of the advertisement to attract the viewer's attention. Because of their relative ease, such assessments are the preferred method of many advertising agencies, yet as noted in the OECD report mentioned above, they do not necessarily represent the primary goal of the advertisement, which must be behaviour change. Robertson's choice of observed frequency of seat-belt use does meet the OECD criterion, but Atkin's point is that the additional information which he did not gather would have permitted further analysis directed toward a determination of just where the campaign went wrong.

To take up Atkin's point, if the additional data had been available, it may have clarified whether the fault lay in the advertisements themselves or in the absence of related community extension of the argument. Both explanations are possible. If the advertisements were at fault, the problem would probably lie in the adoption of a persuasive style which was not optimised to the television medium. Robertson appears to have chosen to emphasise the informational element in his advertisements, together with endorsements from medical practitioners. These are approaches more suited to internalisation than identification, and less suited to television than are more emotional messages with features intended to bring about identification. On the other hand, if community extension was the major problem in Robertson's campaign, it would most noticeably be evident in the absence of support legislation and policing in the USA where the wearing of belts was not compulsory.

In contrast with the absence of appropriate legislation to support Robertson's message in the USA, in Australia, seat-belt wearing has been compulsory in all States for many years. Consistent with this fact there is evidence in Australia of more success from media seat-belt advertisements. This supports the belief that while the advertisements may have limited, or even no success alone, they can be effective when combined with appropriate community action. The action in this case is legislation and enforcement.

An example of a successful seat-belt campaign in Australia was reported by Johnston and Cameron (1978). The advertisement was screened three times each night

over a two-week period. Subsequent roadside observation of people who had or had not seen the advertisement, revealed the success of the message. In this case, community extension, in the form of relevant legislation and policing, probably increased the effectiveness of the message campaign. More recently, a number of advertisements have emphasised enforcement as an explicit component of the campaign. One such example is the "Yeah Yeah" advertisement from the Traffic Authority of NSW (B&T 26/8/88, p. 5) in which the message "If you speed you will get caught" was reinforced by the claim that police stop one speeding driver every sixty seconds.

Another example of the importance of supportive community extension, in this case non-legislative, was reported by Levens and Rodnight (1973). They concluded from their analysis that the presence of supplementary material, co-ordinated with the television campaign, was essential to maintain any initial success of the seat-belt advertisements they studied. They placed particular emphasis on publicity posters, arguing that they were an economical, yet effective means of maintaining the message's impact.

When more money is available, to mount even greater support efforts, the impact of the advertising message also appears to increase. The overwhelming success of the CBS "National Drivers' Test" in 1965, reported by Mendelsohn (1973) is one such case. Although not strictly an advertisement, the manner in which the programme was marketed does make it relevant to the present discussion. The "test' comprised a series of quiz-style questions which were presented during the programme. The questions covered a variety of road safety and driving issues, and drivers were asked to consider their answers during the programme. Most importantly, the screening of the "Test" was promoted through newspapers and magazines, as well as on the stations themselves, and also through petrol dealers.

Following the screening of the National Drivers' Test there occurred a three-fold increase in enrollments at driver training and improvement courses. Much of the credit for this heightened awareness of driver behaviour must go to the campaign, particularly the detailed co-ordination which so effectively linked the community extension material to the programme itself.

The importance of co-ordinated support in the successful seat-belt campalgns is not surprising. The authorities mounting these advertisements were merely employing a conventional tool of marketing. There are few successful commercial advertisements which have not been part of a co-ordinated effort combining all media and point-of-sale backup. However, legal enforcement is one form of support which is uniquely available to the social marketer, and as the data reveal, has been part of the most successful

campaigns. The early attempts at marketing seat-belt use were bound to fail without at least the legal or more conventional support elements.

Finally, evidence appears to support the importance of at least one other marketing convention, namely intensive message repetition, in the successful campaigns. Commercial advertisers employ this tactic in order to heighten the consumer's sense of familiarity with the product, in much the same way as the "mere exposure' process discussed above. It is an approach well-suited to the primarily emotional impact of television. The successful Johnston and Cameron (1978) study reported above used intensive exposure of the advertisements over a two-week period. Levens and Rodnight (1973) also reported that the most effective strategy appeared to involve regular "bursts" of exposure, with the supporting material carrying the campaign between these intense exposure periods. The reported success of the "click clack, front 'n back" theme by the NSW Roads and Traffic Authority would seem to depend a lot on the frequent exposure to this familiar message.

7.5. Social Marketing and Drink-Driving.

The theme of careful co-ordination between advertising and supporting extension activities arises again in the analysis of effective drink-driving campaigns. However, in this case the need for the support to take the form of heightened legislative enforcement appears to be greater. This reflects the point made by Elliott (1987) in his discussion of social marketing. As noted in the general discussion above, Elliott pointed out that the social marketer is often faced with the task of stopping people doing something which they enjoy, in contrast to the commercial advertiser who is trying to tell people they will enjoy doing what he is promoting. This disparity between social and commercial marketers is greatest when the product concerned is a potentially addictive drug such as alcohol, and its combination with driving.

Campaigns which have explicitly linked their message to the legislative enforcement appear to have been effective in changing behaviour. The most recent examples of this were reported in The *Medical Journal of Australia* and referred to the co-ordination of random breath testing (RBT) by police with concurrent advertising in the media. In one report McCaul and McLean, (1990) noted that from 1982 to 1987 the operation of random breath testing in South Australia had had a minimal effect on the occurrence of drink-driving offences. During this time the breath testing had not been supported with appropriate advertising. However, in 1988 a campaign was mounted which involved high media publicity together with increased enforcement. The researchers in their own investigation found that from the time of the publicity there had been a clear reduction in the proportion of tested drivers who had illegal blood alcohol

concentrations. Although not a fully controlled study, the reported data do suggest that the breath-testing alone could not account for the changed behaviour among the drivers of Adelaide. The advertisements had worked **together with** the testing to bring about the modification.

Consistent with the success of the matching of publicity and enforcement found in South Australia, claims have been made that the success of the NSW RBT programme also lies in the combination of these two elements. Havard (1990) argued that the drinking behaviour of NSW motorists has changed considerably since the introduction into that State of RBT in 1982, due to "the highly professional publicity campaign" which accompanied it. The campaign used the conventional techniques of identification and repetition, together with a memorable jingle, to promote the legislative enforcement. Independent figures obtained from the NSW Roads and Traffic Authority confirm the high visibility, not only of the testing itself, but also the advertisements which make up this continuing campaign. The RTA regularly conducts telephone surveys to monitor the effectiveness of its efforts, and the result of three recent surveys is instructive. The proportion of respondents who acknowledged having recently seen a drink-driving advertisement when contacted in September of 1988 was 55%. However, in February 1989 and February 1990, the figures were 75% and 90% respectively. Both of these latter months had been preceded by major advertising campaigns by the RTA (Span, 1990). Clearly, both the enforcement and the promotion are highly visible in this State.

Where the success of campaigns, such as those discussed above, has depended so much upon the combined effect of the two elements it is impossible, and indeed unnecessary, to isolate the relative contributions of the advertising and the enforcement. The important point is that when they are combined, they can be powerful forces for changing behaviour, while alone their effect may be limited and equivocal. This point is now acknowledged by at least some of the relevant authorities, as reflected in a comment attributed to the Head of Police Traffic Operations in NSW who, in response to the reported findings said "If we are going to have any success with enforcement, we are going to need the publicity to enforce it, and there is no point in the Roads and Traffic Authority publicising it if the public don't see RBT in action" (Prior, 1990).

Advertisements which have not depended so explicitly on promoting the enforcement of laws have had more variable outcomes. One successful Australian case relates to a campaign which was conducted in Wollongong in 1982, prior to the introduction of RBT. Reznik, Morey and Best (1984) reported a reduction of drink-driving offences among young people in the target city following an intensive one-month promotional period. This reduction was significantly greater than a general decline in the State's figures, and was not matched by figures from a "control" city (Newcastle) in

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which the campaign did not run. The successful advertisements did not concentrate on legislative action, but instead focussed on the message that a "real drinker" realises that he should not drive, a somewhat controversial approach given the fact that this did not imply any control over the amount one drank but simply ruled out the combination of drinking and driving. In accord with the principle of providing external support for the advertisements, the campaign was accompanied by extensive publicity including leaflet distribution.

The Reznik *et al.* study was relatively well controlled for extraneous factors and the reported evaluation included appropriate statistical examination of the data. However, there remained some uncontrollable factors which the authors recognised as potentially contributing to their result. One of these was the apparent increase in police visibility during the campaign, which leaves open the possibility that the enforcement, although implicit, may still have played some role in producing the behavioural change.

Another Australian campaign which made no explicit reference to legislative enforcement but which had a more equivocal outcome than the Reznik et al. study was reported by Elliott and South (1985). This campaign employed four television advertisements featuring the popular television actor Paul Cronin. The message which was being projected in each was that a "real friend" would not let a friend drive if he had had too much to drink. Elliot and South argued that this approach was an attempt to appeal to the spirit of Australian "mateship".

The so-called "Cronin" advertisements were produced with a high level of technical excellence and their screening was accompanied by extensive supporting activities of a public relations nature, together with material such as beer coasters which were distributed to hotels and clubs. The advertisements were screened on a controlled schedule in either Hobart or Launceston, and the two cities were then sampled to assess their effectiveness.

Unlike the later studies discussed above, Elliott and South, in the evaluation of their campaign, depended upon self-reports of behaviour change rather than more direct behavioural measures. They found a reduction in reported drinking and driving following the screening period, but no reported adoption of the "intervention" procedures which had been advocated in the advertisements as a means of preventing one's friend from driving when drunk.

It is unfortunate that Elliott and South chose not to employ a direct behavioural measure in their study. Nevertheless, together the Australian studies reviewed above do provide good evidence that advertisements directed at drink drivers can be effective in

changing attitudes and behaviour, at least in the short term. It is probable, though, that the maintenance of such changes would depend upon the same processes that were mentioned in the review of seat-belt advertisements, namely repeated exposure of the message (not necessarily the same advertisement since its effect may decline with familiarity), and supporting material between "bursts" of exposure.

A number of other studies, mainly from American researchers, have examined the effectiveness of drink-driving advertisements. These are all reviewed in Elliott and South (1985) and need not be examined again in the present context. In general they report results which reveal varying levels of success but unfortunately they also contain variable standards of research sophistication and evaluative procedures. Their outcomes can add little to the more recent, and in many cases more sophisticated, studies reviewed above.

8. ALCOHOL ADVERTISEMENTS AND DRIVING BEHAVIOUR

8.1. Regulation of Alcohol Advertising.

In recognition of alcohol's status as a potential drug of addiction, its promotion is regulated by both the Australian Broadcasting Tribunal and the Media Council of Australia. The ABT's "Interim Television Programme Standards" (1990) contain one paragraph devoted to alcohol advertising. The prime aim of this paragraph is to define the hours during which direct advertisements may be broadcast (as opposed to the incidental appearance of the product's name at other times). The permitted hours are those during which school-age children are unlikely to be watching television, and carry the classification AO (Adults Only). They cover the night hours between 8.30 p.m. and 5.30 a.m. and the afternoon period between 12 noon and 3.00 p.m. on schooldays (with qualifications for coverage of more than one time zone). On Saturdays and public holidays (other than Good Friday and Christmas Day) alcohol advertisements may be screened "as an accompaniment to the live transmission of a sporting event, provided that the direct advertisement is on behalf of a sponsor of the live transmission of the sporting event" (p. 29).

The issue of just how alcohol is to be depicted in the advertisements is taken up in the MCA's "Alcoholic Beverages Advertising Code", the most recent revision of which appeared after many months of deliberation, in June 1989. The Code's fourteen clauses make frequent reference to the need to direct the message to people older than 17 years, and to present alcohol consumption as the pastime of "responsible" adults. It also requires the advertiser to "not encourage excessive consumption (or) abuse" (clause 2). Alcohol should not be presented as "a cause of or contributing to the achievement of personal, business, social, sporting, sexual or other success' (clause 9) and there should be no "direct association between the consumption of alcoholic beverages and the operation of a motor vehicle, boat or aeroplane or engagement in swimming, water sports or other potentially hazardous activities" (clause 11).

The revision of the MCA Codes followed applications to the Trade Practices Commission by the Australian Consumers' Association for a review of the MCA's authority (see Trade Practices Commission report, 1988). During the period of the revision the alcohol marketing industry expressed reservations about the severity of some proposed clauses. The Trade Journal *B&T* described an industry spokesman as saying that if some of the clauses were implemented "alcohol advertising could well follow the path of cigarette advertising" (Sheppard, 1988b). This presumably was a reference to the possibility that alcohol advertising might eventually disappear from television.

On the other hand, the revised code, during its formulation and when issued, was criticised by some observers as being inadequate to control the potentially damaging effects of alcohol abuse. The Australian Medical and Professional Society on Alcohol and Drugs expressed particular concern over what it perceived as a failure of the code to deal adequately with the problem of under-age drinking (Sheppard, 1988a). On a more specific level Saunders (1989) has drawn attention to a number of features of the new code which he believes are problematic.

One issue of concern to Saunders was the apparent age of the characters depicted in the advertisements. The earlier code had specified that all adults (people of legal drinking age) should be played by actors who were at least 25 years old and, more importantly, who appeared to be "obviously over 21". The new code does not require the latter, and simply says that the actors must be "clearly depicted as adults" (clause 7). Saunders believed that this permitted greater specific targeting of new drinkers.

As if to highlight Saunders' concern , there are signs already that alcohol manufacturers are now more explicitly targeting younger (legal-age) drinkers. The "Campaign Breaks" section of the trade magazine *B&T* in September, 1989, announced a move by the advertisers of Brewer's Bottled Beer to "position the drink away from its boutique associations into the mainstream market" (15/9/89, p.12). The accompanying still-frame from the television advertisement depicted a young man with spiked, semi-mohawk hair, and dressed in "street-kid gear". In February of 1990, the same magazine carried a news item confirming that the "mainstream" target group referred to by the company comprised the "18-24 year-old market" (Bolles, 1990, p.3). This age group was also the stated target of a series of advertisements for the Kahlua brand of liqueur, which were launched in late 1989 (*B&T*, 15/9/89, p.19).

Another of Saunders' (1989) criticisms of the new MCA code was that a previous clause specifying that advertisements should not promote the increased consumption of the product being advertised had been omitted from the revision. He felt this was inconsistent with the producers' claims that the aim of the alcohol advertising was not to advocate increased consumption, but rather to encourage "brand switching".

Among Saunders' other points, was one which is of particular relevance to the present report. As noted above, Clause 11 requires the advertiser to make "no direct association" between the consumption of alcoholic beverages and the operation of a motor vehicle. Saunders believes this represents a serious weakening of the clause in the earlier code, which prohibited the showing of people consuming the alcohol shortly before or whilst driving the motor vehicle, rather than simply requiring no association.

However, it is possible to argue that a subsequent sentence in the new clause, not mentioned by Saunders, does impose a requirement similar to the original. This sentence says that "any consumption depicted shall clearly be represented as having taken place after engagement in such activities and in all cases portray safe practices".

Of more concern in Clause 11 is an exemption which is granted to "low alcohol" beverages. The relevant sentence reads "in the case of advertisements for low alcohol beverages where consumption proves to be of no hazard, an association between the above activities may be made". As Saunders points out, the code includes no specification of a low alcohol product. He believes this provides a "large possible loophole...that merits a test case complaint" (p. 18). Of equal significance is a point which Saunders did not make in his criticism of Clause 11. This is the fact that low alcohol products consumed in sufficient quantity can convey as much alcohol as normal drinks consumed in less quantity. The road-safety implications of this latter point were well illustrated in a study reported by McLaughlin and Smith.

McLaughlin and Smith (1989) expressed concern about a newspaper advertisement which featured a popular male footballer consuming seven glasses of Emu 2.2 beer over a one-hour period. The advertisement claimed that a breath analysis taken fifteen minutes after the last drink revealed a blood-alcohol level of 0.012%. The researchers pointed out that this was below the legal level for Probationary drivers in Western Australia and, as a consequence, could lead such people to believe that they too could consume this quantity of a "low-alcohol" beer and still be able to drive safely. In fact, five male and five female drinkers studied under controlled conditions by McLaughlin and Smith, were above the 0.02% legal limit when tested in the same manner as the advertisement's footballer.

In consequence of his concerns noted above, and in recognition of the claim by the Trade Practices Commission that the MCA code was adopted as a changeable object, open to comment from the public, Saunders (1989) reported that he was developing a "kit" to assist people in their submissions regarding the MCA's code. The kit was to be entitled "Combating Alcohol Promotions".

Prior to his criticisms of the revised MCA code, Saunders had also been active in a more general evaluation of the system of self-regulation which applied to alcohol advertising. He conducted an experimental investigation of eight alcohol advertisements which had received frequent exposure on Perth television stations (Saunders and Yap, 1989). A sample of people were asked to view the commercials and to rate them on various criteria which had been derived from the MCA code. Saunders reported that a large number of his raters perceived breaches of the code in the advertisements. The

breaches he reported mainly concerned the association of alcohol with social and sporting success, sexual achievement, and relaxation. None related to an association between the advertisements and road behaviour.

Saunders and Yap submitted his analyses to the Advertising Standards Council as complaints, none of which was upheld by the Council. As a result, Saunders argued that the system of self-regulation, as it pertained to alcohol advertising was "grossly deficient" (p.35). On the other hand, the response of the Chairman of the Council, as reported in the Advertising Standards Council Case Report publication for the first quarter of 1989, was that the paper was based on "false premises, and was defective in other respects" (p. 3). However, these points were not elaborated upon in the Report.

Another study, along comparable lines to that of Saunders and Yap (1989) was conducted in Britain, where a voluntary code similar to Australia's, also exists. Pendleton, Smith and Roberts (1988) reported that they too had found many perceived code breaches in alcohol advertisements screened on British television. As with the Australian data, there were no examples which pertained to driving, most showing the same sorts of breaches claimed by Saunders and Yap. Unlike Saunders and Yap though, Pendleton *et al.* did not carry their observations through to the regulatory board in the form of complaints, so the effectiveness of the British application of self-regulation remains unclear.

In Australia, an examination of the Annual Reports of the Advertising Standards Council does provide further information by which our own self-regulatory process can be assessed. Such examination reveals relatively few complaints directed at alcohol advertisements. For example, during 1988 the Council reported receiving only 20 (4% of total) such complaints. The majority of these concerned taste, decency, sexism and related issues. However, two complaints detailed in other reports are worthy of note in the present context.

In 1987 a complaint against a West Coast Cooler advertisement was considered. "The commercial conveyed a scenario of a group of young adults heading for a beach holiday. Although the group were driving in a convertible, the occupants were clearly wearing seat belts at all times the vehicle was in motion. As the scene proceeded, the group stopped beside a billboard and a woman reached up to take a pack of the drink from the sign. The group stopped again to buy some of the beverage from a store. The commercial closed with the group on what appeared to be the verandah of a holiday house drinking the product" (Annual Report, 1987, p.14)).

The Council ruled that the cooler advertisement did not contravene the code, since

there was no indication of consumption of the alcohol before or while driving. They were, of course making their judgment on the basis of the pre-1989 version of the code. Whether the advertisement would now contravene the code's association with driving would be a testable proposition. However, it should be noted that the Council concluded their assessment report with the further statement that in their judgment "the overall tone of the commercial (was) exaggerated, unrealistic, and clearly not intended to be taken as a portrayal of everyday behaviour" (p. 14). As noted in a preceding section of the present chapter, concerning the depiction of extreme driving sequences, the use by the Council of this sort of criterion to judge the effect of an advertisement on a viewer is somewhat questionable. The relative impact of "normal" and "exaggerated" depictions is a testable issue, as is the effect of humour and subscripting, which were referred to previously.

In 1989 the Council reported consideration of complaints which had been lodged from two States against an advertisement for Swan beer products. The commercial featured endorsement from Wayne Gardner, and showed the motor cycle champion in driving sequences. The Council again ruled that there was no code violation, and that the advertisement would not encourage misuse or underage drinking. They pointed out that "the first visual beer consumption by Gardner was *after* the 'chequered flag came down' " (Case Report, February & March, 1989, p.10; original italics). Whether this judgment would conform to the subsequent, revised code, with its reference to no "association" with driving, is again, a debatable issue.

8.2. The Effects of Alcohol Advertising on Consumption.

Advertisers spend many millions of dollars each year in Australia, promoting alcoholic beverages. The beer market alone attracts \$40 million annually (*B&T*, 27/10/89, p.20). Yet, as noted above, the manufacturers claim this effort is directed at encouraging "brand switching" not at enticing previous non-drinkers, or moderate drinkers, to drink more. Nevertheless, since this high level of expenditure is repeated throughout the world, the question that frequently has been asked, is whether these latter consequences can be avoided in the face of such apparently intense persuasive campaigns.

Examination of the research literature suggests that alcohol advertising does not increase community levels of consumption, but may have an effect on the drinking patterns of the younger, often under-age, group. However, other factors, particularly peer group pressure, seem to have a more powerful impact on the early consumption figures of this younger group.

Unfortunately, the relevant studies are concerned primarily with the overall

amount of alcohol consumed, and pay little attention to the way it is consumed, either in the short or long term. It is possible that the so-called "lifestyle" trend in alcohol advertisements (Breed and DeFoe, 1981), where the message is nothing more than the depiction of an appealing situation which contains the product, may be promoting a particular style of consumption. Such advertisements, because of their powerful appeal to the forces of identification through images of the ideal self, are particularly well suited to television, and therefore are likely to impact on many aspects of the target group's view of the world. Australian beer advertisements have been described in the trade media as typically adopting a "life-as-a-cabaret" message (B&T, 27/10/89, p.20), and it is not difficult to extend the implications of this lifestyle to driving behaviour. Another related fear of some commentators is that the presence of these clearly popular images of alcohol on television "legitimises" the role of alcohol in most enjoyable activities (e.g. Partanen, 1988). These potential effects of the advertisements deserve more research attention. They are mentioned again below in the discussion of research reported by Aitken and others. However first, consideration is given to earlier work in the fleld, which focussed on consumption figures.

Atkin and his colleagues reported some of the earliest details of the impact of alcohol advertisements on young people. Most of these reports arose from an extensive research programme conducted in Michigan, USA, during 1980. The research set a pattern for subsequent studies, by employing correlational analyses which related various supposed indices of alcohol consumption with advertisement exposure. However, many of these indices can be criticised for their minimal relevance to actual consumption figures. For example, Atkin, Neuendorf and McDermott (1983) reported positive correlations between "brand awareness" and "alcohol knowledge" and exposure to relevant advertising (not just television). When consumption was measured, it was by way of self reports which, in the context, could be expected to be of questionable accuracy, particularly given known peer group pressures among the adolescent members of the sample. Even then, there was only a slight relationship between reported advertising exposure and reported beer consumption, although the association was stronger for consumption of spirits (Atkin, Hocking and Block, 1984; also see Neuendorf, 1987).

One useful finding from the Atkin series of studies was reported by Breed and DeFoe (1981). In a review of early reports of the research results, they drew attention to the responses of adolescents, compared with those of adults, on a number of Atkins' measures. Again, the data take the form of self reports, but in most cases these are unlikely to have been unduly influenced by peer pressure. Breed and DeFoe indicated that "adolescents report higher exposure to the ads, more learning about alcohol, are more impressed with endorsements by celebrities, are more likely to perceive ad models more favourably (along several dimensions), and are more likely to say they will get the

product" (p. 8).

Another study which examined the relationship between advertising exposure and consumption among young people was reported by Strickland (1983). He studied 772 young drinkers aged between 12 and 16 years. All participants had reported consuming at least three alcoholic drinks in their lifetime, and to be currently still drinking. Using simple correlational analyses, Strickland found a slight positive association between exposure indices and consumption. However, the effect was much smaller than that of peer group pressure, as indicated by associations with drinking *versus* non-drinking friends.

To overcome a number of statistical and interpretative difficulties in Strickland's study, Adlaf and Kohn (1989) have recently reanalysed his data. Their conclusions supported Strickland's but the authors added a further observation. They noted that "while exposure to alcohol advertising does contribute directly to alcohol consumption and indirectly to abuse among youth, these effects are modest both in absolute terms and in comparison to the impact of association with drinking peers. Nor should one overlook that the most powerful precursor of advertising exposure is amount of televiewing which has almost as large a negative direct effect on consumption as its positive indirect effect through alcohol-advertising exposure. One would, therefore, expect that televiewing under prevailing advertising practices could have appreciable negative impact only on the presumably small minority who selectively view programming with a high concentration of alcohol commercials, e.g. sportscasts, almost exclusively" (p.756)

The study by Aitken, Eadie, Leather, McNeill and Scott (1988), referred to previously in the present report, examined the impact of advertisements in a slightly different way from those who had followed the early Atkin design, and produced some potentially valuable results. These researchers divided their sample of Glasgow young people aged between 10 and 17 years, into drinkers and non-drinkers. They then obtained measures of advertisement awareness and appreciation. In analysing their data they were not only interested in relating the frequency of advertising exposure to reports of consumption, but also to determine if the drinking and non-drinking groups reacted differently to the advertisements. The results indicated an association between the likelihood of a young person drinking and their peer group's drinking patterns, consistent with previous studies. They also revealed an association with perceived parental expectations about drinking, a potentially important factor which few other researchers appear to have considered. But two other predictors were also significant and important.

The young drinkers in the Aitken et al. study were able to recognise excerpts from more alcohol advertisements and reported a greater liking of them than did the non-drinkers and others who had only "tried" alcohol. However, it is important to note that all

the children had a generally high appreciation of the advertisements, particularly those for the so-called mass-produced lagers (of which the advertisements for the Australian Castlemaine XXXX were the most popular), but the drinkers liked them more. Perhaps not unrelated to this fact was the further finding that more of the drinkers also endorsed the statement that "drinkers are more attractive and tough", confirming the appeal of the advertisements to the young viewers' ideal self images.

Aitken et al. argued that the drinkers in their study were able to readily recognise the advertisements so well because they had been paying more attention to them than the non-drinkers, because they were enjoying them more. Although Aitken et al. acknowledged that this did not necessarily indicate that the advertisements played any role in initiating the drinking of this group, they argued it did show that the advertisements were at least supporting and reinforcing it, once established.

A point which Aitken et al. did not make in the discussion of their results, but which relates to the comment in the first paragraph of the present section, is that the high level of attention and enjoyment that all the children associated with the lager advertisements in particular, could mean that these young viewers will readily incorporate into their world views at least some aspects of the behaviour depicted in the advertisements. Bandura (eg. 1962) has argued that the likelihood of imitation is increased when the observed behaviour attracts and holds the viewer's attention and when it is associated with satisfaction. Both these features were found in the responses reported by Aitken et al..

The behaviour which young people observe in lager advertisements goes beyond simple consumption, but includes all the features which attend the manner of drinking and related activities. As Bell (1987b) has argued, "advertising helps to form a general symbolic context within which alcohol consumption takes on certain values..." (p. 21). If the belief that "life is a cabaret" is carried to road behaviour it may have serious consequences. Furthermore, if any suggestion of unsafe driving appears in these commercials (and this may include instances of humour or exaggeration) and it too is carried into the viewer's reality, the consequences again could be serious. This suggests the need for constant vigilance to ensure the MCA guidelines are effective in controlling the appearance of unsafe practices which may be imitated by those who watch the advertisements so closely, and enjoy them so much.

All of the studies reported above focused their attention on young, generally under-age drinkers. Another approach to studying the relationship between consumption and advertising exposure adopts a wider perspective. A number of studies have employed population statistical figures and compared these with data on advertising expenditure.

The common finding is of no direct association between advertising and community consumption.

Bourgeois and Barnes (1979) examined Canadian data on alcohol consumption and sales, together with figures on related advertising expenditure over the period from 1951 to 1974. They found that unknown variables which they had not been able to control accounted for much more of the variation in consumption over this time than advertising expenditure did. Furthermore, the known variables, such as changes in legal drinking ages also had a significant effect. The advertising expenditure figures did show some relationship with consumption, but the nature of this link was quite variable, and of little explanatory value.

In Australia Smith and associates (Smith and D'Amelio, 1984; Smith, 1988) have examined consumption and expenditure figures from 1970 through to 1986. The most reliable relationship they found was one in which an increase in advertising expenditure followed a drop in consumption. Rather than influencing alcohol consumption, the advertising over these years appeared to be reacting to it.

The use of controlled experimental designs to examine possible links between alcohol advertising and subsequent consumption are rare. This is understandable, given the difficulty of obtaining meaningful results in experiments which need to be conducted in unusual, controlled conditions, and which generally cover a limited time period. Both these problems are evident in two examples of this type of research, reported by Kohn and associates. In both cases the problems have considerably reduced the value of the data.

In the first example, Kohn, Smart and Ogborne (1984) attempted to compare the relative effectiveness of two kinds of alcohol advertising. They used print media, and the advertisements were shown to male passers-by in a shopping mall. The men were asked to make various evaluations of and comments on the advertisements. Their behaviour was subsequently observed over a meal in a restaurant and twelve weeks later they were contacted by telephone and asked for information on alcohol consumption. Neither of the advertisement types influenced the two measures, relative to a control sample who were not exposed to either advertisement.

In another study Kohn and Smart (1984) inserted a number of beer commercials in a recording of an indoor soccer game. They arranged for male college students to view the recording under the pretext that the researchers were interested in the viewing appeal of the game. Refreshments, including beer, also were provided by the study team. Consumption of the beer showed a brief increase in response to the early advertisements seen by the viewers, but overall consumption was not increased by more exposure to the

beer advertisements.

Although the experiments conducted by Kohn and associates have produced results which are consistent with those found in the non-experimental research, the rather specific behavioural indices which were used to assess the influence on drinking behaviour, together with the unusual testing environment, do limit the generalisability of the findings.

8.3. Sponsorship and Endorsement by Alcohol Companies

The producers of alcoholic beverages are just some of the many companies who have turned to sponsorship to increase the promotion of their product. The arrangements which accompany such sponsorships vary depending upon the activity involved, and the amount paid by the company. However, in the case of outdoor activities, particularly those which are broadcast on television, prominent display of the sponsors' name and logo is common. As noted in the introductory sections of the present chapter, research has shown convincingly that the frequent exposure which this brings about, increases a person's feelings of liking for the product.

The activities which attract most major sponsorship attention are sporting. The Fosters brewery, for example, has established a reputation for sponsorship of some of Australia's major sporting events, and those with the greatest television viewing audience. Shoebridge (1988) mentions the Fosters' Melbourne Cup, the Fosters' VFL Grand Final, and the Fosters' Grand Prix. The constant association of the beer's brand name with the emotionally charged sporting activity, recreates a virtual "lifestyle" advertisement for the duration of the event. This brings with it all the benefits of the powerful "lifestyle" approach, together with frequent exposure of the product name and logo during the programme.

Martin (1990) has reported an analysis of the frequency with which the Fosters name and/or logo appeared during the television broadcast of the 1989 Grand Prix motor race from Adelaide. He examined three periods between advertisement breaks, counting those occasions on which the sign or logo was clearly visible (not blurred from movement, or indistinct because of size) for at least one second. The first segment of the race which he analysed was 13 minutes and 2 seconds long. However, it was unusual as it included the first start which was subsequently abandoned. The second segment lasted 12 minutes and 57 seconds, and included the second start. The third segment was a longer 17 minutes and 6 seconds and contained the middle stages of the race.

Martin found that in the first segment the Fosters name and/or logo were clearly

visible on the screen for a total of 3 minutes and 12 seconds, or almost 25% of the total viewing time. The figures for the other segments were, respectively, 3 minutes 11 seconds, 25% of viewing, and 2 minutes 3 seconds, 12% of viewing. Moreover, the number of separate occasions on which the name or logo occurred, making up these times, was 47, 67, and 69 respectively. It is clear that the brand is obtaining exceptionally good levels of exposure through its sponsorship arrangements. This in turn, should enhance the liking of the viewers for the product.

The simple effect of the frequent exposure of the product's name on the viewers' sense of liking toward the product is not of great direct consequence in the context of the present report. However, the fact that the event was a motor vehicle race does raise questions which have not yet been researched. It is possible that among some viewers, an equally strong association was developed between the product and motor vehicle activities or driving in general. This possibility does need to be researched further if alcohol promotion at motor sports is to continue at the level evident in Martin's report.

Another form of sporting sponsorship which attracts the attention of some alcohol companies, is the sponsoring of clubs in team sports. At the professional level this provides the sponsor with another potential promotional tool in the form of product endorsement from prominent players. Powers beer was introduced to the Australian market with sponsorship of a Brisbane football team, and the appearance of that team's captain, and State identity, endorsing the product in television advertisements (Stewart, 1988). Atkin and Block (1983) have reported that adolescents were particularly influenced by such promotion in their reported feelings toward the brand of alcohol being promoted. However, there appeared to be little follow-through effect of this liking onto actual purchasing of the product among Atkin and Block's under-age groups, perhaps because the products being promoted in their study were for non-beer (i.e. "hard" liquor) products, which Atkin's other data indicate were infrequently drunk by the group.

It is probable that the frequent exposure and celebrity endorsement of alcohol products which comes about through sponsorship, does increase positive feelings for the product. However, it is not yet possible to determine if the outcome of this is anything more than brand shifting among people who would have bought the alcohol anyhow, or whether it actually stimulates consumption. However, the figures reported under other sections of this chapter would suggest the latter is unlikely. Of more concern than consumption, in this context, is the possible association of the alcohol sponsor's product with motor vehicle activities. This matter does deserve further research attention.

9. METHODOLOGY

The consultants were requested to recommend methods by which "popular" television shows for the three age groups specified above were selected. In the event, after mutual discussion, AGB McNair ratings were used to determine popular television programmes for the week November 9 to November 15, 1989. It was decided to monitor an average week's viewing for both males and females in the three age groups 13-17 years, 16-24 years, and 25-plus years. (The overlap between the two younger ages is the result of the McNair system.) On average Australians view 2-1/2 hours per day, so we selected the most popular 22-24 hours of television programmes for each group. A total of 54.5 hours of television was analysed and, as might be expected, there is considerable overlap between the favourite television programmes of the various groups.

As of March 1990 AGB McNair have lost their diary rating contract to Nielsen's people meters (Financial Review, 9th March, p.3). It should also be pointed out that McNair's claimed margins of error with their diary system are based on a two choice situation. Yet in Sydney viewers can choose between five television channels. Their published margins of error are therefore conservative. Generally speaking the results from Nielsen's people meters do vary from the McNair diaries. In particular the people meters reveal that the ABC has a larger audience than previously thought, and that the audience for non-prime-time viewing hours (i.e., not between 6.00-10.00 p.m.) is larger than previously thought. In the final analysis the decision taken for this project, namely to work with most popular programmes, is justified as error margins increase as the number estimated in the audience decreases.

FORS also requested a detailed analysis of television alcohol advertisements.

Television alcohol advertisements of all kinds (including, for example, corporate sponsorship of sport) will be monitored over a period of time to determine saturation levels and scheduling patterns. An exploratory and descriptive content analysis of these samples will be carried out. The outcome will be a detailed report of the findings, comparison with the findings of previous studies, and the possible implication for the road safety content of future television productions.

9.1 Coding Method

A brief description is given for each of the categories, except where the category is self-explanatory. Some categories are repeated, and a description is not given on each occasion. The coder was trained to monitor the programmes appearing within the 54.5 hours and would refer to these categories every time driving or alcohol was witnessed on the screen.

9.1.1 Visual Depiction of Driving

1. Driving context:

- (1) Car related advertisement: advertisement, which involves driving, and promoting motor vehicle.
- (2) Non car related advertisement: advertisement promoting products other than vehicles, and which includes some driving.
- (3) News/documentary: non-fiction programmes which include driving depictions.
- (4) Action/crime: fictional programmes which include some depictions of driving.
- (5) Other fiction: programmes other than those above, which include depictions of driving.
- 2. Duration in seconds.
- 3. Time period.
- 4. Day.
- 5. Channel.
- 6. Classification.
- 7. Association with alcohol:

Was there any level of association between the depiction of alcohol and the driving?

- (1) Yes, influence clearly implied.
- (2) Yes, clearly drunk.
- (3) No.
- (4) Not clear.
- Seat belts/helmet:
 - (1) Obvious seat belt: people in the vehicle obviously wearing seat belts.
 - (2) No seat belt: people in vehicle obviously not wearing seat belts.
 - (3) Not discernable: not possible to see if seat belts worn (e.g., moving vehicle seen from distance).
 - (4) Bike with helmet: people on bicycle/motor bike obviously wearing safety helmet.
 - (5) Bike without helmet: rider not wearing helmet.
- Legality:

Some estimation of the legality of the depicted driving.

- (1) Legal driving: driving within the guidelines of the law.
- (2) Illegal apprehended.
- (3) Illegal not apprehended.
- (4) Condoned illegal: driving in illegal manner, with awareness of authorities, and not apprehended.
- (5) Illegal deception: driving in illegal manner, but...
- (6) Questionable illegal: ...
- (7) Unknown: not possible to determine the legality of the driving.
- 10. Type of illegal driving:

Attempt to determine the type of illegal driving, in terms of the traffic rules violated.

- (1) Speeding.
- (2) Disregarding signs, lights, etc.
- (3) Crossing unbroken line.
- (4) Other.
- (5) Multiple breaches of rules.
- (6) Not applicable: no rules breached.
- 11. Vehicle type:
 - (1) Bicycle.
 - (2) Motor bike.

		(3) (4) (5)	Heavy vehicle. Mixed: more than or	one type of v	ehicle depi	cted.				
1	2.	(1) (2) (3)	f principal driver: Male. Female. Unknown. Mixed.							
1	3.	(1) (2)	secondary driver: Male. Female. Unknown. Mixed.							
1	4.	$(\dot{1})$	f principal driver: Pre 17 years. 17-24 years. 25+ years. Not discernable: visible.	not possible	to gauge	age of	driver	because	driver	not
1	5.	(1) (2)	secondary driver: Pre 17 years. 17-24 years. 25+ years. Not discernable: visible.	not possible	to gauge	age of	driver	because	driver	not
1	6.	(1) (2) (3)	Economic status of Blue collar. White collar. Professional/rich. Unknown. Mixed.	principal dr	iver:					
1	7.	(1)	Economic status of Blue collar. White collar. Professional/rich. Unknown. Mixed.	secondary d	river:					
1	8.	Charae (1) (2) (3) (4) (5) (6) (7)	cter role of principal Lead. Support. Bit. Endorsing celebrital Not relevant. Unknown. Not Applicable.							
1	9.	Charae (1) (2) (3) (4) (5) (6) (7)	cter role of seconda Lead. Support. Bit. Endorsing celebrit Not relevant. Unknown. Not Applicable.							
2	0.	Moral (1) (2)	type of principal d Good. Bad.	river:						

- (3)Mixed. Expert: person recognised as an expert on driving. (4)Not relevant. (5) (6) Unknown. (7)Not Applicable. Moral type of secondary driver: 21. (1)Good (2) Bad. (3) Mixed. (4)Expert: person recognised as an expert on driving. (5)Not relevant. (6)Unknown. (7) Not Applicable. 22. Attentiveness of principal driver: Attentive: driver depicted as attending to task of driving. (1)(2) Inattentive: driver depicted as not attending (e.g., talking/looking away from road). Not discernable: not possible to see driver's behaviour. (3) 23. Attentiveness of secondary driver: (1)Attentive. (2) Inattentive. (3) Not discernable. 24. Endangering driving of principal driver: Endangering driving: driving with potential to endanger self/others. Victim of endangering driving: involved in accident as result of another (2) driver's behaviour. No endangering driving. (3) 25. Endangering driving of secondary driver: Endangering driving. (1)(2)Victim of endangering driving. (3)No endangering driving. 26. Company: Identify the other people in the vehicle. (1)Alone. (2) Adult company. (3)Children present. Mixed: both adults and children present. (4)(5) Unknown: not possible to determine who is in the vehicle. 27. Consequences of driving: Visible results of the driving behaviour. (1)Death. (2)Crash, with serious injury. (3) Crash, with minor injury. (4)Crash, with no injury. (5) Consequences not shown. (6) No accident. 28. Location: Identify where the driving took place. Urban road. (1)Rural/sealed road. (2)(3)Rural/unsealed road. (4)Testing track/race track. (5)Unknown, (6)Mixed.
- 29. Motive:

Reason for the driving.

- (1) Pursuit/escape.
- (2) Emergency.
- (3) Thrill driving.
- (4) Functional.
- (5) Sport.
- (6) Demonstrating.
- (7) Mixed.
- (8) Other.
- 30. Centrality of driving:

How important the driving was to the story.

- (1) Driving central to the plot.
- (2) Driving incidental to the plot.
- (3) Not relevant.
- 31. Repetition of the scene:

Record the number of repetitions.

9.1.2 Visual depiction of alcohol

Common Codes

All coding for alcohol included six initial categories of information:

- 1. Reference to alcohol:
 - (1) Advertisement: any advertisement, whether specifically promoting alcohol or not.
 - (2) Incidental occurrence in non-fiction: incidental presentation of alcohol during non-fiction programmes (e.g., news, current affairs and documentaries).
 - (3) Incidental advertisement: visual display of identifying features of alcohol, such as brand names or labels.
 - (4) Programme drinking: depiction of drinking of alcohol within fictional programmes.
- Duration:

Time, in seconds, of the visual depiction of alcohol.

Time slot:

Programmes from 12.00 noon until 12.00 midnight were included in the sample. Each half hour was coded separately.

Dav:

A full week of programmes was sampled. Each day was coded separately.

Channel:

The three major Sydney commercial networks were sampled, and identified in the coding.

Classifications:

Each programme was identified by the classifications 'G"; 'PGR'; or 'AO'.

Selection: 1. Advertisement. or

2. Incidental Occurrence of Alcohol In Non-Fiction

- 7. Type of advertisement:
 - (1) Alcohol: advertisement specifically designed to promote alcohol.
 - (2) Non-Alcohol: advertisement not designed specifically to promote alcohol, but which features some visual depiction of alcohol.
 - (3) Not Applicable: code chosen when the depiction did not occur in an advertisement, but in non-fiction.
- 8. Drinking:
 - (1) Drinking involved: people visibly drinking alcohol.
 - (2) Alcohol displayed, but no drinking evident: identifiable alcohol in bottles/cans/glasses displayed in non-fiction, but no-one seen drinking.

- 9. Drinking and driving in the same advertisement:
 - (1) Yes: when both drinking identifiable alcohol, and driving a vehicle, occurred in the same advertisement.
 - (2) No
 - (3) Not Applicable: the depiction occurred in non-fiction, not an advertisement.
- 10. Alcohol type:
 - (1) Beer/Cider: full-strength and light ales, and alcoholic ciders.
 - (2) Wine: all wines, including still wines, and champagnes.
 - (3) Spirits: whisky, rum, bacardi, etc.
 - (4) Mixed: when more than one type of alcohol was visible.
- 11. Celebrity use:
 - (1) Yes: a known, public, personality was involved in the promotion of the alcohol.
 - (2) No.
 - (3) Unknown: no well-known liquor readily identified in the promotion.
 - (4) Not Applicable: no people seen drinking.
- 12. Context:
 - (1) Alone: person featured was drinking alone.
 - (2) Two People: two people featured drinking together.
 - (3) Small Group: 3-10 people drinking together.
 - (4) Crowd: more than ten people drinking together.
 - (5) Not Applicable: no people seen drinking.
- 13. Age:
 - (1) Young Adult: drinker aged approximately no more than mid 30s.
 - (2) Middle Aged: approximately 35-55 years old.
 - (3) Old: approximately 55+ years old.
 - (4) Not Applicable: no people seen drinking.
- 14. Sex:
 - (1) Male: drinker was male person.
 - (2) Female: drinker was female.
 - (3) Mixed: drinkers included both males and females.
 - (4) Not Applicable: no people seen drinking.
- 15. Socio-Economic status:
 - (1) Blue Collar: drinker apparently a tradesman/labourer.
 - (2) White Collar: drinker apparently an office/more skilled worker.
 - (3) Professional/Rich: drinker apparently a person with professional training, or wealth.
 - (4) Police Officer: drinker a police officer.
 - (5) Not Discernable: not possible to assign SES to drinker.
 - (6) Not Applicable: no people seen drinking.
- 16. Purpose of drinking:
 - (1) Social: drinking occurred in social setting, with friends/others.
 - (2) Celebratory: drinking as part of apparent celebration of special event.
 - (3) Intimate: drinking as part of romantic setting.
 - (4) Not Discernable: not possible to assign purpose to drinking behaviour.
 - (5) Not Applicable: no people seen drinking.

When an additional coding of all advertisements promoting alcohol, between 12.00 noon, and 11.00 p.m., was undertaken, items 17, 18, and 19 were also coded:

- 17. When the advertisement occurred:
 - (1) Prime viewing period: depiction occurred during one of the 12 most highly rated programmes for any age group.
 - (2) Extended viewing period: depiction occurred during the additional programmes included to increase the time sampled.
 - (3) Neither: advertisement occurred outside the two time samples above.

- 18. Age of drinkers:
 - (1) Obviously over 21 years old.
 - (2) Not obviously over 21 years old.
- 19. Suggested contribution to social, sporting or sexual achievement:
 - (1) Yes: there was suggested contribution.
 - (2) No: no suggested contribution.

The three coders were asked to include comments, to justify the code of 19(2).

20. Identification of coder:

Each of the three coders was assigned a separate identifying code; 1, 2, or 3. This was included in all coded representations of alcohol.

Selection: 3. Incidental Advertising of Alcohol

- 7. Alcohol type:
 - (1) Beer.
 - (2) Wine.
 - (3) Spirits.
 - (4) Unknown.
- Programme context:

This item identified the programme in which the incidental advertisement was embedded.

- (1) Cricket.
- (2) Golf.
- (3) Tennis.
- (4) Horse racing.
- (5) Car racing.
- (6) Other.
- 9. Coder identification for incidental advertising.

Selection: 4. Alcohol in Programmes

- 7. Depiction of alcohol:
 - (1) Incidental presence: alcohol obviously present, but not central to the story (e.g., decanter on bar in home, in background).
 - (2) General drinking: others drinking in background (e.g., story set at party with other guests drinking).
 - (3) All plot characters drinking alcohol: all people central to the story drinking alcohol.
 - (4) Some plot characters drinking alcohol, some drinking non-alcoholic drink.
 - (5) All plot characters drinking non-alcoholic drink in an alcohol context: alcohol context defined as, for example, a bar/club.
- Social context:

The location of the depicted alcohol was noted.

- (1) Home.
- (2) Restaurant.
- (3) Pub/bar.
- (4) Outdoors.
- (5) Office.
- (6) Retail outlet, other than pub/bar.
- (7) Unknown.
- 9. Drinking context:
 - (1) Alone.
 - (2) Drinking in company.
 - (3) Not Applicable: no people seen drinking.
- Number of plot characters drinking alcohol.
- 11. Number of plot characters drinking non-alcoholic beverages.

12.	Character role: (1) Lead: central character in the story/series. (2) Support: regular character/supporting character in series/story. (3) Bit: character not central to the plot. (4) Combination, including lead. (5) Combination, minus lead. (6) Not Applicable: no people seen drinking.
13.	Sex of drinker/s: (1) Male. (2) Female. (3) Males. (4) Females. (5) Combination: a mixture of both male and female drinkers. (6) Not Applicable: no people seen drinking.
14.	Age of first principal drinker: This was defined as the first character seen drinking. (1) Pre 18 years old. (2) 18-24. (3) 25+. (4) Unknown: not possible to estimate age of character. (5) Not Applicable: no person seen drinking.
15.	Age of the second principal drinker: (1) Pre 18 years old. (2) 18-24. (3) 25+. (4) Unknown. (5) Not Applicable.
16.	Family class of the first principal drinker: (1) Blue collar. (2) White collar. (3) Professional/rich. (4) Unknown. (5) Not Applicable.
17.	Family class of the second principal drinker: (1) Blue collar. (2) White collar. (3) Professional/rich. (4) Unknown. (5) Not Applicable.
18.	Moral type of the first principal drinker: An estimate of the character of the drinker, as portrayed in the story: (1) Good. (2) Bad.
•	(2) Bad.(3) Mixed.(4) Unknown.(5) Not Applicable.
19.	Moral type of the second principal drinker: (1) Good. (2) Bad. (3) Mixed. (4) Unknown. (5) Not Applicable.
20.	Type of drink consumed by first principal drinker: (1) Beer. (2) Wine. (3) Spirits.

- (4) Non-alcoholic.
- (5) Unknown.
- (6) Not Applicable.
- 21. Type of drink consumed by second principal drinker:
 - (1) Beer.
 - (2) Wine.
 - (3) Spirits.
 - (4) Non-alcoholic.
 - (5) Unknown.
 - (6) Not Applicable.
- 22. Volume consumed by first principal drinker:

Estimate based on information presented, such as number of empty glasses visible, etc.

- (1) Light.
- (2) Heavy.
- (3) Unknown.
- (4) Not Applicable.
- 23. Volume consumed by second principal drinker:
 - (1) Light.
 - (2) Heavy.
 - (3) Unknown.
 - (4) Not Applicable.
- 24. Motive for drinking:
 - (1) Social: drinking with others in friendship/for company.
 - (2) Celebratory.
 - (3) Crisis: drinking because of trauma/distress/upset.
 - (4) Business: drinking in context of job/work (e.g., business lunch).
 - (5) Manipulative: drinking designed to persuade/change the mood of another.
 - (6) Unknown.
 - (9) Not Applicable.
- 25. Consequences of drinking:
 - (1) None: no consequences of drinking.
 - (2) Tipsy: drinker merry/slightly drunk.
 - (3) Drunk/rowdy: drinker intoxicated, and boisterous.
 - (4) Drink/anti-social: drinker intoxicated, and abusive/violent, uncooperative.
 - (5) Drunk/black-out: drinker intoxicated, and passes out.
 - (6) Drunk/under control: drinker intoxicated, but well behaved/amenable/cooperative.
 - (9) Not Applicable.
- 26. Type of programme:

Identity type of programme in which alcohol/drinking alcohol is depicted.

- (1) News/documentary.
- (2) Comedy.
- (3) Series/serial.
- (4) Movie.
- (5) Drama.
- (6) Sport.
- (7) Music.
- (8) Other.
- Repetition of scene:

Number of times the same/similar scene is repeated within the programme.

28. Programme title:

Each of the programmes examined was allocated a separate coding number.

29. Country of origin:

The country in which the programme was made, was identified.

- (1) Australia.
- (2) USA.
- (3) UK.
- (4) Other.
- 30. Identification for programme drinking.

9.2 McNair-Anderson Television Ratings

All viewing figures based on the 3,618,000 potential television viewers (ie. people with a television in their homes) within the Sydney-based prime coverage area, are extrapolated from a sample of 5,545 subjects. These figures are further broken down by sex and age. The six groups utilised in this study were exactly derived from these figures except for the 'over 25 group' which McNair-Anderson represented in three age groups of 25-39, 49-54 and 55+. Due to the analysis of driving and alcohol on television, only *one* viewing group representing the over-25's was required as a category depicting the 'responsible' or 'mature' viewer. The three groups for the over-25's category were therefore averaged instead of added.

<u>Group</u>	Potential viewing audience
males aged 13-17	149,000
females aged 13-17	141,000
males aged 16-24	262,000
females aged 16-24	252,000
males aged 25-39	447,000
females aged 25-39	446,000
males aged 40-54	338,000
females aged 40-54	319,000
males aged over 55	326,000
females aged over 55	401,000
males aged over 25	370,000 (average)
females aged over 25	389,000 (average)

All specific viewing figures for the two older groups therefore represent an average, not an actual viewing figure.

It must also be noted that the total potential viewing population also includes children of both sexes aged between 5 and 12 years which represent a potential population of 398,000.

Viewing figures for specific programmes represent an average over four weeks of television rather than an individual rating representing the week sampled. For example, the viewing figure for 'Ghostbusters' is an average of four different Sunday night movies and the figure for regular shows such as 'A Country Practice' represents an average of viewing figures over four weeks (or 8 episodes).

The degree of overlap between the 13-17 and 16-24 year-old groups could not be overcome since McNair-Anderson did not supply any alternative figures.

9.3 Most popular 12 programmes for males aged 13-17 yrs

	Thousands of Percentage of				
		13-17 yr.old	potent. 13-17	Day(s)	Time
Programme	Channel	viewers	yr.old viewers*	screened	screened
	_	- -			
HOME AND AWAY	7	36	24	M-F	6:30-7:00
NEIGHBOURS	10	35	24	M-F	7:00-7:30
HEY DAD	7	31	21	Wed	7:30-8:00
COMEDY COMPANY	10	29	19	Sun	7:30-8:30
21 JUMP ST.	9	27	18	Sat	8:30-9:30
GHOST BUSTERS	10	27	18	Sun	8:30-10:30
HEY HEY SATURDAY	9	26	18	Sat	6:30-8:30
SPECIAL: FUNNY THING	10	23	16	Mon	7:30-8:30
SEVEN NIGHTLY NEWS	7	22	14	M-F	6:00-6:30
FAMILY TIES	7	22	15	Wed	8:00-8:30
COUNTRY PRACTICE	7	21	14	M,Tue	7:30-8:30
WHO'S THE BOSS	9	20	13	Tue	7:30-8:30
Most popular 23 hr	s.per We	<u>ek for males</u>	aged 13-17 years	ł	
WORLD OF DISNEY	7	19	13	Sun	6 30-7 30
AUST. MOST WANTED	7	19	13	Sun	7:30-8:30
E-STREET	10	19	13	W,Thu	7:30-8:30
GOLDEN GIRLS	7	18	12	Fri	7:30-8:00

^{*} The potential 13-17 year-old male audience amounts to 149,000 possible viewers

9.4 Most popular 12 programmes for males aged 16-24 yrs

Programme	Channel	Thousands of 16-24 yr.old viewers	Percentage of potent. 16-24 yr.old viewers*	Day(s) screened	Time screened
GHOST BUSTERS	10	47	18	Sun	8:30-10:30
HEY DAD	7	41	16	Wed	7:30-8:00
COMEDY COMPANY	10	40	15	Sun	7:30-8:30
NATIONAL NINE NEWS	9	38	14	M-F	6:00-6:30
WHO'S THE BOSS	9	38	1 4	Tue	7:30-8:30
HEY, HEY SATURDAY	9	38	14	Sat	6:30-8:30
NEIGHBOURS	10	38	14	M-F	7:00-7:30
FAMILY TIES	7	33	13	Wed	8:00-8:30
SPECIAL: FUNNY THING	10	34	13	Mon	7:30-8:30
FAMILY TIES	7	32	12	Wed	8:00-8:30
NATIONAL NINE NEWS	9	31	12	Sun	6:00-6:30
HOME AND AWAY	7	30	11	M-F	6:30-7:00
LIVE IN	9	30	11	Mon	8:00-8:30
NICE GIRLS DON'T	10	30	11	Mon	8:30-10:30
Most popular 24 hi	s.per weel	(for males	aged 16-24 years		
BEYOND 2000	7	29	11	Tue	8:30-9:30
TIN MEN	7	29	11	Sun	8:30-10:30
CURRENT AFFAIR	9	28	11	M-F	6:30-7:00

^{*} The potential 16-24 year-old male audience amounts to 262,000 possible viewers

9.5 Most popular 12 programmes for males aged 25+ yrs

		Thousands of 25+ yr.old	Percentage of potent. 25+	Day(s)	Time
Programme	Channel	viewers	yr.old viewers*	screened	screened
NATIONAL NINE NEWS	9	80	22	M-F	6:00-6:30
A CURRENT AFFAIR	9	71	19	M-F	6:30-7:00
BURKE'S BACKYARD	9	69	19	Fri	7:30-8:30
60 MINS.	9	67	18	Sun	7:30-8:30
NATIONAL NINE NEWS	9	66	18	Sun	6:00-6:30
HEY, HEY SATURDAY	9	64	17	Sat	6:30-8:30
COMEDY COMPANY	10	59	16	Sun	7:30-8:30
BEYOND 2000	7	59	16	euT	8:30-9:30
SALE OF THE CENTURY	9	58	16	M-F	7:00-7:30
GHOST BUSTERS	10	57	15	Sun	8:30-10:30
COUNTRY PRACTICE	7	56	15	M,Tue	7:30-8:30
HINCH	7	55	15	M-F	7:00-7:30
Most popular 24,5	hrs.per	<u>week for males</u>	aged over 25	<u>years</u>	
GOLDEN GIRLS	7	50	1 4	Fri	7:30-8:00
WHO'S THE BOSS	9	49	13	Tue	7:30-8:30
HEY DAD	7	49	13	Wed	7:30-8:00
TIN MEN	7	48	13	Sun	8:30-10:30

^{*} The average potential over-25 year-old male audience amounts to 370,000 possible viewers

9.6 Most popular 12 programmes for females aged 13-17 yrs

		Theresedeed	December of		
		Thousands of	Percentage of	D ()	-
В	0 1	13-17 yr.old	potent. 13-17	Day(s)	Time
Programme	Channel	viewers	yr.old viewers*	screened	screened
NEIGHBOURS	10	46	33	M-F	7:00-7:30
COMEDY COMPANY	10	45	32	Sun	7:30-8:30
HOME AND AWAY	7	43	31	M-F	6:30-7:00
GOLDEN GIRLS	7	32	23	Fri	7:30-8:00
HEY, HEY SATURDAY	9	32	23	Sat	6:30-8:30
LIVE IN	9	31	22	Mon	8:00-8:30
WHO'S THE BOSS	9	30	21	Tue	7:30-8:30
FULLHOUSE	7	30	21	Fri	8:00-8:30
WORLD OF DISNEY	7	29	21	Sun	6:30-7:30
E-STREET	10	27	19	W,Thu	7:30-8:30
21 JUMP ST.	9	26	19	Sat	8:30-9:30
SPECIAL: FUNNY THING	10	25	18	Mon	7:30-8;30
Most popular 24 hr	s.per wee	ek for female:	s aged 13-17		
		141 141114	<u> </u>		
COSBY SHOW	9	23	16	Mon	7:30-8:00
FAMILY TIES	7	22	16	Wed	8:00-8:30
COUNTRY PRACTICE	7	19	13	M,Tue	7:30-8:30
TIN MEN	7	19	13	Sun	8:30-10:30
GHOST BUSTERS	10	19	13	Sun	8:30-10:30
AUST. MOST WANTED	7	19	13	Sun	7:30-8:30
CANDID CAMERA	10	18	13	Tue	7:30-8:00

^{*} The potential 13-17 year-old male audience amounts to 141,000 possible viewers

9.7 Most popular 12 programmes for females aged 16-24 vrs

		Thousands of 16-24 yr.old	Percentage of potent. 16-24	Day(s)	Time
Programme	Channel	viewers	yr.old viewers*	screened	screened
NEIGHBOURS	10	63	25	M-F	7:00-7:30
HOME AND AWAY	7	52	21	M-F	6:30-7:00
LIVE IN	9	45	18	Mon	8:00-8:30
WHO'S THE BOSS	9	45	18	Tue	7:30-8:30
GOLDEN GIRLS	7	44	18	Fri	7:30-8:00
HEY, HEY SATURDAY	9	44	18	Sat	6:30-8:30
COMEDY COMPANY	10	43	17	Sun	7:30-8:30
HEY DAD	7	42	17	Wed	7:30-8:00
FULL HOUSE	7	39	16	Fri	8:00-8:30
COSBY SHOW	9	34	14	Mon	7:30-8:00
E-STREET	10	34	1 4	W,Thu	7:30-8:30
FAMILY TIES	7	33	13	Wed	8:00-8:30
SPECIAL: FUNNY THING	10	33	13	Mon	7:30-8:30
Most popular 23 hr	s.per_wee	c for female	s aged 16-24		
DAYS OF OUR LIVES	۵	32	12	M-E	1.20 2.20
	_				
	_				
FAMILY TIES SPECIAL: FUNNY THING	7 10	33 33	13 13	Wed	8:00-8:30

^{*} The potential 16-24 year-old female audience amounts to 252,000 possible viewers

9.8 Most popular 12 programmes for females aged 25+ vrs

		Thousands of	Percentage of		
		25+ yr.old	potent. 25+	Day(s)	Time
Programme	Channel	viewers	yr.old viewers	screened	screened
ŭ			,	•	
NATIONAL NINE NEWS	9	97	25	M-F	6:00-6:30
A CURRENT AFFAIR	9	89	23	M-F	6:30-7:00
COUNTRY PRACTICE	7	88	23	M,Tue	7:30-8:30
BURKE'S BACKYARD	9	88	23	Fri	7:30-8:30
60 MINS.	9	84	22	Sun	7:30-8:30
NATIONAL NINE NEWS	9	80	21	Sun	6:00-6:30
SALE OF THE CENTURY	9	79	20	M-F	7:00-7:30
NATIONAL NINE NEWS	9	78	20	Sat	6:00-6:30
HEY, HEY SATURDAY	9	73	19	Sat	6:30-8:30
GOLDEN GIRLS	7	68	17	Fri	7:30-8:00
NEW FACES	9	66	17	Wed	7:30-8:30
HINCH	7	61	16	M-F	7:00-7:30
Most popular 23,5	hrs.per v	week for femal	es aged over 25	years	
EYEWITNESS NEWS	10	60	15	M-F	6:00-7:00

^{*} The average potential over-25 year-old female audience amounts to 389,000 possible viewers

10. CONTENT ANALYSIS RESULTS

10.1 Driving in the six groups' favourite 12 TV programmes

The top twelve TV programmes in the period November 9-November 15, 1989 (from 12:00 p.m to 11:00 p.m on the weekend and from 12:00 p.m to 3:00 p.m plus 6:00 p.m to 11:00 p.m on weekdays) were content analysed for driving portrayals for the six specified audience groups - namely males and females aged 13-17, 17-24, and 25+. Results are summarised in Table 11.1.

Table 10.1: Appearance of Driving by TV Programme Type for the six selected groups' top twelve TV programmes

Group	Hours Watched	DrivIng In Fiction		Driving in Non-Fiction		Car Ads		Other Ads		Total; Max. N	Per Hour
		Max N	Per Hour	Max N	Per Hour	Max N	Per Hour	Max N	Per Hour		
1. Male 13-17	16.5	13	(0.8)	4	(0.2)	18	(1,1)	23	(1.4)	58	3.5
2. Male 16-24	18	14	(8.0)	3	(0.2)	28	(1.6)	21	(1.2)	66	3.7
3. Male 25+	17	8	(0.5)	4	(0.2)	37	(2.2)	8	(0.5)	57	3.4
4. Female 13-17	15	15	(1)	0		10	(0.7)	17	(1.1)	42	2.8
5, Female 16-24	13	13	(1)	0		13	(1)	20	(1.5)	46	3.5
6. Female 25+	16	4	(0.3)	4	(0.3)	40	(2.3)	3	(0.2)	51	3.2

Results in Table 10.1 indicate that:

- (a) Males are more exposed to TV's depictions of driving than are females.
- (b) The below-25's view more driving depictions in fictional programmes than their older counterparts.
- (c) The major differences between males and females are in terms of exposure to TV advertisements for cars where males, especially those aged over 25 years see more than other groups.
- (d) It is clear from the table that TV car ads are targeted mainly at men, and at those over 25 years (who may be able to afford them).

10.2 Depictions of Driving in the six groups' top 22-24 TV viewing hours

A second analysis extended the hours viewed to the Australian average of around 3 hours per day for each of the six groups. However because of the very considerable overlap between favourite TV programmes, only 54.5 hours of TV programmes needed to be analysed in the week November 9-November 15, 1989. Results are summarised in Table 2 for driving in fiction, non-fiction, car advertisements and other advertisements.

Concurrent screening of programmes on different channels forces the viewer to choose between programmes. Therefore the hours watched (depicted in Table 10.2) represent a selection of programmes from the 22-24 hours of analysis.

Table 10.2: Depictions of driving for each of the six groups' average TV viewing (22-24 hours) from November 9 to November 15, 1989

Group	Hours Watched	Driving in Fletion		Driving in Non-Fiction		Car Ads		Other Ads		Total Max. N	Per Hour
		Max N	Per Hour	Max N	Per Hour	Max N	Per Hour	Max N	Per Hour		
1. Male 13-17 2. Male 16-24 3. Male 25+	19 19 17.5	20 18 11	(1.1) (0.9) (0.6)	4 3 4	(0.2) (0.2) (0.2)	18 40 48	(0.9) (2.1) (2.7)	25 21 11	(1.3) (1.1) (0.6)	67 82 74	3.5 4.3 4.2
 Female 13-17 Female 16-24 Female 25+ 	16 21 15.5	20 19 4	(1.3) (0.9) (0.3)	0 0 13	(0.8)	22 16 27	(1.4) (0.8) (1.7)	17 26 7	(1.1) (1.2) (0.5)	59 61 51	3.7 2.9 3.3

Results indicate, as for the top 12 TV programmes, that males are exposed to more driving on TV than are females. Similarly males are exposed to many more TV advertisements for cars than are females. Males aged 17 years and above are the groups who see the most driving on television.

10.3 Alcohol in the six groups' favourite 12 TV programmes

Content analysis was similarly conducted for occurrences of alcohol in each of the six groups' favourite twelve TV programmes in the period November 9-November 15, 1989. Results are summarised in Table 10.3.

Table 10.3: Appearance of Alcohol by TV Programme Type for the six selected groups' top twelve TV programmes

Group	Hours Watched	Alcohol in Fiction		Alcohol In Non-Fiction		Alcohol Ads		Other Ads		Total Max. N	Per Hour
		Max N	Per Hour	Max N	Per Hour	Max N	Per Hour	Max N	Per Hour		
1. Male 13-17 2. Male 16-24 3. Male 25+	16.5 18 17	25 20 13	(1.5) (1.1) (0.8)	10 11 16	(0.6) (0.6) (0.9)	8 10 3	(0.5) (0.6) (0.2)	9 9 13	(0.5) (0.5) (0.8)	52 50 45	3.2 2.8 2.6
4. Female 13-17 5. Female 16-24 6. Female 25+	15 13 16	31 27 9	(2.1) (2.1) (0.6)	0 0 18	(1.1)	5 0 0	(0.3)	9 6 16	(0.6) (0.5) (1.0)	45 33 43	3.0 2.5 2.7

Results in Table 10.3 indicate that in their top 12 TV programmes:

- (a) Young viewers (13-24 years) see more alcohol portrayals per hour than older viewers (25+ years).
- (b) Males on average view slightly more alcohol portrayals than females.
- (c) Young viewers (13-24 years) see alcohol portrayed mainly in fiction, while older viewers (25+ years) see alcohol consumed mainly in non-fiction TV programmes.
- (d) The higher portrayal of alcohol on television for the under-25's group reflects actual consumption patterns for this age group, (ie. under-25's consume more alcohol than their older counterparts)

10.4 Alcohol in the top 22-24 hours of TV viewing for the six groups

A content analysis focusing on TV's depictions of alcohol was conducted for an average week's viewing (22-24 hours) for each of the six groups. Alcohol was categorised in fiction, non-fiction, alcohol advertisements and in other advertising. Results are summarised in Table 10.4 below.

Table 10.4: Appearance of Alcohol by TV Programme Type for the six selected groups' average weeks' TV viewing

. Group	Hours Watched	i	ohol in ation	i	ohol n Fiction	Alco Ac			her ds	Total Max. N	Per Hour
		Max N	Per Hour	Max N	Per Hour	Max N	Per Hour	Max N	Per Hour		
1. Male 13-17 2. Male 16-24 3. Male 25+	19 19 17.5	39 21 14	(2.1) (1.1) (0.8)	10 11 16	(0.5) (0.6) (0.9)	8 13 6	(0.4) (0.7) (0.3)	13 7 11	(0.7) (0.4) (0.6)	70 52 4 7	3.7 2.7 2.7
4. Female 13-17 5. Female 16-24 6. Female 25+	16 21 15.5	41 36 9	(2.6) (1.7) (0.6)	0 0 18	(1.2)	11 14 0	(0.7)	9 8 16	(0.6) (0.4) (1)	61 58 43	3.8 2.7 2.8

Results in Table 10.4 tend to duplicate those for the top 12 TV programmes summarised in Table 1. However it remains apparent that:

- (a) 13-17 year-olds view more alcohol portrayals than do either 17-24 or 25+ year-olds.
- (b) As with the top twelve TV programmes 13-17 year-olds, especially females, see more alcohol portrayed in fictional programmes than do other age groups.
- (c) Conversely older groups, especially 25 year + females, are more exposed than younger groups, to alcohol in TV's non-fiction programmes.

10.5 Problems with the above analyses

One problem constantly confronted relates to the duplication of viewing of most

popular TV programmes across the six groups sampled. Thus when the analysis was extended to include the top 22-24 hours of viewing for each group, which conforms to the average TV viewing times of Australians, we only needed to sample 54.5 hours of television. Six multiplied by 22 hours yields 132 hours of viewing, but groups tend to watch many of the same shows. It is very difficult with 22-24 hours to isolate TV programmes which are viewed by only one group. Such shows are rare indeed. There seems no way to overcome this problem because the number of shows uniquely watched by any one group is too small for meaningful analysis. Therefore results will be dealt with group by group.

A second related problem in terms of analysis relates to the fact that TV networks screen their most popular programmes at the same time. Peak viewing times, moreover, tend to be between 6.00 p.m. and 8.30/9.00 p.m. This gives rise to the problem that no one viewer can watch the most popular programmes on both Channels 7 and 9 at the same time. They can, of course, use their videos to overcome this problem by displacement viewing, but the McNair ratings make no allowance for this. An attempt to deal with this difficulty has been made by expressing, wherever possible, results as the maximum possible number screened in the sampled week. In later parts of this report results are expressed in terms of a range - rather than an absolute number. Such results provide the number of driving and alcohol incidents seen on TV in the sampled period as if a group member had selected to watch TV programmes which did not screen minimal amounts of driving or alcohol as opposed to concurrently screened programmes which featured more of these events.

A third problem with the analysis relates to the depiction of alcohol advertisements. In all 155 such advertisements were analysed which were screened in the 186 hours of television sampled. Each of the three commercial channels were examined between the time periods 12 noon-3.00 p.m. and 6.00 p.m.-11.00 p.m. on weekdays (40 hours per channel) and from 12 noon-11.00 p.m. on weekend days (22 hours per channel). 62 hours multiplied by three channels yields 186 hours. However many of these advertisements are in fact repeats. In the 186 hours only 33 unique advertisements were screened. This only becomes problematic when various crosstabulations are conducted on the data. When the same data has effectively been entered into the computer five times, cross-tabulations of, for example, status of drinker with type of alcohol consumed, reflect such duplications.

11. PORTRAYAL OF DRIVING ON TELEVISION

11.1 Driving in the top 22-24 hours by age and sex groups

The average Australian views approximately 22-24 hours of television per week. Content analysis has been performed for these number of hours for each group for the three commercial stations in Sydney beginning Thursday Nov. 9 1989 and ending Wednesday 15 Nov. 1989.

The analysis in table 11.1 simply represents the most popular 22-24 hours of television for the six groups, as opposed to the previous analysis in tables 1 and 2 which accounted for concurrent screening of programmes on different channels.

Table 11.1: Appearance of driving in the programmes constituting the top 22-24 hours of viewing for the six groups

Gro	пр	Total hours	Driving in fiction	Driving in non-fiction	Car Ads	Other Ads	Total N	Incident per mins.
male	13-17	23	25	7	24	26	82	17
male	16-24	24	19	4	51	22	96	15
male	25+	24.5	14	8	57	13	92	16
female	13-17	24	33	3	35	21	92	16
female	16-24	23	21	0	18	27	66	21
female	25+	23.5	6	17	48	8	79	18

The most popular 54.5 hours of television (programmes within the most popular 22-24 hours of television for the six groups) contained a total of 189 driving incidents, 88 (47%) of which occurred in the form of car-related advertising, 37 (20%) appeared in non-car related ads., 25 (13%) were within news/current affairs, 10 (5%) were depicted in action/crime programmes and 29 (15%) occurred in other fictional shows. The vast majority of driving (163 cases or 87%) was contained in Australian productions (with 2 of these cases showing driving overseas) and the remaining 26 were depicted in American productions. The duration of driving incidents ranged from 1 second to approximately 10 minutes but the most common (50 or 27% of cases) ranged from 28 to 30 seconds which indicates the predominance of car-related advertisements. 164 (92%) driving incidents were screened between 6:00 and 9:00 p.m and 119 (63%) were shown during G-classified programmes. Depictions of driving were fairly evenly distributed across channels but 52 (28%) disproportionately occurred on Sunday.

Not surprisingly, cars were the most common form of transport accounting for

131 (or 69% of cases), 16 (9%) driving incidents involved heavy vehicles followed by bicycles and motorbikes which accounted for 9 (5%) and 3(2%) driving cases respectively. Most driving occurred on a sealed road in either an urban (91 or 48% of cases) or rural (41 or 22% of cases) locale. More than one person was in a vehicle in 63 (33%) instances and children were present in 27 (14%) incidents. 28 (15%) incidents depicted driving within a sporting or demonstrative sphere but driving was mainly depicted as functional (123 or 65% of cases) and responsible. This was reinforced by the predominance (107 or 57% of incidents) of discernibly over 25 year-old drivers, but young drivers (17-24 yrs.) accounted for 11% or 20 cases of driving.

By potentially exposing males and females over 16 and 25 years respectively, to more car-related advertisements than are other groups, the motor vehicle industry seems to tap the male and financial aspects of owning a motor vehicle. This pattern is reflected by the general depiction of driving on television but particularly through advertising. The motor vehicle was certainly depicted as a "mechanical bride" (McLuhan 1964) with males discernibly driving in 111 (59%) cases in comparison to the 32 (17%) cases featuring female driving. This discrepancy was however mainly due to the predominance of advertising. For example, 58 (66%) and 19 (22%) of the 88 carrelated advertisements featured male and female driving in comparison to 14 (48%) and 12 (41%) split depicted in the 29 fictional programmes. Similarly, only 42 (22%) driving incidents portrayed a professional/rich driver but 39 (93%) of these cases occurred within advertising. Once again, 39 (44%) of the advertisements depicted a professional/rich driver in comparison to the 1 (4%) depicted amongst the 29 fictional programmes. Blue-collar workers drove in 23 (12%) instances and discernibly Whitecollar workers accounted for 44 (23%) driving incidents. Police officers were also seen driving in three cases. Unfortunately the difficulty in classing socio-economic status was reflected by the predominance of the 67 (35%) cases where an assumption in this regard was not possible. The predominance of advertisements severely reduced the possibility of assessing the driver's character role or moral type but 21 (11%) and 25 (13%) of drivers were described as lead and 'good' characters respectively. 8 (4%) drivers were assessed as being 'mixed' moral types, 2 (1%) were described as 'bad' and surprisingly few (7 or 4% of cases) were classed as unknown within such an ambiguous category.

Table 11.1 only indicates the total number of driving incidents for the top rating programmes constituting the national viewing average for each group. It would be impossible for each group to watch every one of these programmes since many are screened concurrently but on different channels. Therefore, the amount of driving to which each group is exposed depends on the selection of available programmes. Table 11.2 represents the single most accurate viewing figure. Table 11.2 (below) supplies a range of exposure to driving incidents based on selection of overlapping programmes appearing within the top 22-24 hours for each group.

11.2 Range of driving depictions for possible viewing patterns.

Utilising the same data as above, taking into account possible choices within the top-rating programmes provides table 11.2.

Table 11.2: Range of driving depictions within the top 22-24 hours of viewing as dependent on the selection of an average viewer in each of the six groups

Group		Possible hrs. viewed per week	Range of incidents viewed per week	Range of incidents viewed per hour
male aged	13-17	19	60-67	3.2-3.5
male aged	16-24	19	66-82	3.5-4.3
male aged	25+	17.5	54-74	3.1-4.2
female aged	13-17	16	42-59	2.6-3.7
female aged			55-61	2.6-2.9
female aged	25+	15.5	49-51	3.2-3.3

Males over 16 are certainly exposed to a potentially higher amount of driving on television than other groups which reinforces the male-driving stereotype.

11.3 Driving in the top 12 programmes by age and sex groups

In order to provide a different and comprehensive data analysis, the top 12 rating programmes were examined and represented below in table 11.3.

Table 11.3: Range of driving depictions within the top twelve programmes as dependent on the selection of an average viewer in each of the six groups

Group		Possible hrs. viewed per week	Range of incidents viewed per week	Range of incidents viewed per hour
male aged	13-17	16.5	55-58	3.3-3.5
male aged	16-24	18	63-66	3.5-3.7
male aged	25+	17	54-57	3.2-3.4
female aged	13-17	15	39-42	2.6-2.8
female aged	16-24	13	40-46	3.1-3.5
female aged	25+	16	49-51	3.1-3.2

Unfortunately, the smaller viewing base does not provide significant or interpretable differences between the groups.

11.4 Depictions of driving in Australian and American fictional programmes

This section only supplies comparative figures. Concrete examples are

incorporated in further text.

American and Australian fictional programmes appearing within the top 54.5 hours of television contained 26 and 13 driving incidents respectively. Seat-belts were clearly visible in 7 or 54% of Australian driving depictions in comparison to only 3 (12%) American incidents. Seat-belts were not utilised in 14 (54%) instances of American programming in comparison to a single case (8%) depicted in Australian fiction (note: the remaining cases did not clearly show the driver or seat-belt). Illegal driving was unapprehended in 5 (19%) incidents within American productions in comparison to a single case (8%) found in Australian television. Speeding was proportionally evident within twice as many incidents in American shows (4 or 15% of cases) as Australian productions (1 or 8% of driving incidents) and other offences appeared in proportionately similar incidents (15% for both countries). Although inattentive drivers were proportionately more common in Australian fiction, (23% in comparison to 15%) American productions contained more endangering driving (23% in comparison to 15% in Australian fiction). Not surprisingly, pursuit/escape driving appeared in a remarkable 11 incidents (42%) within American fiction, in comparison to a single case (8%) within the 13 depictions of driving in Australian productions. Inconsequential accidents were depicted in 31% (8 incidents) of American shows whereas one of the two accidents in Australian fiction depicted minor consequential injuries.

The most popular American productions screened in Australia definitely contain more negative road safety messages than is contained in Australian fiction. Indeed, as will become evident in later sections of this report, many Australian fictional programmes actually depict positive road safety messages which are not reflected within the imported American fictional programmes.

11,5 Driving depicted in fictional programmes

Fictional programmes accounted for a total of 39 (20%) driving incidents. The vast majority (33 or 84% of cases) occurred between 6:30 and 9:00 p.m. A disproportionately large number of driving incidents (15 or 39% of cases) were screened on Sunday. 17 (44%) occurred during a G-classified programme, 15 (38%) were screened during a PGR programme and the remaining 7 (18%) were shown during adults-only television.

Absolutely no association with alcohol was evident, legal driving predominated, accounting for 28 (72%) incidents, but most illegal driving incidents were unreprimanded (6 or 15% of cases). The most common type of illegal driving was speeding which occurred in 5 (13%) cases and other or miscellaneous offences accounted for 6 (15%) illegal driving incidents but some aspects of illegal driving were fairly obvious. Endangering driving was evident in 8 (21%) incidents which is not surprising

considering that 12 (31%) cases depicted driving in a pursuit/escape context. The number of cases depicting the lack of seat-belts (15 or 39% of cases) outweighed those showing seat-belts being utilised (10 or 26% of cases). These incidents could be mainly attributed to the "World of Disney" and "Tin Men". The "World of Disney" showed a car chase which involved speeding, dangerous driving and lack of seat-belts. The previews for "Armed and Dangerous" showed similar scenes along with inconsequential accidents. "Tin Men", although set in an era where Cadillacs were built with fins and seat-belts were not compulsory, did account for a fair proportion of driving without restraints and inconsequential accidents which were depicted in 9 (23%) incidents. "Nice Girls Don't Explode" actually depicted a car backing into a pedestrian as a comical and inconsequential practice. Seven (18%) cases of driving were described as inattentive with only "Home and Away" depicting any possible repercussions of inattentive driving. Whilst admiring the physical appearance of a young man, an underaged and overconfident female character starring in "Home and Away" ran into the back of a parked car and was blackmailed by the victims in exchange for secrecy.

Males drove in 22 (56%) cases as opposed the 12 (31%) incidents depicting female driving. Older or over-25 year-old drivers appeared in 26 (67%) incidents and functional driving accounted for 23 (59%) incidents thereby reflecting the advertising figures. Drivers were not depicted as mainly professional/rich, which accounted for only 2 (5%) cases within fictional programmes but gave more emphasis to white and blue-collar workers which appeared in 17 (44%) and 11 (28%) cases respectively.

Not surprisingly, lead characters performed most of the driving, (21 or 54% of cases) and exactly the same number of drivers were described as 'good' characters with 9 (23%) described as either 'bad' or 'mixed'. No significant relationship was evident between the moral type or socio-economic status of drivers in relation to legal status of driving.

Children were present in only 2 (5%) cases as opposed to the 23 (59%) depictions where adult company was present. The children were present in the "World of Disney" and an episode of "Neighbours" with the former lacking seat-belts or childrestraints.

11.6 Driving in car-related advertisements

Car-related advertisements accounted for 88 (47%) of driving depictions, 86% (76) of which were screened during prime-time or between 6:00 and 8:30 p.m. 30% (26) and 50% (44) were disproportionately screened during Sunday and channel 9 respectively. No clear association between alcohol and driving was evident and the 5 (6%) cases depicting illegal driving were either in the context of car-insurance (which falls under car-related advertising) or demonstrative driving not on a testing track, such

as the "Nissan Pajero" 4WD advertisement which demonstrates the car's handling by showing unnecessary dangerous driving on unsealed roads.

The car insurance instances depict numerous car accidents in a slapstick or comical fashion whilst the soundtrack croons "lucky you're with AAMI" (pronounced "Amy") in the background. The accidents themselves are not Important as long as each driver was insured with AAMI car insurance. Most of the accidents depicted are fairly serious, such as a car flying off a jetty or running into the back of a car at fairly high speed, and are caused by presumably innattentive and dangerous driving. Furthermore, the potential physical consequences of such accidents are ignored, thereby emphasising damage to cars rather than people. However, concluding that such an advertisement has potential negative connotations for road safety may be ignoring the basic message of the advertisement. Despite the reckless driving causing the accidents, it is only advertising comprehensive car insurance using comedy as it's selling point. The lack of physical consequences are common in slapstick, which depicts most accidents as slightly funny mishaps rather than serious events.

Seat-belts were obvious in 65 (74%) cases and the remaining 23 cases did not clearly display the driver. Children who were passengers in 7 (8%) advertisements were obviously and safely strapped into appropriate child-restraints. For example, both the "Ford Falcon" and "Minbus" advertisements show all children securely fastened whilst in the cars.

Cars are certainly a male's domain within advertising since 66% (58) of carrelated advertisements depicted male-only driving in comparison to the 19 (22%) cases showing female driving. Socio-economic status was similarly biased toward depiction of professional/rich drivers which occurred in 39 (44%) advertisements such as the "Magna" advertisement followed by 17 (19%) and 2 (2%) depicting white and blue-collar workers respectively. The "Pajero" advertisement used an unlikely White-collar driver whilst the blue-collar drivers drove in 'tougher' cars such as the "Ford Maverick". However, the difficulty in figuring socio-economic status from 30 seconds of advertising (especially when the advertisement is aimed at middle-class income families), was apparent from the 27 (31%) cases were the drivers class was not discernable as in the "Ford Falcon" commercial.

Over-25 year-old drivers were depicted in 71% (62) of advertisements and the image of responsibility and maturity was further reinforced by the predominance of functional and attentive driving which accounted for 73% (64) and 67% (59) of advertisements respectively. Absolutely no speeding was evident in any commercial and any endangering driving which occurred in 9 (10%) advertisements was depicted in a demonstrative context where the driver was presumably an expert. One "Magna"

commercial in particular demonstrates the car's performance on a testing track.

11.7 Driving depicted in non-fictional programmes

Driving in non-fictional programmes accounted for 25 (13%) driving incidents and the majority (15 or 60% of cases) were screened between 6:00 and 6:30 p.m. Only one case appeared where the driver, a policeman backing out of a driveway, was not wearing a seat-belt but 12 (48%) incidents occurred where the driver was not clearly visible. Two (8%) illegal, 3 (12%) condoned speeding incidents and 1 accident with no subsequent injury were screened in an otherwise positive depiction of driving. "Australia's Most Wanted" accounted for most of the illegal driving by depicting speeding during recreated emergencies and escapes.

Again, males drove in 13 (52%) cases in comparison to the 1 (4%) case depicting female driving. Most ages were not discernable (13 or 52% of cases) but those identifiable were over 25 years old (9 or 36% of cases). The large number of personalities featured in news programmes probably accounted for the 15 (60%) driver described as professional /rich but blue-collar workers were depicted in 7 (28%) incidents. These were mainly truck drivers protesting against the 90 km. an hour speed ruling for heavy vehicles.

No driver was described as inattentive and all endangering driving (4 or 16% of cases) was performed by an expert either in a sporting or otherwise trained profession. For example, reports on motor racing accounted for the former, while "Hinch" reported on a defensive driving school for heavy vehicle drivers.

11,8 Driving as depicted in other (non car-related) advertisements

Non car-related advertisements portrayed 37 (20%) driving incidents. All illegal driving (5 or 13% of cases) was unapprehended and inattentive driving (which occurred in 7 or 19% of cases) was used mainly as slapstick comedy which explains the 5 incidents where no injuries resulted from accidents. For example, the "Frisco" ice-cream commercial depicts a policewoman who, whilst directing traffic, momentarily loses all concentration due to her rapture over the taste of "Frisco" ice-cream. Needless to say she causes an extremely serious car pile-up where, miraculously, nobody receives any injury. Once again car accidents are depicted in the form of slapstick which becomes difficult to interpret in terms of road safety messages. The completely exaggerated car pile-up, which shows cars rolling over one another, would in reality be extremely serious for all passengers involved but whether these comical depictions of accidents assist in creating a blase attitude toward accidents is difficult to determine. Only 1 case depicted driving without a seat-belt (which occurred in a "coca-cola" commercial showing a group of youngsters travelling to the beach by bus) but 3 (8%) incidents

portrayed cyclists without helmets. Indeed, the "P.K" chewing-gum commercial depicts cyclists with and without helmets in the same advertisement.

Female drivers appeared only in conjunction with male drivers (6 or 16% of cases) as opposed male-only driving which appeared in 18 (49%) driving incidents. Older drivers once again dominated the driving, appearing in 10 (27%) incidents, as opposed to the 1 case showing a younger driver. Not one driver was depicted as professional/rich but white-collar workers drove in 10 (27%) scenes with blue-collar workers driving in 3 (8%) instances.

Driving was mainly functional (23 or 62% of cases) and depicted positively but sporting or demonstrative driving was screened in 5 (14%) cases which accounted for most of the endangering driving which appeared in 6 (16%) incidents. For example, the "Mobil" oil commercial demonstrates the increased performance of a motor vehicle after the addition of Mobil oil to the engine.

11,9 General frequencies for depictions of driving

All coding descriptions are available in the last section of the report beginning on page

All figures are rounded to the nearest whole number and represent a percentage of the total 189 driving incidents screened during the most popular 54.5 hours of television.

47% of screened driving was within a car-related advertisement, 20% occurred in other advertisements, 13% was non-fiction and the remaining 20% was within fictional programmes. The duration of driving incidents ranged from 1 second to approximately 10 minutes. The average duration was 29 seconds with a standard deviation of 46 seconds. Due to the predominance of advertising, the most commonly occurring duration (30 or 16% of cases) was 30 seconds

2% of driving incidents occurred between 1:30 and 2:30 p.m, 87% of driving incidents occurred between 6:00 and 9:00 p.m, and 11% were screened between 9:00 and 10:30 p.m.

26% of driving depictions were evenly divided between Thursday and Friday, 5% were screened on Saturday, 28% occurred on Súnday, 17% on Monday, 13% on Tuesday and 11% occurred on Wednesday.

Channel 7 accounted for 40% of driving depictions, 32% were screened on Channel 9 and the remaining 28% were on Channel 10.

63% of driving was screened during G-classified programmes, 26% occurred during PGR-classifications and 11% were shown during adults-only (AO) programmes.

Seat-belts were obvious in 53% of cases, were not worn in 9% of cases and were not discernable in 30% of driving incidents. 6% of cases depicted cyclists with helmets

and 2% showed cycling without the use of helmets.

85% of all driving was legal, 1% depicted illegal driving which was apprehended and 7% of driving incidents were illegal and unreprimanded. Condoned illegal driving (such as police chases) accounted for 3% of all driving incidents and the remaining 3% were questionable in their legality. 4% of driving incidents involved speeding and a further 7% involved other multiple driving infringements.

Cars accounted for 69% of vehicles seen on television, 9% were heavy vehicles, bicycles accounted for 5% and motor bikes for a further 2%. The remaining cases were combinations of these vehicles.

59% of all drivers were male, 17% were female, 4% depicted both sexes.

Over-25 year-olds drove in 57% of cases, 11% of drivers were 17-24 year-olds and 1% were under-aged. 5% of incidents simultaneously depicted drivers from different age groups and age could not be discerned for 27% of drivers.

White and blue-collar workers accounted for 23% and 12% of drivers respectively and drivers described as professional/rich were depicted in 22% of incidents. 5% of driving incidents depicted more than one social class and socio-economic status could not be discerned in 35% of cases.

Character roles were not relevant in 81% of driving incidents but 11% of drivers were lead characters within the programme, 5% were support actors and 'bit' characters accounted for 1% driving. Character roles were not discernable in 2% of driving incidents.

Moral types were also not relevant in 74% of cases but 13% were described as 'good' characters, 1% were 'bad' and 4% were described as possessing characteristics from both spectrums. 4% of drivers could not be described in terms of moral virtues and a similar number were described as belonging to an 'expert' class of driver (ie. moral was not applicable).

67% of drivers were attentive when they drove, 10% were inattentive and 23% of driving was not discernible in this regard.

85% of all driving was safe and 15% was described as endangering.

Drivers were alone in 33% of driving incidents, had adult company in 33% of cases and children were present in 5% of moving vehicles. 9% of driving incidents depicted combinations of passengers and they were not discernible in 20% of incidents.

Driving was inconsequential in 91% of all cases but 1% depicted collision with minor injury, 8% showed collisions with no injury and 1% did not show the consequences following an accident.

48% of driving occurred in an urban locale, 22% occurred on a rural but sealed road, 5% depicted driving on an unsealed road and 15% of driving occurred in a combination of areas. Testing tracks accounted for 5% of driving locations and 5% of driving occurred in obscure or unknown locations.

65% of all driving was described as functional, 6% was for pursuit/escape

purposes, 2% was due to an emergency, and only 1% was described as 'thrill' driving. 15% occurred for sporting or demonstrative purposes and 11% fell into more than one or 'other' categories.

Driving was central to the plot in 71% of incidents, incidental to the plot in 15% of cases and not relevant in the remaining 14% of driving incidents.

12. THE PORTRAYAL OF ALCOHOL ON TELEVISION

12.1 Alcohol in the top 22-24 hours by age and sex groups

The average Australian views approximately 22-24 hours of television per week. Content analysis was performed for these number of hours for each group for the three commercial stations in Sydney beginning Thursday Nov. 9 1989 and ending Wednesday 15 Nov. 1989.

Table 12.1 simply represents the most popular 22-24 hours of television for the six groups, as opposed to the previous driving analysis which accounted for concurrent screening of programmes on different channels.

Table 12.1: Appearance of alcohol in the programmes constituting the top 22-24 hours of viewing for the six groups

Grou	ıр	Total hours	Alcohol in fiction	Alcohol in non-fiction	Alcohol Ads	Other Ads	Total N	Incident per mins.
male	13-17	23	46	10	8	12	76	18
male	16-24	24	25	14	16	13	68	20
male	25+	24.5	18	17	9	12	56	26
female	13-17	24	52	0	14	11	77	18
female	16-24	23	38	0	14	10	62	22
female	25+	23.5	9	30	0	17	56	25

In total alcohol was seen 143 times in the 54.5 hours analysed. 60 (42%) of these alcohol presentations appeared in fictional programmes. 30 (21%) appeared in non-fictional programmes. 22 (15%) were screened in alcohol advertisements. Curiously slightly more alcohol presentations (31 or 22%) were screened in non-alcohol TV advertisements, than in advertisements for alcohol.

The above figures only indicate the total number of alcohol incidents for the top rating programmes constituting the national viewing average for each group. It would be impossible for each group to watch every one of these programmes since many are screened concurrently but on different channels. Therefore, the amount of alcohol to which each group is exposed depends on the selection of available programmes. Table 10.4 represents the single most accurate viewing figure.

12.2 Range of alcohol depictions for possible viewing patterns

Utilising the same data as above, taking into account possible choices within the top-rating programmes, provides table 12.2.

Table 12.2: Range of alcohol depictions within the top 22-24 hours of viewing as dependent on the selection of an average viewer in each of the six groups

Group		Possible hrs. viewed per week	Range of incidents viewed per week	Range of incidents viewed per hour
male aged	13-17	19	60-70	3.2-3.7
male aged	16-24	19	42-52	2.2-2.7
male aged	25+	17.5	34-47	1,9-2.7
female aged	13-17	16	45-61	2.8-3.8
female aged	16-24	21	48-58	2.3-2.7
female aged	25+	15.5	33-43	2.1-2.8

As previously noted, 13-17 year-olds, both male and female, are exposed to more alcohol on television than are older groups.

12.3 Alcohol in the top 12 programmes by age and sex groups

In order to provide a different and comprehensive data analysis, the top 12 programmes were examined and represented in table 12.3.

Table 12.3: Range of alcohol depictions within the top twelve programmes as dependent on the selection of an average viewer in each of the six groups

Group		Possible hrs. viewed per week	Range of incidents viewed per week	Range of incidents viewed per hour
male aged male aged	13-17 16-24		48-52 45-50	2.9-3.2 2.5-2.8
male aged	25+	17	38-45	2.2-2.6
female aged	13-17	15	45	3
female aged	16-24	13	31-33	2.3-2.5
female aged	25+	16	38-43	2.4-2.7

Once again, the smaller viewing base diminishes the differences between the groups but the youngest (and non-drinking) groups seem potentially exposed to more alcohol on television than their older counterparts.

12.4 Analysis of alcohol In popular series/serials

60% (36 cases) of all drinking found in fictional programmes occurred within the following popular series/serials. 5 episodes (or one week) of 'Home and Away' and 'Neighbours' contained 7 and 4 depictions of alcohol respectively. Two episodes of 'A Country Practice' and 'E-Street' contained 9 and 11 depictions respectively and even 1 episode of 'The World of Disney' managed to squeeze in 3 instances of alcohol. Two other

popular American-made series, '21 Jump St.' and 'Full House" each had one depiction of alcohol. These programmes are collectively and primarily watched by both males and females aged 13-17 years.

Although 12 (33%) of all alcohol incidents within these programmes focus specifically on main characters drinking alcohol, another 14 (39%) show either all or some characters drinking a non-alcoholic beverage within an alcohol context such as a public bar club or restaurant. For example, in "A Country Practice" the doctor and policeman are mostly seen drinking a non-alcoholic beverage thereby reinforcing their positions of authority and responsibility.

Drinking alcohol however is depicted as a social and inconsequential pastime, such as sharing a drink after work or with a guest, with 72% (26 cases) of all alcohol being consumed in either a pub/bar or restaurant. 66% (24 cases) of all drinking was described as facilitating a social or celebratory atmosphere but the 5 depictions of alcohol being utilised in crisis situations (12% of incidents), such as "Home and Away" depicting two friends reconciling their differences over a beer, cannot be ignored. The vast majority of drinkers were well into adulthood (81% or 29 cases) and the 2 incidents of under-aged drinking were followed by negative consequences as in "21 Jump St." where an under-aged drinker is caught in the bar.

89% or 32 cases of drinking occurred in company of both males and females (in 22 or 61% of cases) but sexual stereotypes were definitely reinforced by the lack of female-only drinking which occurred in only 1 (3%) case as opposed to the 12 (33%) cases depicting male-only drinking. Females are often seen drinking with other males but never with other female friends as opposed to males who are commonly depicted drinking with both sexes. Not surprisingly therefore, beer is the main type of alcohol consumed (in 14 or 39% of cases), but the number of incidents depicting the consumption of wine and spirits (5 or 14% and 7 or 19% of cases respectively) fell below (or were similar to) the frequency of non-alcoholic beverages being consumed in an alcoholic context (7 or 19% of cases).

Blue-collar workers are involved in more drinking episodes (12 or 33% of drinking scenes) than characters described as portraying White-collar workers or the professional/rich (8 or 22% and 5 or 14% of cases respectively).

12.5 Alcohol depicted in popular movies

Very few movies rated highly enough in order to qualify for the most popular 22-23 hours of television. The three movies that fell within the content analysis contained a total of 10 alcohol incidents which accounted for 17% of all alcohol found in fictional programmes. 'Tin Men' contained 5 incidents of alcohol, 'Ghostbusters' portrayed 4

incidents and 'Nice Girls Don't Explode' contained only 1 instance. The portrayal of alcohol within these movies strongly parallels the depictions found in popular series/serials. For example, the drinking is fairly incidental, social, it occurs mostly within an alcoholic context and reinforces the same stereotypes. The distinguishing factor is the occurrence of alcohol advertisements during the post-8:30 p.m time-slots when these movies were screened. In the case of 'Tin Men' and 'Nice Girls.....' the number of alcohol advertisements outnumbered the depictions of alcohol during the actual movie (6 and 7 advertisements respectively) whereas 'Ghostbusters' produced only 3 advertisements. These movies proved most popular for the under-25 group. Although not a movie, it is noteworthy to add that '21 Jump St.,' which is most popular in the 13-17 year-old group, contained a total of 5 alcohol-related advertisements in the space of an hour.

12.6 Alcohol in all fictional TV programmes

Alcohol in the sampled 54.5 hours is mainly portrayed in fictional TV programmes (60, 42%).

Over half (36, 60%) of all alcohol presentations in TV's fictional programmes are screened in popular series/serials such as <u>Home and Away</u> and <u>Neighbours</u>. A bar, usually in a club, is a very popular location where disparate characters encounter one another.

One-third (21, 35%) of alcohol portrayed in fiction shows main characters drinking alcohol. At the same time, however, 30% (18) of such characters are seen drinking a non-alcoholic beverage in places where alcohol is served.

Three-quarters of drinkers (46, 75%) are adults.

Under-aged alcohol drinking was seen in TV fiction (5, 8%), but all such incidents were followed by negative consequences.

Two-thirds of all alcohol consumption (42, 70%) was for social or celebratory purposes.

Seven percent (4 cases) of alcohol drinking in TV fiction, however, was to cope with crises.

Male only drinking was displayed in one-third of alcohol portrayals (19, 32%).

Female only drinking was seen in just 5% (3 cases) of alcohol displays.

The most commonly portrayed alcohol types in popular shows were beer (19, 32%), spirits (13, 22%) and wine (11, 18%).

12.7 Alcohol depicted in popular Australian news/current affairs

One-fifth of the alcohol screened in the sampled 54.5 hours appeared in non-fiction TV programmes - (such as) at press club conferences, and even in news programming. The sampled period included the beginnings of the demolition of the Berlin Wall. ABC News reports showed East Germans in cars coming over the border with large

bottles of champagne in their hands. Channel 9 showed champagne being poured over cars. In fact these were the few incidents where drinking and driving were combined in the sampled TV coverage.

Both news and current affairs featured as the most popular programmes for males and females in the over 25 year-old group. This did not apply to the younger groups where non-fictional programmes hardly prevailed within the list of popular programmes. Alcohol depicted on popular news programmes accounted for 30 (21% of the total) incidents of alcohol occurring within the top 22-23 hours of Sydney television. Five episodes of 'Seven Nightly News', 'National Nine News' and 'Eyewitness News' contained 10, 10, and 11 incidents of alcohol respectively. One week of current affairs programmes such as 'Hinch' and 'A Current Affair' also contained 2 and 3 depictions of alcohol respectively. The most popular weekend news (National Nine News both Saturday and Sunday) contained 3 combined instances of alcohol. Alcohol is always incidental and appears mainly during press conferences or in relation to business reports such as "Alan Bond's brewing interests" etc.

Exactly one-third of all news items depicting alcohol actually displayed drinking, most of which was wine (19 or 63% of cases) and was either social or celebratory in nature. This is explained by the prevalence of press conferences in news items and also explains why 13 (43%) drinkers were classed as belonging to either white-collar or professional/rich socio-economic groups.

No preference was evident for either sex or age groups with 18 (60%) cases depicting both male and female drinkers whilst 12 (40%) incidents contained all ages ranging from 'young adults' to 'old'.

12.8 Depiction of alcohol in advertisements

Content analysis of one week's worth of television (November 9 to November 15, 1989 from 12:00 p.m to 11:00 p.m on the weekend and from 12:00 p.m to 3:00 p.m plus 6:00 p.m to 11:00 p.m on weekdays) produced a total of 155 alcohol advertisements but a number of advertisements were screened several times. In sum, 33 unique alcohol advertisements were analysed.

144 (93%) advertisements were screened after 8:30 p.m, 112 (72%) displayed actual drinking and only 1 advertisement depicted driving (boating) within the same advertisement. Beer and cider (both having the same alcoholic content) were advertised in 72 (47%) and 8 (5%) cases respectively followed by spirits (50 or 32% of cases) and wine/champagne (24 or 16% of cases). Only 39 (25%) utilised an obvious celebrity but 73 (47%) of alcohol advertisements depicted their actors as belonging to a professional/rich class. Similarly, 54 (35%) depicted alcohol and a suggested sporting,

social or sexual 'achievement' within the same advertisement. This figure may be subject to criticism but the use of sporting celebrities suggests an association between alcohol and sporting achievement. Similarly, a couple depicted in intimate proximity of each other or gazing into one anothers eyes whilst consuming alcohol associates drinking with physical or sexual intimacy.

Sexual stereotypes were perpetuated by the complete lack of female-only drinking in comparison to the 58 (37%) advertisements depicting male-only drinking. 70 (45%) cases featured 'mixed' drinking but further analysis indicated that 57% (40 cases) of all 'mixed' drinking suggested intimacy. Not surprisingly, 75 (48%) alcohol advertisements depicted only two people drinking. 55 (36%) advertisements depicted young adults but a further 130 (84%) utilised actors which were obviously over 21 years of age.

(a) Factor Analysis of alcohol advertisements

Factor 1

<u>Variable</u>	Loading
Use of a celebrity	0.88
Males mainly depicted	0.84
Beer mainly depicted	0.83
Occasion depicted as social	0.49

The factor analysis is interpretable in terms of types of alcohol. Factor, which accounts for 26% of the variance in alcohol advertisements, represents (and includes) the beer commercials.

The relationships between each type of alcohol and the variables portrayed in the 33 unique alcohol advertisements certainly lend credence to the above analyses. Only beer commercials utilised celebrities and depicted beer drinking as a social occasion (50% of all social drinking involved beer) involving small groups (67%). Not surprisingly, 56% of advertisements depicting male-only drinking and 50% depicting blue-collar drinkers were beer-related. There is little argument as to the target of beer commercials. Spirit commercials seemed to create an association between romance and alcohol (or spirit) consumption. Exactly half the number of alcohol commercials depicting young people were spirit advertisements. More importantly, 67% and 53% of alcohol advertisements depicting two people and both sexes drinking respectively, were advertising spirits. Indeed, 86% of drinking in commercials described as 'intimate' was attributed to spirit advertisements. Where many beer commercials suggest an association between beer and sporting achievement (44%), the spirit advertisements associate themselves with sexual or physical intimacy (33%). Wine is difficult to assess in terms of these variables as many wine advertisements only depict the product - not consumption.

12.9 Alcohol advertisement frequencies

There were 155 advertisements for alcohol recorded during the week sampled. All percentages in this description have been rounded to the nearest whole number.

56% of the advertisements were 30 seconds in duration, and a further 25% were screened for 60 seconds. 17% of the advertisements were 15 seconds in length.

Distribution of alcohol advertisements occurred mainly between 8.30 and 11.00 p.m. 15% occurred between 8.30 and 9.00 p.m.; 22% between 9.00 and 9.30 p.m.; 21% between 9.30 and 10.00 p.m.; 17% between 10.00 and 10.30 p.m.; and a further 19% between 10.30 and 11.00 p.m. 7%, or 10 of the 155 advertisements, were screened between the remaining hours sampled.

More alcohol advertisements were screened on Saturday than any other day (21%), and the lowest frequency occurred on Sunday, when only 8% of the advertisements were recorded. 10%, 12%, and 13% of the alcohol advertisements were shown on Thursday, Friday, and Tuesday nights respectively, and there were slightly more were seen on Monday night (17%) and Wednesday night (19%).

Distribution of the alcohol advertisements across the three main channels was not even, with Channel 7 screening 34% of the total observed advertisements, Channel 10 screening 36%, and Channel 9 screening only 30% of the advertisements.

There was a marked difference in the frequency of screening of advertisements for alcohol, depending on the classification of the show during which they were screened. 41% and 39% were screened during PGR and AO programmes respectively. Only 20% of the advertisements were shown during G rated programmes.

People were portrayed as drinking alcohol in 72% of the advertisements. The balance of 28% had alcohol displayed but not drinking was involved.

Only one of the 155 advertisements for alcohol featured both drinking and driving (boating). This constituted 0.6% of the total.

There were four categories of alcohol featured in the advertisements: Beer, cider, wine and spirits. 47% of the advertisements were for beer, 5% for cider, 32% for spirits and 16% featured wine.

25% of all advertisements featured a celebrity endorsing/using the product. 54% of the advertisements did not include a known personality, and in a further 21%, it was either coded Not Applicable (no people seen), or not known if a celebrity was featured.

Almost half (48%) of the advertisements featured only two people. Drinking alone occurred in 12% of the advertisements, and 16% featured a small group of drinkers. Only 7% of the advertisements featured a crowd of people, and in 17% of the advertisements, no people were seen.

Drinkers in alcohol advertisements were generally portrayed as young or middle aged (36% and 37% respectively). In 4% of the advertisements, the drinkers were portrayed as old, in 5%, the age groups were mixed, and in 18%, the age was Not

Applicable.

Male only drinkers were portrayed in 37% of the advertisements, and there were both males and females portrayed in 45% of the advertisements. In 17%, the sex of the drinkers was Not Applicable. There were no advertisements which featured only women.

Almost half of the drinkers portrayed in advertisements were classified as professional/rich (47%). Only 7% were apparently blue collar workers, and 3% were white collar workers. In 27% of the advertisements, the socioeconomic status (SES) of the drinkers could not be identified, and in a further 16% of the advertisements, SES was Not Applicable.

Drinking was portrayed as a social activity in 39% of the advertisements, and used in an intimate atmosphere in 28% of the advertisements. In 19% of the advertisements, the purpose was not discernable, and in 14%, the purpose was Not Applicable.

85% of the advertisements were screened at times other than the rating periods sampled. 12% were screened during the primary rating shows, and a further 3% occurred during shows in the extended ratings period.

Drinkers were obviously over 21 years of age in 84% of the advertisements, and in only one advertisement, (1%) was the drinker not obviously over 21 years of age. In a further 15%, the age of the drinker/s was Not Applicable.

In 35% of the advertisements, there was a suggestion that the alcohol would contribute to social achievement, and in 54% of the advertisements, there was a suggested contribution to sporting achievement. In only one of the advertisements, (0.6%), was there any suggestion of contribution to sexual achievements. In 11% of the advertisements, suggested contribution to achievements was Not Applicable.

13. THE SEMIOTICS OF DRIVING AND ALCOHOL ON TELEVISION

Analysing the content of television programmes is not sufficient to provide insight into how the viewer responds to different types of programmes or to different types of portrayals of driving or drinking behaviour. Television provides viewers with a diverse amount of visual and oral information, and various representations and interpretations of reality. A vast array of symbols and images are seen by viewers in relation to alcohol and driving. Many of these images are seen in an inherently cultural context: viewers respond to certain images according to, often unconsciously held, societal standards (Hodge and Kress, 1988). Thus, the image of an Australian athlete receiving a gold medal evokes a feeling of national pride and achievement - the 'Australian' sportsperson victorious. Our society values success in sporting endeavours, and this value partially embodies itself in the proud feeling the viewer, sitting in the loungeroom, feels.

What, then, are the kinds of images viewers see on television when a programme depicting an alcohol scene or a driving scene is televised? Any answer will obviously be incomplete in terms of its analysis, but may still, however, provide a basic analysis of the types of images and their meanings. One of the most dominant images in both driving and alcohol-related scenes is one of a gender differentiation. This dominance, as will be seen, has some ramifications on how driving and drinking behaviours are seen by viewers.

13.1 Driving

13.1.1 Driving as displayed in advertisements

One of the primary representations of driving on television, as the results of this project reveal, occurs in advertisements for cars. What is initially blatant is the arbitrary nature of all associations between the car and the images associated with it. Traditionally, cars are implicitly associated with freedom, escape from stress and also with manly virility, but there is no concrete reason, no physical or intellectual reason, why this association should exist. It follows that the car is then linked with masculinity and 'manliness'. The content analysis of this project supports this association: in both fictional and advertising portrayals of driving, the driver is almost always male. Images of masculinity abound particularly in the advertisements, and create a standard from which the television viewer responds to. As will be seen through an examination of a few car advertisements, different cars are marketed for different viewers, and the method by which this is attained adds an interesting dimension to the portrayal of driving in advertisements.

One of the first dichotomies found in car advertisements is one of emphasis.

Sometimes, depending on the car, the driver is emphasised and focused on in the advertisement; at other times, the car itself becomes the focus. Take for example the Ford Corsair advertisements. The sales pitch immediately isolates the importance of the passengers, but particularly the driver. The elderly man sitting in the back seat, one of "Australia's real motoring experts", provides an image of respectability and reliability. His clothes are pastel coloured, neat and well presented: he is respectable, the average Grandpa who's seen a few cars in his time. Yet he is not driving: that prestige is reserved for the younger male.

The focus of the advertisement shifts from the elder backseat, couple to the front seat where a number of interesting images and associations appear. Sitting in the passenger seat is a young and attractive woman, and it is implied that she is both a wife and a mother. She is dressed differently to anyone else in the car: clad in a short, red mini-skirt. The camera takes advantage of her short skirt, as it follows the movement of her hand, which turns the volume up on the cassette player, located conveniently near her legs. The flash of colour in the grey interior of the car that her clothes bring to the commercial is not only to catch the viewer's visual attention. The camera shot presupposes a certain type of viewer will like seeing that leggy view, regardless of how briefly they are seen: a male viewer.

Juxtaposed with this feminine splash of flesh and colour is the scene immediately following. The camera is positioned so that the initial eye gaze naturally moves from the "co-driver's" legs to the car's dashboard and thence to the driver himself. Unlike his wife, the driver is dressed in sombre, earthy colours. He also wears a high-neck skivvy: no flesh can be seen. He is, first and foremost, the driver. Previous camera shots have accumulated to his final scene, as it is he who must ultimately approve of the car. He is not too young, but rather of an 'experienced' age for driving. It is only after the driver, the one person in control of this new car, has been shown to be satisfied with his car that the viewer actually sees, in full, the car itself. This 'Ford Corsair' is obviously a man's car, but it is also the family car. The car is a steely-grey colour, which harmonises with the family's own clothing mood.

This idea of the car as a reflection and even extension of the driver (i.e., a male) is most apparent when different vehicle types and drivers are examined. The racy red 'Twin Cam Toyota' is emphasised for its speed and power as it de-feathers a chicken on a nearby footpath as it whizzes past. The driver, seen only briefly, is naturally male. He is devastatingly handsome: the rugged, sporty type. He gives a smile as he turns the key in the ignition and hears the engine roar. The power and capacity of this car delight him. Once again, the car becomes the man's domain. This car, however, is targeted at the young and preferably single, carefree male. The car's colour reflects this: very few family cars are advertised in the passionately fiery colour of red, which is often linked with a

virulent and vital driver lifestyle.

Countless other advertisements reflect this male-identity-car trend. The business man in a grey suit drives his sophisticated lady to a ritzy dinner, in a mansion, in a silver Magna: a classy car for the special evening. Two women tennis players are driven home from the tennis courts by 'Roger', who drives a red Nissan Pintara. The women are contrasted with Roger in various ways: he wears dark colours, they wear white; they chatter constantly, he remains silent; he is driving, they are passengers. One woman exposes the normally unexpressed connection between driver and car when she comments, "Very nice, Roger...love his car".

Even when a woman drives a car, which is quite a rare occurrence, there is a kind of masculinity about her. The woman who drives the 'Ford Laser' to work is dressed in greys, whites and khakis. She wears a tailored suit, with padded shoulders and her hair is pulled back: an appearance often utilised by women to appear less feminine in a male-dominated workforce. The car she drives is "fashionable" rather than familial, or fast or sporty. Men and women, it would seem, use cars for totally different reasons, and the advertising campaign picks up on this. Women are not seen as 'thrill' drivers or as 'family' drivers. Those roles belong to the male of the species. Images of fast driving, freedom or even sexuality do not crowd into the advertisement where a female drives. No seductively dressed male is perched comfortably in the passenger seat: the female driver always drives alone (with the one exception of the Yorkshire Terrier dog who sneaks into the boot of a Mazda). Such observations as these reiterate the specifically male character of driving.

13.1.2 Driving as displayed in fictional programmes

Analysing the images used in programme driving becomes problematical due to the small sample of television content used in the present project. A wide variety of driving behaviour occurs on television, of which only a small representation is here accounted for. Nonetheless, some generalisations can be made. Driving scenes are typically used as transitions between other scenes or as attention-grabbers. Thus, the high speed chase through the streets of New York is used primarily as attention-gaining and the scene of friends discussing love's dilemmas on their way to lunch is used as a link between the home (a private inside environment) to the restaurant (a public inside environment).

Cars are often portrayed as multi-functional machines, and driving behaviour often reflects this multi-faceted utility. The policeman uses his car as an instrument of the law, and usually drives accordingly, but if a conditional breach of the law is required, then that is acceptable. The 'ghost-buster' uses his vehicle to drive to the spooks as quickly as possible, regardless of safety or traffic regulations; and so on.

In programmes, once again, the car emerges as a man's toy. One movie, "Tin Men", is devoted to the underhand dealings of two male car swindlers. In this movie, not one woman drives a vehicle. Cars become a source of disagreement and provide the central conflict in the movie. Antagonism between the two protagonists is developed and externalised through their vehicles and the way in which they systematically wreck the other's car. Cars are seen as a status symbol and driving behaviour is dependent upon mood: if the driver is mad, then his driving will be reckless. The cars are a subdued colour and match the suit colours of their drivers. In this particular movie, cars are undoubtedly seen as part of the driver's identity, but also become part of the film's dynamics. This in itself is unusual, as when driving is normally seen it is incidental to plot and even character.

Three other driving episodes are worth noting. Firstly, in "A Country Practice", both episodes involved a car rally. All drivers were male. Bob, the plumber, drove a run-down, dusty red ute; Matthew, the young veterinarian, drove a pale yellow Volvo; and the middle-aged doctor, Terrance, drove an upmarket four wheel drive. Status, job and even personality are embodied in the vehicle (Bob cheats in the car rally - his morals are as dusty as his car), but most importantly, so too is gender. "A Country Practice" is also one of the many programmes screened in the week of viewing analysed which depicts driving in a safe manner. The two car rally episodes are of a particular importance in this regard. Whereas the bulk of driving behaviour on "A Country Practice" is 'functional' and not focused upon, these episodes provide an extended concentration on driving. Each driver is seen to sit in the car and put a seat belt on before driving off. Each passenger is also clearly seen to fasten their seat belt. Not one driver could be accused of neglecting the law or common sense in relation to driving behaviour.

The obvious use of seat belts was also discerned in the "Home and Away" episodes. The two girls, driver and passenger, who had a minor accident were filmed in a manner which enhanced this behaviour. Close-up shots of their faces were exchanged for a camera angle which included more of their bodies and of the vehicle as they fastened their seat belts. While it should be noted that this does not imply that the fastening of seat belts was a deliberately focused upon behaviour, it does indicate the 'naturalness' of their actions through an undidactic and subtle presentation.

Thirdly, one episode of "Disney" showed three English nannies driving in and around London in a steam-powered truck, with the skeleton of a dinosaur on the truck. The driving scenes are humorous partially due to the incongruity of feminine driving and the vehicle itself. Most of the driving occurs during a foggy London evening, and the elderly ladies are pursued by the 'villains'. Loud, fast tempo music accompanies these scenes, which constitute the most action-packed moments of the programme, but conversely, these scenes are light-hearted and fun. The women make jokes and the

dinosaur creates havoc to passers-by with its boney tail. The entire <u>mood</u> of the driving is different to that of a high speed chase in a police show or by male drivers.

In contrast to the noticeable use of seat belts in Australian programmes such as "A Country Practice" and "Home and Away" are the somewhat more lax USA productions. The "Tin Men" movie displays some instances of reckless driving, but all incidents, regardless of the type of driving seen, neglect showing the driver or passengers clicking into a seat belt. Similarly, the "Disney" driving scenes depict innocent little nannies jumping into trucks and cars and speeding off. Because the nannies are, perhaps by default, slotted into the role of the 'goodie', their careless attitude seems incongruous with their characters. These English nannies are the role models for the children in their care, yet their driving behaviour does not reflect this crucial role. While it should be remembered that this particular programme is comical, almost farcical in nature, it still constitutes part of a social environment from which viewers, particularly children, develop knowledge of the use and abuse of motor vehicles.

Pedestrian portrayal in the sampled viewing is difficult to analyse due to insignificant representations of such behaviour. The seven von Trappe children are seen joyfully frolicking through the streets of Salzburg in "The Sound of Music", "Rocky" jogging on the urban roadway with fans in tow and a crazed possessor of an evil spirit hypnotically crossing busy streets in "Ghostbusters" but other depictions of pedestrians are rare. A quick shot on the nightly news shows safe road crossings and ordered traffic, a transitory scene between two "Neighbours" characters as they walk down their street is sedate and perfectly normal behaviour. Even in the mad-cap chase through London in "Disney", pedestrians are portrayed as insignificant bystanders, useful only for the disbelief or bewilderment that steals across their faces as the nanny-driven truck with dinosaur in tow races past.

13.2 Alcohol

13.2.1 Depictions of alcohol in advertisements

Alcohol advertisements fall generally into two categories: the beer advertisements, brimming with mateship scenes and fun times; and the liqueur and spirit advertisements, often involving suggestive intimate looks between attractive men and women.

Firstly, the beer advertisements. These advertisements often involve a sporting presence. The 'Tooheys Feels Good' advertisement campaign combines the funky music of James Brown with the sporty cricketer, Mike Whitney. Actions on the cricket field are duplicated in the pub: the throwing of a beer, the slapping of hands in victory. There are women present, but they do not drink beer. Their dresses are short, and the women are

very close to the men (thereby lessening personal body space, which implies intimacy). As with most alcohol-related scenes, the mood is one of celebration and good fun: the music is energetic, it is at night-time and there are brightly coloured lights and clothes all around. The emphasis of the advertisement is equally divided between drinker (the cricketer) and the beer.

All the beer advertisements utilise a stark and bold writing. The 'Fosters', the 'Tooheys Dry', the 'Tooheys' are all written in very formalised and regimented letters, suggestive of strength and masculinity. The young man who drinks the 'Tooheys Dry' is conveniently dressed in the same colours as the lettering and packaging of the beer itself (i.e., red and blue). The music, if any, that accompanies these beer advertisements is one of a young, happy age group. The exception here would be the 'Fosters' advertisements, which focus more on the older beer drinker through the presence of two famous sportsmen. Emphasising mateship ("thanks mate", "cheers mate") and lightheartedness, these Fosters advertisements present beer as a friendly means of breaking the ice. Alcohol becomes an integral component of this 'mate' oriented Fosters advertisement. It facilitates an introduction between the two men (they meet at the bar) and provides initial conversation as well. Furthermore, the Fosters itself becomes a means by which innocent foot-in-the-mouth utterances are resolved and playfully forgotten.

The spirit advertisements, however, are of a different style altogether. All emphasise the romantic setting of the scene, the physical attraction between male and female and the consequently central role alcohol takes in that relationship. Music is always softer, sometimes more exotic as in the 'Tia Maria' or 'Bacardi' advertisements. Eyes meet over a glass of Baileys, or, as in the 'Cointreau' advertisement, the glass provides a convenient means of illustrating physical desire. The 'Cointreau' bottle is the only coloured object in the otherwise black and white setting. She is a mature businesswoman, he is a younger businessman, and the setting is a busy lunchtime restaurant. Through the positioning of the camera, the viewer is able to identify with both the man's interest in this mysterious woman, and the woman's intrigue for the man. The focus is on the eyes, which meet and sustain contact for a few tantalising seconds in the hectic environment.

A similar innuendo occurs in the Baileys advertisement. Images of fun, romantic activities (picnics, bike-riding, hugging in the rain) culminate in the soft, hazy scene of the two lovers on their lounge by an open fire. Once again, the Baileys is central to this intimacy, indicated by a flutter of the eyelids into a glass of creamy Baileys as he gazes lovingly at her. The writing used is stylish rather than bold. This could be suggestive of the acceptability of the Baileys as a drink for both sexes, as opposed to beer which is fundamentally for males. As with the 'Cointreau' advertisement, alcohol becomes part of the accepted romantic environment.

One other aspect of the liqueur advertisements that is different from beer advertisements is that of location. Whereas beer advertisements predominantly occur inside, spirit and liqueur drinking behaviour is much more versatile. Drinkers are seen outside and inside, on tropical islands, by the pool, and so on. This location differentiation creates the possibility for liqueurs as a more 'functional' type of alcohol, free from the restrictions of the pub dominated beer drinker. Inside locations often suggest constraint and containment, whereas the outside settings allow many more possibilities for freedom and escape, romance and relaxation.

13.2.2 Depictions of alcohol in fictional programmes

As with driving behaviour in programmes, there is a divergent number of presentations of alcohol and drinking in fiction. Alcohol is used in a wide variety of situations: to celebrate the success of the car rally, to relax after work, to drown depression in, to give the touch to a romantic dinner for two, to discuss business over. In all situations, however, alcohol is portrayed as a facilitator of intimacy and social discourse. One episode of "E Street", for example, showed a young man unburdening his problems after one too many beers to the friend who had driven him home. He later apologises to that friend for his openness, blaming his intoxicated state for his behaviour.

Male drinkers in programmes are seen as more varied in their choice of alcohol. Whereas men only will still consume beer, they also will drink spirits. The plumber on "A Country Practice" drinks beer regularly, but no-one else does: this drinking behaviour is portrayed as an 'after-work' activity, as relaxation and social enjoyment. Of course, the pub setting of these "A Country Practice" scenes cannot be read as a pristine dramatisation of alcoholics gathering together solely for the purposes of drinking. Other activities occur within the alcohol-related setting that are entirely unrelated to alcohol: meetings for lunch, gatherings of friends, and so on. Any images of alcohol seen in these contexts must therefore be interwoven with wider social images and behaviours. "A Country Practice" particularly illustrates this marriage of alcohol with a wider, more general, social environment. There are no images of glamorous women, seductive looking men or exotic locations bustling around the Wandin Valley R.S.L. Club. The viewer is instead presented with a natural, unobtrusive representation of alcohol as an acceptable component of human social interaction.

Alcohol itself is often presented as part of the social environment. The focus, of both the camera and the plot, hinges not on a bottle of Tooheys or a glass of whiskey, but on the person. Glasses of alcohol may be present in a scene, but what is occurring audibly is of more importance. The "Neighbours" episode where a young underage drinker is apprehended is an example. The emphasis is on her juvenile behaviour and attitude rather than what she was drinking, and also on the consequences of her behaviour on her

closest relationships. Alcohol assumes a generic identity that is incompatible with her age and her role as a daughter and friend. Similarly, in the movie "Tin Men", discussions of business matters occur in an alcohol setting, and alcohol is consumed, but the beverage is only causally referred to. Alcohol becomes part of social interaction rather than a separate entity in its own right that needs to be isolated and highlighted.

Programme drinking thus constitutes a wide variety of situations and circumstance which includes social drinking, celebratory drinking, intimate drinking and, where reference is made to drinking and driving or illegal drinking, prosocial drinking. The images are often, but not always, positive. All types of people, male and female, rich and middle class, drink in a number of different situations and environments. Viewers would respond to these differing portrayals in their own ways, depending upon their own life experiences. Using such a small sample for analysis can invariably only touch upon the implications of differing representations of alcohol on television.

14. COMPARISONS AND CONCLUSIONS

14.1 Theoretical Implications

In compiling the literature review on traffic-related studies it becomes apparent that actual content studies are rare indeed. Even Atkin's (1989) study relies on an 'informal' analysis of some television programmes and around 150 advertisements screened since 1980. The Greenberg and Atkin (1983) systematic study reports only on television programmes screened between 1975 and 1979. However the lack of such studies has not stopped academics and researchers from speculating about the possible impacts of television's portrayals of traffic-related incidents on the audience. Many, many articles have been published in which it is argued and reasoned that television does have an impact on the audience.

While we have reviewed many such studies in our literature review section, it is our evaluation that many more content and particularly audience studies are required which can inform the heavy speculation about effects. Until, and unless, we know how traffic-related incidents are both portrayed and equally importantly perceived on television, there is little point in speculating about effects.

Moreover the history of the research thinking concerning the effects of violence on audiences is illuminating in this regard. The thinking in the 1970s, as evident in the US Surgeon General's Report (1972), was that television violence did adversely effect audiences. Much of such thinking relied heavily on Bandura's social modelling studies. Bandura claimed to demonstrate that children could learn to imitate 'novel' aggressive acts having only once seen them on television. Critics such as myself (Noble, 1975), who reasoned that Bandura's results could not be freely generalised to the real world from the laboratory, were disregarded in favour of the academic zeitgeist claiming evidence for effects. However by the time of National Institute for Mental Health Report in 1982, academics were much less certain that television violence did effect audiences.

Several reasons can be proposed for this change in overall academic opinion. Milavsky and his colleagues conducted a mammoth field study which was published in 1982. They examined the influence of television aggression on nearly 3,000 children over a three year time span. While admittedly paid for by the American Broadcasting Company in the USA, Milavsky found very few significant relationships between exposure to violence on television and the amount of violence displayed in real life over the three year period. The study was described by Cook, Zendzievski and Thomas (1983) as state of the art both in data collection and in data analysis. Certainly for very many the Milavsky study was the best yet conducted and changed many researchers' opinions related to the effects of televised violence.

Consequently Freedman in 1984 wrote an article for the <u>Psychological Bulletin</u> in which he reasoned that the cumulative evidence of the studies so far conducted had <u>not</u> proved that television violence was likely to make audiences aggressive. While Freidrich-Cofer and Huston rejoined in 1986 that Freedman had not 'proved' his case, they were unable to persuade many of the validity of their argument. Freedman (1986) of course rejoined and rebutted their arguments. Of interest in this debate is the fact that both sets of authors were forced to re-evaluate the original laboratory experiments conducted in the 1960s by Bandura on modelling and by Berkowitz on the priming of aggressive drive. Grant Noble in 1975 questioned the generality of the results obtained in psychological laboratories such as those by Berkowitz and Bandura.

Briefly put the problem of generality relates to the confidence one has that results obtained in strictly controlled laboratory conditions may also be expected to be found in The real issues revolve around sampling. In the first instance how representative was the film or television material shown to audiences? employed a home-made five minute film of an adult attacking a 'bozo' doll with a hammer. Berkowitz shows seven minutes from the movie Champion starring Kirk Douglas. Neither of these films is representative of the array nor length of violence screened on television. The representativeness of the subsequent measures of aggressive behaviour must also be questioned. Bandura simply observes whether children precisely imitate the supposedly 'novel' behaviours they have seen. Unfortunately many children do spontaneously attack the bozo doll with the hammer so one cannot be sure whether the child has learnt an entirely new behaviour, or whether an already existing behaviour has been reinforced. This latter point is significant because the claims of the social learning theorists with regard to television is that it teaches new and novel behaviours by modelling. Colleagues repeating these experiments (e.g., Kniveton and Stephenson, 1970) have heard new child subjects saying "Look mummy, there's the doll we have to hit" as they waited to do the experiment for the first time. Clearly they had already learnt what to do, not from the film, but from friends in school. Berkowitz simply uses the number of electric shocks students are prepared to administer to an experimental accomplice after viewing. This latter measure is hardly representative of aggressive behaviour at all.

Finally the representativeness of the samples must also be considered. Bandura worked exclusively with nursery school children from pre-schools on university campuses. We have yet to be fearful of preschoolers. Berkowitz works with his own psychology students who must know what his expectations are. Again they are not likely to represent television viewers who may be at risk. We feel that there are so many problems in generalising from these laboratory studies that the theoretical case which establishes that viewers model themselves, and subsequently imitate, television characters they like is simply as yet not proven. Freedman (1984, 86) in fact reiterates precisely these arguments in the television violence debate. However it is

worth noting that Freedman, and others, do tend to agree that exposure to pro-social behaviour on television does seem to assist audiences in increases in friendly and co-operative behaviour. There is probably a moral here. Should one wish to improve driving and drinking behaviour, audiences should be exposed to models on television who show what should be done - rather than to models who show what should not be done even if they are punished for so doing. The series of better driving television programmes 'Drive Alive' produced by NBN Newcastle is an excellent example of this approach. Considerably more encouragement should be given to such producers in campaigns which show improved driving behaviour.

Meantime theorists like Atkin, Singer and Roberts will continue to reason that television does influence audiences in both the alcohol and driving domains. The reader is cautioned that much of what they say is speculation and that for many in the academic community their case as yet still has to be convincingly proved. Their speculations are worthy of study, but should not be accepted as 'gospel' truth.

14.2 Comparisons between driving studies

This report has already commented on the few content analyses of driving behaviour that have been carried out either in Australia or in the USA. While making comparison less onerous than with alcohol studies, it is worth noting at the outset that the major American study (Greenberg and Atkin 1983) does not appear to include advertisements. In contrast the present content study found that two thirds of all driving portrayals in the programmes monitored were to be found in advertisements.

The Greenberg and Atkin study found an average of 4.5 driving incidents per hour in fictional programmes, while the Atkin (1989) update of this study found between 4 and 5 incidents per hour in an 1988 sample of 24 programmes, particularly action crime shows. In the present study the average for fictional programmes was 1.3 incidents per hour. Even including advertisements the present study found a maximum of 4.3 incidents per hour in the most popular shows among 16 to 24 years old males, still below the US figure for fictional programmes only, while the highest figure for females was 3.7 per hour for 13-17 year olds. Australians in the older age group tend not to watch such action adventure programmes, preferring news, documentaries and comedy.

The quality of the driving portrayals also differs in American and Australian programmes. In the present study the majority of driving incidents (of a total of 189) were found in Australian programmes, only 13% (26 incidents) were in American programmes and these were all fictional, while 13 incidents appeared in Australian fictional programmes. Greenberg and Atkin (1983) and Atkin (1989) report that three quarters of the driving portrayals they observed were routine, in the present study 85% of incidents were coded as legal. While Greenberg and Atkin report 20% of irregular

driving scenes involved speeding the present study found only 4% could be so coded. In the present study the incidents of irregular and dangerous driving occurred mainly in screened American programmes. Seat belts were clearly visible in over half (54%) of Australian driving depictions in comparison to only 12% in American programmes. Seat belts were not used in over half (54%) of American fictional programmes compared to a single case (8%) in Australian fictional material. Similarly speeding was twice as evident in American fictional programmes (4 incidents or 15% of cases) as in Australian fictional programmes (1 incident or 8% of cases).

It is somewhat difficult to relate Bell's (1987b) findings to those of the present study. Bell did not include advertisements; he was concerned with traffic related incidents including driving of cars, cycling, motorcycling and pedestrian behaviour. This latter aspect was not included in the present study. Bell found the most frequent portrayals of driving behaviour in cartoons, at 7.2 incidents per hour. The present study did not include cartoons as they were not among the most popular programmes for the specified groups. Bell reports rates of incidents per hour as follows, for news, 3.2; for adventure programmes, around 2.5; for soap opera, 0.5; and for crime programmes, 1.6. Overall, our results (1.3 driving incidents per fictional hour) do accord with those of Bell in terms of sheer driving frequencies. However Bell's study is not easy to summarise as he simply categorises driving and other road behaviour as simply safe or dangerous without providing detail of the types of traffic infringements portrayed. It is therefore difficult to relate Bell's findings in detail to our study. For example, in cartoon programmes 86 traffic-related incidents were classified as dangerous (or 6.9 per hour), 4 were classified as safe (or 0.3 per hour), and 16 accidents were screened (or 1.3 per hour). It is obvious that the cartoon makers think they have both a licence and a medium in which they can break traffic rules for comic effect. However in our study no cartoons rated highly enough to warrant inclusion in the content analysis studies.

In the present content study driving-related incidents were screened 39 times, or around once an hour in fictional television programmes. In non-fictional television programmes 25 driving incidents were screened at a rate of 1.4 per hour. However carrelated advertisements alone accounted for nearly half (47%) of all depictions of driving seen in the most popular television shows. A further fifth (20%) of driving incidents were screened in non car-related advertisements. In total therefore two-thirds of all driving portrayals actually appeared in advertisements rather than television programmes. Bell did not include television advertisements in his overall analysis and his figures related to the frequency of driving portrayals cannot easily be compared with results from the present study. However it seems fair to conclude that the rate at which driving incidents are screened are similar in Bell's and our present study - with the exception of cartoons (88 incidents at 7.2 per hour) and adventure programmes screened mainly for children between 4.00 and 6.00 p.m. (97 incidents at 2.7 per hour).

Moreover since it is in these programme types, according to Bell, that the most dangerous driving is seen, it should not surprise that we conclude that driving on Australian television is more responsibly portrayed than Bell reports. However there should still be some residual cause for concern about the possible socialising effects of television in regard to traffic-related incidents for the child audience.

Bell does however tabulate his driving results in terms of whether heroes or villains are principally involved. Villains are portrayed in driving incidents at about one-third of the rate for heroes. He notes that heroes are particularly salient in motorcycling and pedestrian incidents classified as dangerous. Had our results confirmed this trend there would be cause for concern as children are much more likely to identify with, and possibly imitate, heroes rather than villains. However lead characters performed most of the driving in fictional television programmes (54%) in our study. Moreover the same number of drivers were described as 'good' characters as either mixed or bad. In fact only two drivers in the present study were classified as bad characters and we have not therefore made comparisons between good and bad characters in terms of driving.

Bell similarly reports on the type of people depicted in traffic incidents on Australian television. He reports that adult males and boys were most often seen in traffic-related incidents. In fact males appear in no less than 97% of all driving incidents screened between 4.00 and 6.00 p.m., and in 90% of all driving incidents screened between 6.00 and 8.00 p.m. We find that males (56%) are seen driving more often than females (31%) but to nothing like the degree reported by Bell. It is clear therefore that in popular television programmes for those aged 13 years or more more females are seen driving than between 4.00 and 8.00 p.m. as reported by Bell.

Not surprisingly therefore Bell discovers that adult males are involved in virtually all of the 24 accidents shown. Equally it is not surprising that men outnumber women by two-to-one in the 'very few explicitly safe incidents'. However in the present content study we find no overall differences between male and female drivers on television in terms of dangerous driving. Twelve endangering driving incidents (our of a total of 111) were enacted by males (11%) and three (out of a total of 32) or 9.5% were enacted by females. Similarly in terms of speeding (males 2/111, females 3/32), multiple offences (males 6/111, females 0/32) there are no overall differences between male (9.9%) and female (9.4%) driving in popular television. Such results, however, make it clear that female viewers are just as exposed to dangerous depictions of driving on television as are males.

Bell reports on the number of traffic-related incidents screened in television programmes made in Australia, the USA, and the UK. 124 incidents in 94.5 hours (1.3

per hour) were screened between 4.00 and 6.00 p.m. from Australian productions. 60 incidents from American productions were screened (4.00-6.00 p.m.) in 70.5 hours (0.9 per hour). 29 incidents from UK productions were screened (4.00-6.00 p.m.) in 12.5 hours (2.3 per hour). Bell merely notes that date for the 6.00-8.00 p.m. period were consistent with these findings. However he notes that the preponderance of news and locally-produced 'soaps' makes further comparisons uninformative. Results from the present study indicate that 164 or 87% of driving incidents in the most popular television programmes were contained in Australian productions. The remaining 13% (or 25 incidents) were screened in American productions. Bell finds no real differences in dangerous driving between Australian and American productions. He reasons that programme type or genre is a better predictor of dangerous incidents than is country of origin. However we find American productions portrayed twice the rate of dangerous driving (6/25 or 24% of driving incidents) than shown in Australian productions (21/164 or 13%). Most pursuit and escape driving was screened in popular programmes imported from the USA.

As far as 'settings' are concerned Bell reports that 24% of driving was located in urban settings (100/425), 36% in suburban settings (153/425), and 28% in rural settings (118/425). Our results are roughly comparable with 22% of driving seen in rural areas but on a sealed road and 5% on unsealed roads. Our 27% corresponds very closely to Bell's 28%. We report 48% of all driving in urban areas which is a little less than Bell's 60% for urban and suburban combined. However we find that 15% of driving took place in a combination of areas, 5% on testing tracks and 5% in locations which could not be classified.

Finally in this section it should be noted that Bell does count the number of advertisements screened in his sample period. However since he does not report these advertisements in his overall tables, and since no rates per hour are provided, there seems little point in comparing his results with results from the present content study.

14.3 Comparisons between Alcohol studies

It seems that analysing the most favourite 22-24 hours of programmes for each group provides significant differences between various grouping in terms of exposure to alcohol. Each figure however is representative of the programme types viewed by each group. As Hansen (1986) found, alcohol depictions were most prevalent in fictional programmes and occurred 4.8 times per hour in his study of evening television. In order to compare Hansen's statistic, the number of alcohol (and driving) depictions contained separately in the fictional and non-fictional programmes within the top 22-24 hours of programmes for each of the six groups were divided by the total duration of each programme type. Instead of dividing the number of depictions of alcohol and driving

within each programme type by the *total* number of hours viewed per week - as summarised in tables 3.1-3.4 - table 15.1 below represents number of depictions in relation to number of hours for fiction and non-fiction *separately*.

Table 14.1: Rate of alcohol and driving per hour in fiction and non-fiction within the top 22-24 hours of programmes for each group.

	Alcohol/hour in		
Group	<u>fiction</u>	n/fiction	
male 13-17	2.4	2.9	
male 16-24	1.4	2.2	
male 25+	1.6	1.3	
female 13-17	2.3	0	
female 16-24	1.7	0	
female 25+	1.6	1.7	

Only 3.5 hours of non-fiction feature within the most popular 22-24 hours for a 13-17 year-old male but these few hours contain 10 depictions of alcohol. However none of the current statistics approach Hansen's figures of 4.8 incidents of alcohol per hour in fiction. The young (below 25's) males seem to have higher rates for non-fiction where Hansen found an average of 1.9 visual references per hour. Within the total 54.5 hours sampled 60 incidents of alcohol appear in approximately 30 hours of fiction - or 2 per hour - and 30 incidents within 20 hours of non-fiction - or 1.5 per hour (the remaining hours are accounted by programmes not attributable to either category such as game shows and talent quests). Whilst the individual group figure vary rather remarkably in terms of alcohol and are difficult to compare with previous studies, the average figures indicate a much lower rate of alcohol than found in Hansen's study.

Breed and DeFoe (1981, 1984) examined 150 hours of situation comedies and one-hour dramas for *only significant* depictions of alcohol which went beyond incidental social sipping and found an hourly rate of 4.7. Lowery, (1980) studied afternoon soap operas and produced a figure of 3 incidents per hour but Futch et al. (1984) found "that portion of television heavily viewed by children and adolescents" (p405) contained 2.2 visual depictions and a further 5.3 verbal references to alcohol per hour. Wallack and Breed (1987) found an incredulous 10.65 drinking acts per hour in a study of American fiction. Casswell et al. (1983) studied 72 episodes of an indigenous New Zealand soap opera ("Close to Home") and identified an average of 7.6 depictions of alcohol per hour. Since most of these studies focus on only a couple of programme types, one week's worth of Australian soap operas including "E-Street, Home and Away, A Country Practice and Neighbours" are examined. Alcohol is portrayed on an average of 3.4 times per hour. This approaches Breed and DeFoe's figures but not Caswell's. However, by isolating "E-Street" which contained 11 depictions of alcohol in 2 one-hour episodes (or 5.5 per hour), Casswell's finding is 'closer to home' than initially expected. It must be noted that

the present study focuses on television content as a whole and single programme analysis (as above) is therefore extremely tentative due to the lack of a sufficient data base.

One point of agreement between most studies is that children and adolescents, by being heavy viewers of popular soap operas and dramas are being exposed to numerous and unrealistic depictions of alcohol. Gerbner et al. (1982), although unfortunate in experimentation, has emphasised the salience of the mainstreaming hypothesis in explaining the influence of 'television facts' upon the perception of real life. example, Wallack and Breed (1987) found that alcohol was the most often consumed beverage on television as opposed to the least consumed in real-life. Although the present study did not seek to obtain such measurements it did investigate the stereotypes associated with alcohol on television. For example, male-only drinking was evident in 32% of fictional programmes whilst female-only drinking was evident in only 5%. However over half (60%) of all drinking scenes portrayed a combination of sexes drinking. Although Hansen (1986) undertook a differing examining technique he also found that males were depicted as drinking in more instances (71%) than females (29%). Breed and DeFoe (1984) also found similar figures with males drinking in 76% of instances as opposed to 24% of drinking accounted for by females. Drinking is mainly depicted a male pastime or activity and whilst Australian productions depict both sexes drinking together, females are rarely seen drinking solely in the company of their own gender.

Australian dramas and soap operas depict blue-collar workers drinking more frequently than other classes whereas Hansen finds that upper middle classes are depicted in alcohol-related scenes more often than the middle or working classes. It is not surprising therefore that both Hansen and DeFoe found that wine was consumed more often than other alcoholic beverages whereas the present study found beer to be the most frequently consumed alcoholic beverage in fictional programmes. One fairly unique aspect to this study was the study of non-alcohol drinkers in alcoholic contexts. Two main characters in "A Country Practice" -a policeman and a doctor- are always seen drinking soft drinks in the frequent setting of the local club. This must be considered as a prosocial depiction since the characters who wield power and responsibility are in fact not seen drinking alcohol despite the 9 depictions of alcohol in two one-hour episodes.

Identification with these lead characters, especially amongst the young population, would be fairly minimal due to their age and position. Adolescents are much more likely to identify with the younger characters in "Home and Away" which one must assume are targeted toward a young audience. Two and a half hours of this programme contained 7 depictions of alcohol with a least one in the context of two main characters (and friends) reconciling their differences. In fact these two characters were portrayed consuming alcohol (always "Fosters" beer) in three of the seven depictions. According to the

recently dethroned AGB-McNair ratings, "Home and Away" is the most popular programme amongst males aged 13-17, capturing 36,000 13-17 year-old male viewers which is one -quarter (24%) of the potential population. Although it is not the most favourite show for females of the same age, it nevertheless draws 43,000 female 13-17 year-olds (31% of potential population). It would be unrealistic for a programme to avoid alcohol completely but depicting alcohol as facilitating resolution of a interpersonal crisis within a programme aimed at adolescents would surely be described as irresponsible.

It is not surprising that Hansen was intrigued by the rules regulating alcohol in advertisements without similar codes present for fictional programmes. For example, the duration of "21 Jump St." produced 5 alcohol-related advertisements where all actors involved must, by law, obviously be adults. The programme itself showed under-aged drinking which although not depicted in a positive manner was nevertheless shown in the context of a fictional and very popular (amongst 13-17 year-olds) programme whereas the same event is forbidden for advertising. Hansen also argued and demonstrated that the negative effects of alcohol are overlooked in favour of depiction in the context of celebration and socialising. Indeed, 72% of all alcohol-related scenes within the 30 hours of fiction appeared in either social or celebratory contexts.

Hansen may have point in his argument but one salient factor arising from the comparison of different studies is the variety of techniques associated with measuring the depiction of alcohol on television. The present study utilises a variety of analyses but focuses mainly on a holistic view of alcohol on television which moves beyond programming and incorporates a study on alcohol-related advertising. Fictional programmes may not be subject to the same rules regulating advertising but advertisements incorporate more definite stereotypes than other programme types. The stereotypes are created in respect to association of alcohol with particular lifestyles. As was quoted earlier in the study Bell (1987b) stated, "advertising helps to form a general symbolic context within which alcohol consumption takes on certain values...(p.21). A particular style of consumption rather than consumption alone is prevalent in alcohol advertising.

Beer, for example, is clearly depicted in a manly and social manner which varies according to the age of the targeted audience. The "Tooheys Draught" advertisements studied within the week of analysis utilised young male sporting celebrities, expensive clothes and young attractive women in order to target the product at young males. "Fosters", obviously aiming their product at middle-aged males utilised discernibly older sporting celebrities and more traditional values such as 'mateship'. Needless to say women did not appear in this unabashed traditional treatment of the flagging but still remembered Australian pub ethic. Although selling the same product, the association with

different 'ideal' lifestyles is all important in targeting particular sections of the audience.

Generally, alcohol advertisements did not depict any female-only drinking but 37% depicted male-only drinking. Women were however targeted by the depiction of some spirits (eg. "Baileys") as facilitating intimacy with 86% of alcohol advertisements described as intimate being attributed to spirit commercials.

Alcohol advertisements are only allowed screening from 12:00 to 3:00 pm on schooldays (unless accompanying a sporting event on weekends) and between 8:30 p.m and 5:00 a.m. Adolescents would therefore be exposed to alcohol advertisements within this sample if movies screened at 8:30 p.m were amongst the most popular shows constituting the 22-24 hors of weekly viewing. Results indicate that their exposure to alcohol advertising is very minimal in comparison to fictional programmes but outweighs that of the over-25's. It is however, by the standards specified, a responsible depiction of alcohol which is never clearly associated with driving although this latter regulation is subject to much interpretation as was discussed within a previous section of this report. Hansen may therefore have some credence in emphasising the importance of studying the codeless context within which alcohol appears but creation of stereotypes and ideal lifestyles within advertising certainly does warrant more examination than previous content studies have displayed.

Portrayal of alcohol in non-fictional programmes would invariably be life-like since the reports stem from factual situations. The camera lens is however quite narrow and must be selective. East Germans are readily shown drinking in celebration of their new found freedom but alcoholism in the Soviet Union is a tentative topic for Australian news programmes. Once again alcohol is selectively portrayed in a positive light. Alcohol however does seems to fuel press conferences which explains the prevalence of wine (63%) in news broadcasts. It is rather difficult to simply isolate particular programme types in relation to studying the effects associated with depiction of alcohol on television. Surely a more accurate understanding would involve the possible interrelationships between different types of programmes within the same medium.

14.3.1 What Does the Audience see ?

A considerable body of work on alcohol depictions on television have been conducted in Europe. Such scholars tend to adopt a slightly different approach to the Americans. For example MacDonald (1983) interviewed 165 long term soap opera viewers, rather than merely content analysing TV programmes. Such an approach is badly needed in these studies. While we agree with Garlington that to understand drinking behaviour "information is needed as to the actual frequency or rate of drinking-related events portrayed on television today" (p220), more than this is required. Psychologists have long recognised that perception of the same images is selective. Audiences do not

necessarily perceive content in the same way and studies of audience perceptions are needed just as much as content studies. For some reason unknown to us Road and Traffic Authorities are keen to commission content studies, but not those of audience perceptions. We have previously recommended such studies but to no avail. MacDonald reports that regular soap opera viewers say they see more alcohol than other drinks and drugs. However the audience reported that alcohol was more criticised than praised by characters in soap operas. It would seem that such viewers have grown to expect that alcoholism has become one of the themes frequently portrayed in this genre.

Other European studies have orientated away from the so called 'sips and mentions' approach. Room (1988) has commented that in America there is now a perceived need to progress beyond what he terms the 'sips and mentions' approach whereby all visual and verbal references to alcohol are extensively analysed as in the above studies. He perceives an acute need for more studies of the MacDonald type to investigate audience perceptions of content, the need to compare alcohol consumption frequencies between the real and televised world (as has begun in the mainstreaming studies) and to explore the meaning that alcohol has in societies like ours.

The brief received for this project was fundamentally of the 'sips and mentions' type. However we did explore the relative frequencies with which different age groups in the audience were exposed to both alcohol and driving displays in the sampled week. As far as driving was concerned obtained results make it clear that males see more driving on television than do females and that 13 to 17 year-olds see less driving than their older counterparts. Yet audience perception studies are also required to see whether these 'drives and mentions' are actually perceived in a differential way by these audience groups. Our 'sips and mentions' analysis of alcohol displays, as previously noted, show that alcohol is less frequently seen in popular television screened in Australia than in the USA. However our results make it clear that 13 to 17 year-olds do see more alcohol depicted in their favourite TV programmes than do their elder counterparts. On average the younger audience see alcohol on the screen once every 15 minutes compared to the older groups once every 20 minutes. The real problems emerge in terms of understanding what such differential frequencies might mean in terms of both perceptions by such audiences and the likely influences on subsequent behaviours.

14.4 Guide for TV Programme makers

The Roads and Traffic Authority of New South Wales (RTA) recently released a Guide for Programme makers. Moves towards this guide were made over a number of years. In 1986 the the Traffic Authority of New South Wales commissioned a literature survey (Noble and Noble 1987) to look at road safety and the television programmes children watch. This surveyed theoretical and other approaches to the understanding of

how television might be influencing children, particularly with regard to portrayals concerning road and traffic behaviour. While overseas studies could be cited with regard to programme content, no similar study had been carried out in Australia. This report recommended among other things that a content analysis be carried out on Australian television programming.

This was subsequently carried out (Bell 1987b). Bell's study involved the content analysis of traffic related incidents on Australian television in July-August 1987, with particular reference to programmes children might view. A total of 380 hours of programmes screened between 4pm and 8pm on weekdays was analysed.

Following this, in early 1989, a one day workshop was conducted in Sydney, bringing together road safety experts, academics, metropolitan and regional television representatives, members of the Australian Broadcasting Tribunal and people from a number of production houses. The objectives of the workshop were fourfold

to reduce negative road safety messages in the programmes children watch to promote greater awareness of road safety issues among relevant decision makers in the television industry

to foster closer liaison with the tv industry so there is a consultation mechanism that can be utilised

to develop a road safety guide for television personnel

Viewpoints from all the participants were canvassed in more formal presentations, subsequent discussions and small workshop groups. It is reported (Ravinder 1989) that the workshop was well received by television personnel. Important recommendations were that the title guidelines not be used in the final document and that it not be didactic or instructional. It also should be presented in such a way that the creative skills of writers, directors and producers were not interfered with. However, it should present information in a positive and informative way, with research based information presented to help the programme makers in their task.

The media handbook was subsequently produced in early 1990. Considering the voluminous material on which it is based it is a short document, though this should not be taken as a criticism but an observation. There is little point in producing lengthy documents that will not be read and considered. Rather the handbook seems to have condensed the overall conclusions of both of the previously mentioned reports and to have presented the information in a form that is accessible and also appears to be so. Thus it points out "it takes no thought at all to film a road scene the wrong way. It only takes a little thought to get it right" (p3) and more pointedly "Unless it's essential to your story that a character drinks and drives, don't associate alcohol in any way with drivers without showing the negative consequences" (p 11).

Though not having the force of an ABT directive it is to be hoped that this initiative, which has taken place over a number of years, may have contributed to an awareness among television personnel of what it is possible for them to do in making the programmes children watch more responsible with regard to the messages they may contain relating to road safety issues.

14.5 "Drive Alive" - Road Safety by NBN Newcastle

The motor vehicle is seen a friendly and safe aspect of Australian life. It not only serves as instrumental vehicle which transports the family but is often regarded as a member of the family itself. This issue was cleverly satirised in the sitcom "Kingswood Country" where the family car was more important than family members. The Australian family car is not simply an instrumental machine - it does not travel *for* people but *with* people. "Drive Alive in '85" (a documentary/series on driving and road safety produced by NBN Newcastle) manages to dispel this myth by pointing out that motor vehicle accidents have been responsible for more fatalities than Australia's participation in both world wars.

Like most technologies the motor vehicle is a 'double-edged' sword. It serves the human desire for mobility but this rapid transportation is directly responsible for numerous injuries and deaths. Where the negative aspects of other technologies, guns for instance, are readily emphasised, the motor vehicle receives comparatively little attention. Legislation controlling the use of firearms (which are responsible for a handful of deaths every year) is often initiated by government bodies but road safety is relatively ignored. As Drive Alive indicated, simple obedience to traffic regulations is not a sufficient measure to avoid accidents. Most accidents occur within a small radius of the home and fatal injuries may result from collision at speeds well within legal range.

There are however certain regulations which prove to be very important in reducing injury and death. The importance of seat-belts is repeatedly emphasised in every road safety message. Australian television is careful in depicting the vast majority of drivers safely buckled in their vehicles. Imported American programmes often show unrestrained drivers which may be well within the liberal American driving code but is unacceptable in Australia considering the current road toll. Similarly, the depiction of dangerous driving and speeding which is common in imported shows is relatively rare in Australian productions. The demonstrations of the possible effects of accidents on unrestrained dummies were surprisingly and shockingly real - especially where 'child dummies' were involved. The programme was not however solely involved in graphic accident reproductions. It provided very useful and salient driving instructions for avoiding accidents even were they seemed inevitable. The motor vehicle ceased to become a 'living',unrestrained object and was represented as an instrument totally controlled and

represented by the driver.

Television productions such as "Drive Alive" manage to relay the importance of road safety beyond simple adherence to road rules places the locus of responsibility for accidents not on roads and traffic conditions but on each and every driver. Changing the state of roads or traffic conditions is a matter of time and money but altering the behaviour of drivers to deal with every road condition is a more complex issue involving education and dispelling technological myths. "Drive Alive" provides a vital but unfortunately rare instance of road safety education seeking rather than simply providing for an audience.

15. RECOMMENDATIONS

Since most unsafe or irresponsible driving was screened in imported American TV programmes, some care needs to be exercised in this regard.

Licensees could be requested to pre-screen such programmes for responsible driving depictions. They could include safety warning in programmes which go to air which contravene safe Australian driving practices - such as the mandatory need to wear seat belts when driving cars and wearing helmets when riding motor cycles.

Our results indicate that TV advertisements for cars showed just under half of all driving displays screened in the sampled week. These advertisements portrayed driving very responsibly with seat belts, for example, inevitably buckled up. The advertising industry could be congratulated in this regard. Usually they are only criticised for not behaving responsibility. A system whereby they are congratulated for good performance could enhance relationships between the industry and those charged with improving road safety.

However in non-transport advertisements driving behaviours were not so responsibly displayed. Moreover there were a surprising number of driving portrayals in such advertisements - one fifth of all driving displays were seen in such advertisements. The Media Council of Australia should be informed of these results and asked to apply their driving codes to such advertisements.

In most social marketing campaigns in Australia negative consequences are stressed in terms of not obeying the law. It is recommended that Road Safety organisations consider some pro-social and positive campaigns. The series of TV programmes produced by NBN Newcastle 'Drive Alive' reveal just how much about driving is not taught in order to pass the driving test. This series of programmes is very informative about safe driving practices and initiatives like this should be considerably encouraged. These programmes have been screened with benefit in local schools. Road Safety organisations could promote such material even further and encourage other licensees to produce positive messages related to driving. These could neatly supplement the more common fear arousal campaigns.

This project requires the content analysis the most popular television programmes screened in the sampled week. The literature reviews make it clear that this specification meant many of the programmes which do display both alcohol and driving were not sampled. Cartoons generally continue to show poor driving and afternoon soapoperas are often very concerned with alcohol. While cartoons are not of particular concern to this study, some care should probably be exercised in the selection of cartoons for the youngest and possibly most vulnerable section of the audience.

The literature review also makes it clear that there is some current dissatisfaction with the 'sips and mentions' approach which has been adopted in the alcohol content studies. Merely knowing how often such events are seen is not enough. Studies of audience perceptions of such content are urgently needed. To date these are very few and far between and yet until we know how the audience sees such material we cannot be confident about effects.

(Pp.65-66; p.80) Research is needed to examine the validity of the Advertising Standards Council's assumption that humorous exaggeration in an advertisement reduces, or eliminates, the impact on viewers of questionable driving behaviour contained within that advertisement. In similar need of research attention is the assumption of the Council and the Federation of Australian Commercial Television Stations, that potentially dangerous driving sequences may occur in advertisements provided they are conducted by professional drivers and the relevant scenes are subscripted to this effect. Existing psychological research suggests viewers may forget the qualifying context (e.g. "just humour", or, "specially trained drivers") in which the driving appeared, yet recall, and perhaps imitate the actions as if the qualifying context had not been present.

(Pp.66,67) Following a suggestion by Atkin (1989), there is a need to examine if passive views of characters wearing seat-belts has less impact on people's awareness of seat-belt use than if the characters are shown actively "buckling up".

(Pp.68-71) Effective campaigns promoting seat-belt use and the dangers of drink-driving have combined advertising and community extension. In particular, "bursts" of advertising which emphasise periods of heightened legal enforcement appear most effective. This pattern should be continued.

(Pp.76-80) Test cases are necessary to determine the impact of revised wording In Clause 11 of the Alcoholic Beverages Advertising Code (Media Council of Australia). This clause now requires "no direct association" between the consumption of alcoholic beverages and the operation of a motor vehicle. It is possible that, contrary to the belief of some commentators, this could imply the disallowing of some advertisements which complied with the previous, more specific equivalent clause which simply prohibited the depiction of "people consuming alcoholic beverages immediately before or whilst driving" a motor vehicle.

(Pp.76,78) The exemption of "low alcohol" beverages from the requirements of the new Clause 11 of the Alcoholic Beverages Advertising Code should be challenged. The evidence suggests this could permit advertisements which were misleading to young drinking drivers in particular.

(Pp.79-84) Research on the effects of alcohol advertisements on viewers should

move its attention away from the simple issue of whether advertising influences the amount of alcohol consumed, to the question of whether advertisements influence the way in which the alcohol is consumed and where and when it is consumed. In particular, it is possible that the "life as a cabaret", lifestyle advertisements which form the bulk of beer advertisements have the potential to reduce the perceived need for self control, especially when associating alcohol and driving. The persuasive impact of these advertisements on behavioural imitation warrants attention.

(P.85) The impact of alcohol advertisements which feature product endorsement by popular motor vehicle drivers, and which include scenes of the endorser's driving skills, needs to be researched. Test cases have established that the Advertising Standards Council does not consider such advertisements to be in breach of the (former) Alcoholic Beverages Advertising Code, yet disquiet among some observers, from the resulting association of high-speed driving sequences and alcohol does suggest more empirical data are needed.

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