

CHAPTER 14

Social Science Research and Alcohol Policy Making

ROBIN ROOM

The link between social science research and alcohol policy making reaches back at least 80 years. In the last years of the 19th century, a group of Boston-based academicians and business leaders known as the Committee of Fifty to Investigate the Liquor Problem commissioned a number of studies, extending over several years, of the various aspects of alcohol problems (Billings, 1903; Calkins, 1901; Koren, 1899; Wines & Koren, 1897). A substantial proportion of the studies would now be described as social science, including a survey of drinking patterns among "brain-workers" (Billings, 1903), and a study of alcohol's role in crime that is in some ways still unsurpassed (Koren, 1899). Perhaps the most notable social science effort was the study of *Substitutes for the Saloon* (Calkins, 1901), which involved sending young sociologists and others out to map and report on the place of the saloon and its potential alternatives in 17 big cities of the United States.

At the repeal of Prohibition, as Americans and their legislators suddenly had to face up to designing alcohol control systems, academic social scientists were drawn to alcohol policy issues (Levine & Smith, 1977). Studies were made of the effects of Prohibition (e.g., Bossard and Sellin, 1932; Feldman, 1927; Warburton, 1932), of control systems in other countries (e.g., Thompson, 1935; Wuorinen, 1931), and eventually of the operations of American control systems (e.g., Culver & Thomas, 1940; Harrison & Laine, 1936).

In the 1940s and 1950s, as the alcoholism movement organized itself to influence public policy on the treatment of alcoholism, social scientists were involved in a number of capacities. Selden Bacon played a major role in the organization of what became the national voluntary organization on alcoholism, chaired the first state alcoholism commission, and wrote what were in effect community organizing manuals for the movement (Bacon, 1947, 1949). As state alcoholism commissions became widespread in the 1950s, social scientists played important advisory and sometimes programmatic roles. A social scientist, David Pittman, served for a

time as president of the North American Association of Alcoholism Programs. Meanwhile, as urban renewal projects sought to remake the central city and destroy traditional skid rows, social science knowledge about the culture of "urban nomads" was often drawn on as part of the planning (e.g., Bogue, 1963; Dunham, 1954; Rubington, 1958). Social scientists such as Pittman were heavily involved in the eventual adoption in the mid-1960s of the detoxification center as the policy response to the problem of skid row drunkenness (see Room, 1976b).

Social science research also made conceptual contributions to the developing alcohol policies of the 1950s and 1960s. The discovery and description of a population of alcoholics characterized by social stability (Straus & Bacon, 1951; see Straus, 1976) provided evidence for the alcoholism movement's drive to change the social handling of the alcoholic by enhancing the social respectability of alcoholism (Kurtz & Regier, 1975). Sociocultural studies of drinking patterns and problems in different groups (e.g., Bales, 1946; Skolnick, 1958; Snyder, 1958) were seen as pointing to a conclusion that American drinking problems were due to special ambivalence (Ullman, 1958) and lack of consensus (Mizruchi & Perrucci, 1962) about drinking norms—a conclusion that underlay the "responsible drinking" campaigns and policies of succeeding years (Chafetz, 1967, 1971; Plaut, 1967).

In the enormously broadened alcohol arena of the 1960s and 1970s, social scientists have been involved in many aspects of alcohol policy. A social scientist, Robert Straus, chaired the influential Cooperative Commission on the Study of Alcoholism in its formative years, and the commission's reports were all written by social scientists (Cahn, 1970; Plaut, 1967; Wilkinson, 1970). Straus also chaired the National Advisory Committee on Alcoholism in the years of increasing federal involvement in alcohol problems, culminating in the establishment of the National Institute on Alcohol Abuse and Alcoholism (NIAAA) (see National Advisory Committee on Alcoholism, 1968). Harrison Trice and colleagues played an important role in developing and providing a rationale for the strategy of identification and "constructive coercion" or "confrontation" of the alcoholic in the workplace (Roman & Trice, 1967; Trice & Roman, 1972) as industrial alcoholism programs burgeoned in the early 1970s. In recent years, as evaluation studies became a standard instrument of policy, social scientists moved into new and often embattled roles as the bearers of discomforting empirical tidings (e.g., Armor, Polich, & Stambul, 1976; Blane, 1976; Blane & Hewitt, 1977; Blumenthal & Ross, 1975; Gusfield, 1972). In the competition among social and health problems for public funds, social science studies were frequently drawn upon as evidence of an ever-increasing roster and magnitude of alcohol problems (e.g., NIAAA, 1974, 1979; Berry & Boland, 1977).

Social scientists have also been instrumental in recent conceptual developments affecting alcohol policy making. One development is the increasing reconceptualization of alcohol problems in terms of a variety of discrete but overlapping disabilities and problems rather than as a single entity of "alcoholism." This reconceptualization is based in part on general population survey data showing only a modest overlap of drinking problems in the population at large, in contrast to clinical populations (see Clark, 1966; Edwards, Gross, Keller, Moser, & Room, 1977; Straus, 1975, 1976). The conceptual disaggregation of alcohol problems associated with these findings has pointed to new directions for prevention policy making (Bruun, 1970; Gusfield, 1976; Room, 1972). Another development is the reemphasis on the role of alcohol consumption per se—both at the individual level and in the aggregate—in the occurrence of alcohol problems, which has resulted in a renewed focus on the availability dimension of alcohol policies. While Canadian and Scandinavian social scientists have taken the lead in this development (Bruun et al., 1975; deLint & Schmidt, 1968b; Schmidt & Popham, 1980), U.S. researchers have also become involved (Beauchamp, 1976; *Medicine in the Public Interest*, 1976).

To a large extent, the connections we have sketched above reflect the more official side of social science's relation to alcohol policy making; in some cases the social scientist was acting in an official capacity, in other cases as an adviser to or agent of the authorities. Where new directions of policies were implied or being proposed, there was usually some consensus on the definition of the situation between the social scientist and the policy establishment. Even where the "climate of ideas" at the time may have been hostile to the work (Schmidt & Popham, 1980), there were usually policy makers to sponsor or protect the research work.

However, there are also critical traditions in alcohol social science expressing varying degrees of dissent from a policy consensus. Sometimes the criticism is expressed only in cynical murmurs in convention corridors. Often an unstated divergence can be discerned between social science research and the policy reports based on the research.

Sometimes a divergence can be seen in the writings of an individual social scientist between writings in the policy role and writings outside it. Selden Bacon, writing as an alcoholism movement leader in 1949, criticized dry organizations as "likely to minimize the efforts of a rehabilitation program [and] reluctant to see that prevention emerges from rehabilitation and allied education" (1949, p. 15). Fourteen years later, less centrally involved in the movement, Bacon (1963) was criticizing state commissions on alcoholism for emphasizing only the treatment of alcoholics and treatment-related education, and calling for an equal concern with alcoholism as a public health problem.

Increasingly, critiques of policy-related research are appearing in the social science literature. Light (1976) has challenged the premises of the major economic analysis of the costs of alcoholism (Berry & Boland, 1977), and Marden, Zylman, Fillmore, and Bacon (1976) have criticized as alarmist the reporting of the major federally funded study of adolescent drinking (Rachal et al., 1975). Kurtz and Regier (1975; Regier & Kurtz, 1976) have criticized both the process and the substance of decision making on the Uniform Alcoholism and Intoxication Treatment Act. There has been a considerable controversy involving social scientists over the effects of lowering the drinking age on drunk-driving casualties (see review and references in Whitehead, 1977). The assumptions underlying the "sociocultural" model of drinking problems, emphasizing the role of ambivalence or the absence of moderate drinking norms, have been critiqued (Mäkelä, 1975; Room, 1976a), as have the data and assumptions underlying the "distributionist" model, which emphasizes empirical regularities in the distribution of consumption and relates the overall level of consumption to the rate of alcohol problems (Miller & Agnew, 1974; Parker & Harmon, 1980).

The alcohol social science literature also includes studies that are radically antagonistic to common policy assumptions. A series of skid row studies (Spradley, 1970; Wallace, 1965; Wiseman, 1970) have challenged the official picture of skid row subcultures and their desires. Similarly, Anglo-American theories about Native American drinking have been challenged in the anthropological literature (Levy & Kunitz, 1974). Here also might be mentioned social scientists' involvement in the long and bitter battle over controlled drinking as an outcome of treatment, pitting behavioral psychologists against a fundamental tenet of the alcoholism movement (see review and references in Roizen, 1977a).

Social scientists have thus played a great variety of roles with respect to policy making: policy-making roles, roles in social movements with policy aims, roles as policy advocates and as critics and dissenters, roles as evaluators of policies and programs, and roles as methodological experts. But despite the multiplicity of involvements and roles, there is room for doubt about the effects of social science research on policy. Although policy decisions and social science research findings may often coincide, it would be rash to conclude that the policy decisions were dictated by the research findings.

The experience of Scandinavia, Finland in particular, is instructive in this regard. For an American social scientist with policy interests, Finland appears as a kind of utopia. Finnish alcohol social science has a strong research tradition and continuing institutions dating back more than 25 years, funded out of state alcohol monopoly funds, with regular advisory roles to the national legislature and to the treatment system authorities.

Alcohol social science has had a more systemic viewpoint and a more cumulative research tradition in Finland than in the United States. Over the years, a number of pioneer studies with policy implications have been carried out: for instance, Kuusi's study (1957) of the effects of opening alcohol monopoly stores in rural villages, Lanu's study (1956) of the operation of the buyer surveillance system that limited eligibility to purchase alcohol, Törnudd's study (1968) of the preventive effect of fines and jail terms in cases of public drunkenness, and a cooperative study led by Mäkelä (1974) of the effects of a liquor store strike. In many cases, policy changes appear to have been brought about by the research findings. But as a researcher who has been intimately involved in this history, Kettil Bruun is skeptical that the social science findings played a decisive role:

A dissertation by Lanu (1956) is often said to have led to the extinction of the buyer surveillance system in Finland—yet the investigation started when the system had already been heavily criticized. Similarly, the decriminalization of public drunkenness was supported by Törnudd's sophisticated study (1968). Nevertheless the explanation for the acceptance of his findings may be that prisons were crowded and the police had more important duties to attend to—in fact, in its proposals to Parliament, the Cabinet [overinterpreted] the implications of the research findings. (Bruun, 1973)

In the American experience of recent decades, also, there is reason to question the apparent influence of social science research on policy. As Bruun (1973) puts it, “social research produces logical arguments rather than logical conclusions regarding policy and action.” Thus, social science research tends to be taken into policy discussions in circumstances where it fits a preexisting structure of argument.

The Influence of Social Science Research on Policy

Let us examine several of the historical instances where the strongest case could be made for a social science influence on policy.

1. Straus and Bacon's 1951 study of “Alcoholism and Social Stability” is often cited as instrumental in changing the picture of the alcoholic from the skid row bum to a more middle-class and respectable image. And, indeed, this study found that clients showing up for outpatient treatment at the Yale Plan Clinics did not resemble the classic jobless population that had been the original wartime justification of the clinics. But from the point of view of policy, the study did not create a new direction, but rather provided a new argument for an existing policy direction. The ideology of the nascent alcoholism movement had for at least the preceding five years centered on the idea that the alcoholic was a sick person who

could be helped and was worth helping, and had emphasized that the alcoholic was just like other folk except for a predisposition to alcoholism. The two popular movies made in the 1940s under movement influence—*The Lost Weekend* and *Smash Up*—portrayed middle-class alcoholism (Johnson, 1973, pp. 282–283, 387–388). Differentiation of alcoholism from skid row associations has long been an article of faith for the alcoholism movement (Johnson, 1973, pp. 370–373). The Straus and Bacon study did not create a new argument, but rather provided useful and dramatizable support for an existing line of argument.

2. Social scientists are cited as providing a crucial argument in policy decisions over the decriminalization of public drunkenness: “experts say that the vast majority of chronic alcoholics . . . would voluntarily join in an effective, comprehensive treatment program” (President’s Commission on Crime, 1967, p. 79). This argument served to bridge the gap between civil liberties lawyers’ insistence on no compulsion beyond the detoxification process and the need to see decriminalization as a public health measure and as slowing down the “revolving door” of drunkenness arrests (Room, 1976b). Policy imperatives created a need for a research position, rather than vice versa. And, according to Lemert, the research position was falsifiable at the time: “the irrelevance of a treatment model for Skid Row alcoholics could easily have been discovered from available research had codifiers, legislators and judiciary been oriented and organized to do so” (Lemert, 1976). Certainly the research position was falsified by later experience (Room, 1976b).

3. For the first five years of NIAAA’s existence, the major federal policy on preventing alcohol problems was the promotion of norms of “responsible drinking.” Behind this policy was the assumption that America had a high rate of drinking problems because of a lack of agreed-upon drinking norms:

The rate of alcoholism . . . has been shown to be low in groups whose drinking-related customs, values, and sanctions are widely known, established, and congruent with other cultural values. On the other hand, alcoholism rates are higher in those populations where ambivalence is marked. . . . Ours is a Nation that is ambivalent about its alcohol use. This confusion has deterred us from creating a National climate that encourages responsible attitudes toward drinking for those who choose to drink. (Chafetz, 1971)

This argument, the essence of which also appeared in the work of the 1960s Cooperative Commission on the Study of Alcoholism (Plaut, 1967; Wilkinson, 1970), was directly derived from a social science analysis (Ullman, 1958) drawing on a series of social science studies of ethnoreligious factors in drinking patterns and problems—a comparative analysis in

which the comparison with Anglo-Protestant U.S. patterns had no empirical study as a base. The argument has in fact been criticized in recent years on both empirical and theoretical grounds (Mäkelä, 1975; Room, 1976a; Whitehead & Harvey, 1974). But the argument can be seen as arising as the solution to a specific policy dilemma. Johnson (1973, pp. 327–349) has traced the emergence, starting as early as 1953, of a group of clergy, state administrators, and social scientists interested in alcohol problems who were uneasy with the single-minded focus of the orthodox alcoholism movement on the disease concept of alcoholism and providing treatment for the alcoholic. The group contended that “the social uses of alcohol as well as the prevention of problem drinking were both subjects that should be given greater attention” (Johnson, 1973, pp. 327–328). After several years of discussions, the group secured the grant that became the Cooperative Commission on the Study of Alcoholism.

The group, and after it the Cooperative Commission and eventually NIAAA in its formative years, thus wished to refocus attention away from an exclusive concern with the treatment of alcoholics and toward alcohol problems in the society at large. Such an emphasis was, however, the classical territory of the temperance movement, and there was a desire for several reasons to avoid temperance arguments or identification with the temperance movement. In the wake of the debacle of Prohibition, any association with temperance would be impolitic. It would also be thought unwise to alienate or directly confront the alcoholic beverage industries. Furthermore, the group and the commission staff were generally liberal and libertarian in politics and averse to preventive strategies implying control or constraint.

As I have argued elsewhere (Room, 1976a), the ambivalence argument provided an attractive solution to this dilemma: it tended to place the onus for American alcohol problems on conflict over drinking norms and thus implicitly on the temperance movement, it deemphasized amount of drinking as a potential issue, and it pointed to an optimistic program of reducing drinking problems by teaching new rules of drinking. Ostensibly, the argument derived from a small number of social science studies, which became perhaps the most frequently cited studies in alcohol social science. But most of the studies were of one culture rather than explicitly comparative; those that were comparative were to some extent misinterpreted (Mäkelä, 1975). None of the studies were of cultural change over time (Room, 1971), although the policy argument concerned how to change rates of drinking problems. The social science analysis did not produce the policy argument; rather, it served as plausible evidence to buttress policy predilections.

4. The finding that alcohol problems in general populations showed less overlap between problems and less continuity through time than in the

classical picture of alcoholism based on clinical populations has been presented by several authors, including myself (Room, 1972), as holding implications for policy. In fact, the approach of disaggregating alcohol problems and planning for their prevention and treatment differentially by problem area has entered policy discussions and has influenced recent policy-oriented definitions of alcohol problems (Edwards et al., 1977). But, rather than viewing this line of research and findings as resulting in policy changes, the research may be viewed as an incidental artefact of a shift in ideas and policy orientations in a segment of the alcohol policy world that considerably predated the research program. As noted above, as early as 1953 a group interest can be discerned in a wider view of alcohol problems in the society at large, rather than just in treatment of the alcoholic. This group allied itself in the late 1950s with the newly emerging federal interest in alcohol studies in the National Institute of Mental Health (NIMH), securing federal funding for the Cooperative Commission on the Study of Alcoholism. Part of the provisions of this grant was that its research director be someone with strong academic credentials, but "who had not previously been associated with the field of alcoholism" (Johnson, 1973, p. 338). This provision reflected feelings that alcohol research had been too ingrown and too dominated by the orthodox alcoholism movement. By indirection, Straus referred to these feelings in 1960 in characterizing a nascent "second generation of alcoholism researchers":

You want the freedom to think. You insist on tightness and rigor in methodology. You are seeking methods to involve the best scientific minds in this field... you have been free, remarkably free, from contamination of an emotional involvement with the alcohol problem... You are rejecting for the researcher the multiple roles of justifier, rejustifier, composer of progress reports, passer of tin cups. Above all, you are rejecting those who would irresponsibly popularize your research and your thinking. (Straus, 1960)

Contemporaneously with the Cooperative Commission grant, NIMH made a grant for the California Drinking Practices Study to make surveys of drinking practices and eventually of drinking problems in the general population. The approach was to be inductive and empirical; again, the principals involved in the actual study—Ira Cisin, Ray Fink, Genevieve Knupfer—were new to the alcohol field. To the extent possible, the study was thus insulated from the presumptions about alcohol problems of the alcoholism movement, and began in a period when the conceptual disaggregation of alcohol problems was already in the air (the 1967 report of the Cooperative Commission is titled *Alcohol Problems* rather than alcoholism, and includes a specific discussion of the "range of alcohol prob-

lems"). To a considerable extent, the emphases in the study's eventual reports on the diversity and separability of drinking problems (Clark, 1966; Knupfer, 1967) and on avoidance of the global term *alcoholism* (Knupfer, 1967; Cahalan, 1970) were foreordained in the conditions of the study's inception.

5. As noted above, in recent years there has been a renewed emphasis on the importance of the amount of alcohol consumption in the occurrence of alcohol problems, and consequently on the availability dimension—and particularly on the price of alcohol relative to the cost of living—as a potential means of reducing alcohol problems. The argument has been stated succinctly by an international group predominantly composed of social scientists, in a widely circulated report:

changes in the overall consumption of alcoholic beverages have a bearing on the health of the people in any society. Alcohol control measures can be used to limit consumption: thus, control of alcohol availability becomes a public health issue. (Bruun et al., 1975, pp. 12–13)

In line with this argument, NIAAA's 1977 draft "National Plan to Combat Alcohol Abuse and Alcoholism" stated that "there is strong evidence that as consumption rises, so do primary and secondary problems related to the use of alcohol. Since the trend in this country during the last decade has been towards ever increasing total consumption, a major effort is required to stabilize this increase" (*Alcoholism Report*, August 26, 1977, p. 1). Under strong pressure from alcoholism movement groups, NIAAA soon backed down from this goal (*Alcoholism Report*, September 23, 1977, p. 7; October 14, 1977, pp. 2–3; October 28, 1977, pp. 2–3; December 9, 1977, pp. 1–2).

A large part of the alcoholism movement's objections to the goal of stabilizing alcohol consumption was a desire to avoid antagonizing the alcohol beverage industries, which have long maintained links with the movement. It had been an article of faith in the alcoholism movement since its inception to avoid "political" entanglements, and particularly involvement in wet/dry struggles, which were seen as potentially detracting from the primary goal of securing humane treatment for the alcoholic. The issue of the relevance of population consumption levels to an "alcohol abuse and alcoholism" agency thus squarely poses the choice between the alcoholism treatment policy frame of the alcoholism movement and the alcohol-problems-in-society policy frame of the Cooperative Commission and its initiators—although ironically with an approach diametrically opposed to the Cooperative Commission's, an approach labeled by some commentators as "neo-Prohibitionist."

The conventional scientific history of the modern consumption control argument attributes the primary work to a group of Ontario Addiction

Research Foundation (ARF) social scientists, Jan deLint, Wolfgang Schmidt, and Robert Popham, who, beginning in 1968 (deLint & Schmidt, 1968a, 1968b) published a long and cumulative series of analyses, drawing on earlier work by the French demographic analyst Sully Ledermann, on the invariant qualities of the distribution of alcohol consumption in the population. DeLint and Schmidt's original data was drawn from a study of wine and liquor purchases in Ontario provincial stores that had been initiated in 1961 and that, judging by the descriptions of it in the ARF annual reports of the early 1960s, originally had broader aims than establishing the distribution of consumption.

In deLint and Schmidt's original report (1968b), submitted for publication at the end of 1967, analysis and discussion is limited to a presentation of the logarithmic normal nature of the empirical curve of distribution of consumption, a cautious description of Ledermann's speculations about the reasons for the shape of the curve, and a remark on the lack of bimodality in the curve, so that "a definition of alcoholism based solely on quantity of drinking must ipso facto be arbitrary." No mention is made of policy implications of the data.

In the ARF *Annual Report* for 1967, transmitted in March 1968, a discussion of the study by the policy-making director of the ARF, David Archibald, included some conservative policy-oriented speculations:

It is interesting . . . to speculate on what our chart would look like if total consumption increased. . . . Given the same shape of curve, . . . any such upward development . . . seems likely . . . to increase the number of persons who, while perhaps they would not appear alcoholic in behavior, would nevertheless be prone to liver damage and other physical diseases that are usually associated with high-volume drinking. (ARF, 1968, p. 21)

In a paper presented in September 1968, the researchers venture a modest policy comment:

It should be noted that an increase in the per drinker consumption invariably leads to an increase in the consumption of amounts dangerous to health. . . . The Cooperative Commission on the Study of Alcoholism [Plaut, 1967] has suggested that it does not matter whether its proposals . . . will lead to an increase in alcohol consumption or not.

It would appear that we are faced here with a dilemma. To reduce the more traditional alcohol problems on this continent, namely the problem of intoxication and the problem of alcoholism in the psychiatric sense (gamma alcoholism) we might want to liberalize liquor legislation. . . . At the same time . . . an increase in overall levels of alcohol consumption (will lead) to an increase in the prevalence of organic diseases attributable to excessive alcohol use. (deLint & Schmidt, 1968a)

In Archibald's review of progress in the 1968 ARF report (transmitted April 1969), caution is thrown to the winds, in a blunt statement of policy advocacy:

It has been found that rates of alcohol consumption hazardous to health are inextricably linked to the general level of alcohol consumption. This implies that the only feasible approach to the prevention of this problem is to effect a decrease in the average level of consumption within the drinking population as a whole. (ARF, 1969, p. 24)

This documentary history suggests strongly that modestly presented research analysis was seized upon by the policy-making level of ARF as an organizing tool for a coherent alcohol policy position. In any event, the researchers involved subsequently rose to the occasion, publishing a series of reports substantially less cautious in their argument than the initial reports. Instead of being presented as an empirical regularity, the form of the distribution of consumption was presented as "for all practical purposes . . . unalterable" (Popham, Schmidt, & deLint, 1971), and the problems linked closely to consumption level were assumed to extend beyond cirrhosis to "alcoholism" in general (deLint & Schmidt, 1971).

In the 1970s, the work of Ledermann and of deLint, Schmidt, and Popham was subjected to a barrage of critical examination (see reviews in Miller & Agnew, 1974; Parker & Harmon, 1980; Smith, 1976). In the wake of this, Schmidt and Popham (1980) conceded that in some of their work "we may be justly accused of some overstatement and oversimplification," acknowledging that "to a degree this was due to a deliberate strategy to secure a hearing for a point of view which ran counter to the prevailing sentiment." On the other hand, the fact of an empirical regularity in the form of distribution of alcohol consumption in different populations remains relatively unshaken (Guttorp & Song, 1977; Skog, 1977).

In view of the considerable and controversial literature that surrounds the issue of the distribution of consumption, it is ironic that the exact shape of the distribution is in fact not important in the argument for price manipulations or other controls as a prevention strategy. So long as a strong temporal relationship between the overall consumption level and cirrhosis mortality can be shown, whether the consumption is distributed lognormally or otherwise is largely immaterial to policy considerations. From this perspective, the whole argument over the Ledermann curve has been a diversion from the policy issues of the interrelations of prices and other controls, consumption levels, and cirrhosis mortality. On these issues, evidence was available well before 1968. In 1960, John Seeley, then research director of ARF, published an article showing strong relations over time between alcohol prices relative to disposable income, consump-

tion level, and cirrhosis mortality. The article was a refinement of an earlier analysis by a newspaper writer (Erratum, 1961). Seeley's article did not shrink from discussing the policy implications:

It appears that deaths from liver cirrhosis, though small in number, are increasing rapidly, and rise and fall with average alcohol consumption. It also appears that alcohol consumption rises and falls inversely with alcohol price. It is sufficiently credible to justify a social experiment to determine whether an alcohol price increase would reduce liver cirrhosis mortality, while simultaneously furnishing a sizable increase in government revenue. . . . (Seeley, 1960)

In the ARF *Annual Report* for 1960, the report of the Research Department pursues the same line, remarking indeed that "perhaps a large part of the problem [of cirrhosis deaths] could be dealt with by government tax policy" (ARF, 1961, p. 51). Archibald's "Annual Review of Operations" also discusses the study and its implications, but with considerably more caution and several caveats (ARF, 1961, pp. 10–11). In succeeding annual reports, discussion of the issue, and indeed in general all policy issues except those concerning treatment, disappeared.

Thus, it seems that Seeley's initial research report fell on stony ground in terms of its influence on policy: the researcher's enthusiasm for its policy implications was not shared by those in policy-oriented positions. Conversely, in 1967 and 1968 the implications of the research were eagerly picked up; the research reports served as a catalyst for policy initiatives actually more directly related to Seeley's earlier work. The policy climate was changing, at least in Canada, probably partly in response to the general increase in consumption levels in the 1960s.

But in the United States the climate of attitudes toward alcohol controls has shifted more slowly than in Canada or Scandinavia. Much of the technical criticism of the "ARF position" has come from south of the border, and is linked to a strong disposition among many social scientists as well as policy makers against recognizing any possibility of relationship between alcohol controls and alcohol problems. This was perhaps most clearly expressed on the record in the reaction of social scientists and the public health establishment to an independent analysis, presented at the American Public Health Association meetings of 1966, of temporal relations between consumption level and cirrhosis mortality. The paper concluded by arguing in guarded terms that "governmental fiscal and regulatory measures can be effective in reducing alcohol consumption and lowering mortality from cirrhosis of the liver" (Terris, 1967). All papers presented at the same session *except* this one were printed in the June 1967 *American Journal of Public Health*. This resulted in the curious situation of the prepared discussion of the session papers, more than

half of which focused on the Terris paper, appearing without a paper on which it was commenting (Elinson, 1967). This discussion, by a social scientist, manifested considerable unease over the paper's "provocative analysis." In addition to citing various pieces of counterevidence, the discussant joked about "having a drink or two" at lunchtime "before some impulsive local government is led by Dr. Terris' skillful presentation" to alter control laws, and suggested that, as with a possible association of cervical cancer with frequency of intercourse, there might be knowledge better left unknown: "the implications for prevention—if this were a factor—[might be] just too horrible to endure. I think most of us have a similar feeling about alcohol" (Elinson, 1967).

An extraordinary editorial footnote to this discussion, in giving the reference to Terris's presentation, further dissociated the official organs of public health from any policy implications of Terris's paper:

A summary of Terris' paper appeared in the APHA 1966 conference report issue of "Public Health Reports," March, 1967, vol. 32, No. 3. The summary in "Public Health Reports" carries the headline, "Restrict Alcohol Availability to Reduce Liver Cirrhosis," and refers to a paragraph toward the end of Terris' mimeographed paper—a paragraph which was *not* read at the meeting, although the full mimeographed paper, which included this paragraph, was distributed to the press. (footnote to Elinson, 1967)

Terris's paper, apparently including the offending paragraph, was finally printed in the *American Journal of Public Health* six issues later (Terris, 1967). Its publication may have been aided by the fact that Terris was by then president of the American Public Health Association. In more recent years, public health journals have shown a greater receptivity to papers in the tradition of Terris's (Brenner, 1975)—including a social scientist's challenge that public health's disinterest in alcohol controls has resulted from a philosophy of "accommodation with the prevailing ethical paradigm" of "market justice" (Beauchamp, 1975).

6. A recent well-publicized interplay of social science research and policy making has occurred over the issue of whether alcoholics can ever return to controlled drinking, touched off by a report written by three social scientists at the Rand Corporation (Armor, Polich, & Stambul, 1976). Abstinence as the goal of alcoholism treatment has long been a fundamental credo of the alcoholism movement, and clinical reports of return to moderate drinking (e.g., Davies, 1962) have been seen as a substantial threat to the movement's therapeutic paradigm, and have not been allowed to pass unchallenged (Roizen, 1977a, 1977b). However, the battle over the Rand Report surpassed previous skirmishes in intensity and duration.

The Rand Report was based on data from NIAAA's monitoring and evaluation system for federally funded alcoholism treatment centers, which routinely collected intake and follow-up data on all clients, and on a special follow-up study performed under NIAAA contract by the Stanford Research Institute (Ruggels, Armor, Polich, Mothershead, & Stephen et al., 1975). The monitoring and evaluation system was regarded by the NIAAA leadership as a major element in projecting an image of NIAAA as a dynamic, forward-looking agency (Chafetz, 1974).

As control of the treatment system slipped from the grasp of the voluntary-action-based alcoholism movement into the hands of government bureaucracies, the goal of abstinence was increasingly eroded. To justify public expenditures, the treatment system needed to show strong and indeed startling improvements in those treated, and abstinence was too harsh an outcome criterion to serve this purpose. Well before the Rand analysis, state and federal evaluation systems had moved away from the criterion of abstinence as their measure of success. This development was parallel to but differently motivated from a similar shift by behavioral psychologists interested in inculcating controlled drinking.

The Rand social scientists, relatively new to the alcohol field, were oriented to the world of governmental agencies and not the world of the alcoholism movement, and may not have expected the ferocity with which their findings on the issue of moderate drinking among those treated for alcoholism were greeted. However, they joined the battle with gusto and some success. In the ensuing outpouring of printed matter, it is notable that only a few social scientists who had close movement ties lined up with the movement position (e.g., David Pittman, NCA press conference materials, July 1, 1976).

But the Rand Report did not have much effect on policy, at least in its immediate aftermath. Roizen (1977b) has noted that the controversy over controlled drinking obscured a number of other important findings with policy implications in the report. Under pressure from the alcoholism movement, NIAAA did not disown the report or its findings, but simply asserted their irrelevance to policy: in a "HEW News" press release of June 23, 1976, Ernest Noble, the new director of NIAAA, stated his feelings that "abstinence must continue as the appropriate goal in the treatment of alcoholism."

Conclusion

It is clear from these six vignettes of interactions between alcohol social science research and policy making that the relationship does not fit a rationalistic paradigm where scientists autonomously discover "new knowledge," which is then carried into action in policy decisions. In some

cases, in fact, it could be argued that the policy produced the knowledge rather than vice versa. Nor is it realistic to regard social scientists as disinterested scholars following wherever the facts may lead. Sometimes, indeed, social scientists seem to have had difficulty distinguishing between the world as they found it and the world as they wanted it to be.

Often the apparent linkage between social science research and policy making reflects that both are manifestations of general social trends. Noting that "in discussions of research and policy, research findings are often regarded as causes of policy and action," Bruun (1973) cautions that, if we recognize "that science is valuebound, at least when social science research problems are formulated, then research, policy and action could all be influenced by the same overall forces in society. . . . Research could be seen as a modern instrument of debate on research policy, primarily on alternate means derived from the same basic values, rather than on alternative goals."

The evidence suggests, then, a considerable skepticism about social science's independent influence on policy making. Nevertheless, it would also be a mistake to conclude that social science research has no independent influence at all. As Bruun (1973) puts it, "the big decisions will always be taken primarily on the basis of values—the small, but still important ones might, however, be improved by social research." Gusfield (1975) notes that as knowledge accumulates and is disseminated, it does set limits to the parameters of public debate. Thus, the long-run effects of research may differ from and be more important than the short-run effects. As Max Planck sadly remarked about physical science, "a new scientific truth does not triumph by convincing its opponents and making them see the light, but rather because its opponents eventually die, and a new generation grows up that is familiar with it" (quoted in Kuhn, 1962, p. 150). Of course, this is comfort to the scientist concerned with policy only to the extent one can be sure that one is riding the wave of history.

That social science knowledge is potentially "subversive" (Gusfield, 1975) of received definitions of the situation is recognized by both social scientists and policy makers, and is a continuing source of strain between them. The social scientist tends to be defined and appreciated by those in the policy arena as a bearer of technical skills—as a survey researcher, an evaluator, a population estimator, a multivariate analyst. The social scientist prefers a different definition of his or her contribution:

The primary contribution which we have to make is conceptual. In a field which concerns social interaction and involves a complex of human behavior, the greatest need . . . is for theoretical orientation or explanatory concepts to provide a focus for research design and for hypothesis testing. . . . Ranking far down in importance, but nonetheless significant, are our methodological and

technical skills. The particular tactics employed by a sociologist are often, unfortunately, stressed as his sole contribution and I, for one, resent being regarded as sample-minded. (Pearl, 1960)

In the era of the alcoholism movement, alcohol social science research has suffered particularly from operating with assumptions at odds with the prevailing model. If alcoholism is a disease, then the exciting research advances are to be expected from biomedical and not social science research. Marty Mann commented frankly on this in the early days of the movement, in a letter to Howard Haggard, then director of the Yale Center of Alcohol Studies. Commenting on the reaction of a federal official to the physiological research at the center, she noted:

I would venture to say he was most impressed with that phase of our work Many businessmen to whom I talk of this work seem mainly interested in the same thing. Perhaps it gives more hope. And I mean physiological, not social research. (quoted in Johnson, 1973, p. 290)

The common assumptions of social science research have also conflicted with the assumptions of the alcoholism movement (see Room, 1979). Perhaps as a result, the proportion of federal research expenditures supporting social science research tended to drop as the research moved from NIMH to NIAAA jurisdiction (Room, 1979).

While alcohol social science research has a long history of interrelation with policy making, our analysis has underlined the ambiguity of the relationship. Nevertheless, there is clearly no choice but to continue the relationship, and we may expect both social scientists and policy makers to keep on trying. And we may expect them both to keep on finding it trying.

Afterword, December 1989

Apart from a few changes of tense and updated references, the text above is as it was written in April 1978. There is little in it that I would change. In my view, Kettil Bruun's conclusions are still a reliable guide to the relation between social science research and policy making, not only in the alcohol field but also more generally.

Are there any new lessons on the subject from the 1980s? There is certainly more material on some of the case studies mentioned above. In the early 1980s, discussions of alcohol control issues began to enter the public arena and to be taken up within the public health constituency (Moore & Gerstein, 1981; Room, 1984; World Health Organization, 1980). The diversionary debate about the exact shape of the distribution of alcohol

consumption simmered down, and research on the effects of alcohol controls and other alcohol policies took on new vigor. The United States may now have overtaken Canada and Scandinavia in "new temperance" thinking and debate, though innovations in actual policy have often been primarily symbolic (e.g., adding warning labels to alcoholic beverage containers). In this case, social science thinking proved to be at least the harbinger of more general cultural shifts in thought about alcohol.

The issue of controlled drinking for alcoholics has remained contentious (Roizen, 1987), with the flash points in the controversy usually involving behavioral psychological thought; in trying to subsume the alcoholism disease concept into a broader analysis, rather than directly opposing it, sociologists have played a quieter subversive role (Room, 1983). There was a second round to the Rand study, but with a more muted public controversy; this time, NIAAA staff simply reinterpreted the findings into a more publicly acceptable form (Room, 1980).

For most of the 1980s, U.S. alcohol social science research lost ground in relative terms to other alcohol research traditions, and the links between researchers and bureaucratic policy formation became attenuated. In part, this trend reflected changes that came with the advent of the Reagan administration. In its first flush, that administration had a specific aversion to anything called or smacking of "social research" (choosing not to go down fighting over a name, the Social Research Group in Berkeley became the Alcohol Research Group). But the relative decline in the influence of social science research in the alcohol field was mostly a by-product of policies not specifically directed against it. The Reagan administration's shift of treatment and prevention services money into block grants destroyed NIAAA's Prevention Division, which had been the main nexus between alcohol researchers and alcohol policy discussions. Stripping NIAAA of its treatment and prevention grant functions also resulted in an agency oriented to survival in terms of research prestige, in an organizational environment that allocated prestige primarily to microbiological research.

In the later 1980s, the balance began to shift back. Homelessness and AIDS emerged as issues which, in alcohol studies as elsewhere, directed attention back to the social dimensions of health and social problems. The promises of quick breakthroughs from microbiology or genetic studies, with significance for management of or policy on alcohol problems, have begun to come into question. Prevention came back into NIAAA's organizational chart, so far in the form of a branch (one step down from a division). The rhetoric and legislative activity on illicit drugs, which reached an extraordinary pitch in the late 1980s, have in the long run tended to sweep alcohol issues up into the debate, and have brought new resources to the measurement of alcohol-related burdens in the society.

In the longer run—in terms of the “long waves” of alcohol consumption (Mäkelä et al., 1981), and of societal response to alcohol problems (Blocker, 1989)—the 1980s appear to have been a time when a new trend in the cultural position of alcohol, to which the Reagan administration was largely irrelevant, became consolidated. Per capita alcohol consumption in the United States has been dropping steadily since 1981, while the level of societal concerns about heavy drinking and its consequences has risen (Room, 1989). The concerns have been manifested in several popular movements, most notably in Mothers Against Drunk Driving, Remove Intoxicated Drivers, and other grassroots antidrinking-and-driving movements; and in the Adult Children of Alcoholics and other “codependence” movements, which focused attention on the drinker’s effects on those around him or her. The concerns have also been manifested in the growth of a professional and paraprofessional alcohol treatment capacity and establishment, and in shifts in this constituency’s thinking and practice toward a more proactive and interventionist stance. Generally speaking, sociologists and other social scientists have played little role in the leadership of these movements; for that matter, there has been too little in the way of critical social science analysis of these movements.

Social scientists such as Dan Beauchamp have played more of a role in another manifestation of the new concerns—a strand of activism on alcohol controls and policy, operating under a public health rubric, which has developed out of the perspectives noted in the fourth and fifth case studies presented above. To the great displeasure of the alcoholic beverage industry, this strand formed part of the official policy mix as the surgeon-general turned to drinking-driving issues in the waning days of the Reagan administration (Koop, 1989). But as the groups promoting a “public health approach” to alcohol issues have become more caught up in political action, they have tended to diverge away from the research concerns and institutions of social alcohol research.

Let me add a few last words on Selden Bacon’s place in this longer historical perspective. Each of us is to some extent a child of his generation, and Bacon, I am sure, does not find congenial many of the trends I have just described for the 1980s. In common with other scholars from the “wet generations” whose work stretched from Odegard (1928) to Pittman (1980), Bacon has long had a fundamental disbelief in alcohol controls in any form (e.g., Bacon & Jones, 1963) and an aversion to punitive approaches to dealing with alcohol problems. He played a leading role in the first years of the movement to establish an alternative societal vision, one which focused on providing humane treatment for the alcoholic. But as the alcoholism movement developed and became institutionalized, he became critical of it (Bacon, 1963); eventually, indeed, the institutions of

the movement have circled back to an openness to coercive approaches and indeed to alcohol control policies. From the perspective of a practical politician, Bacon's career in alcohol politics suggests that sociologists, like poets and artists, are useful in making a revolution, but unreliable, even subversive, when it comes to consolidating it.

From the perspective of alcohol research, it is a different story. Bacon was the first and founding alcohol sociologist of modern times. Not only in his own work, but through the diverse contributions of his students, and in turn of their students, Bacon's legacy in alcohol research continues and increases. The tradition of critical thought that Bacon has epitomized and established will serve society and scholarship well as we seek to transcend the dialectic dynamic of the "long waves."

Acknowledgments

This chapter was originally prepared for a conference on the Utilization of Social Research in Drug Policy Making, sponsored by Columbia University's Center for Socio-Cultural Research on Drug Use, Washington, DC, May 3–5, 1978. Its preparation was partly supported by a national research center grant from the National Institute on Alcohol Abuse and Alcoholism to the Social Research Group (now the Alcohol Research Group). It has benefited from discussions with Robert Straus, Don Cahalan, Ron Roizen, Harry Levine, and Walter Clark.

References

- Addiction Research Foundation. (1961). *Tenth annual report for the year ending December 31, 1960*. Toronto: Alcoholism Research Foundation.
- Addiction Research Foundation. (1968). *Seventeenth annual report: 1967*. Toronto: Alcoholism and Drug Addiction Research Foundation.
- Addiction Research Foundation. (1969). *Eighteenth annual report: 1968*. Toronto: Alcoholism and Drug Addiction Research Foundation.
- Armor, D., Polich, J.M., & Stambul, H.B. (1976). *Alcoholism and treatment* [The Rand Report]. Santa Monica, CA: Rand Corp.
- Bacon, S. (1947). The mobilization of community resources for the attack on alcoholism. *Quarterly Journal of Studies on Alcohol*, 8, 473–497.
- Bacon, S. (1949). The administration of alcoholism rehabilitation programs. *Quarterly Journal of Studies on Alcohol*, 10, 1–47.
- Bacon, S. (1963, October). State programs on alcoholism. A critical review. In *Selected papers delivered at the 14th annual meeting* (pp. 1–18). North American Association of Alcoholism Programs, Miami Beach, Florida.
- Bacon, S., & Jones, R.W. (1963). *The relationship of the Alcoholic Beverage Control Law and the problems of alcohol* (Study Paper No. 1). New York: New York State Moreland Commission on the Alcoholic Beverage Control Law.
- Bales, R.F. (1946). Cultural differences in rates of alcoholism. *Quarterly Journal of Studies on Alcohol*, 6, 480–499.
- Beauchamp, D. (1975). Public health: Alien ethic in a strange land? *American Journal of Public Health*, 65, 338–339.

- Beauchamp, D. (1976). Exploring new ethics for public health: Developing a fair alcohol policy. *Journal of Health Politics, Policy and Law*, 1, 338–354.
- Berry, R.E., Jr., & Boland, J.P. (1977). *The economic cost of alcohol abuse*. New York: Free Press.
- Billings, J.S. (Ed.). (1903). *The liquor problem: A summary of investigations conducted by the Committee of Fifty, 1893–1903*. Boston: Houghton, Mifflin.
- Blane, H.T. (1976). Education and mass persuasion as preventive strategies. In R. Room & S. Sheffield (Eds.), *The prevention of alcohol problems: Report of a conference* (pp. 255–288). Berkeley, CA: University of California, Social Research Group.
- Blane, H.T., & Hewitt, L.E. (1977). *Mass media public education and alcohol: A state of the art review*. Report prepared for NIAAA, Rockville, MD.
- Blocker, J.S. (1989). *American temperance movements: Cycles of reform*. Boston: Twayne Publishers.
- Blumenthal, M., & Ross, H.L. (1975). Judicial discretion in drinking driving cases: An empirical study of influence and consequences. In S. Israelstam & S. Lambert, *Alcohol, drugs and traffic safety* (pp. 755–762). Proceedings of the Sixth International Conference on Alcohol, Drugs and Traffic Safety, Addiction Research Foundation, Toronto.
- Bogue, D.J. (1963). *Skid row in American cities*. Chicago: University of Chicago Community and Family Study Center.
- Bossard, J.H.S., & Sellin, T. (Eds.). (1932). Prohibition: A national experiment. *Annals of the American Academy of Political and Social Science*, 163, 1–233.
- Brenner, H. (1975). Trends in alcohol consumption and associated illnesses. *American Journal of Public Health*, 65, 1273–1292.
- Bruun, K. (1970). Alkoholihatat mahdollisimman vahaiaiksi [The minimization of alcohol damage]. *Alkoholipolitiikka*, 35, 185–191. Abstracted in *Drinking and Drug Practices Surveyor*, 8, 15, 47 (1973).
- Bruun, K. (1973). Social research, social policy and action. In *The epidemiology of drug dependence: Report on a conference* (pp. 115–119). Copenhagen: World Health Organization.
- Bruun, K., et al. (1975). *Alcohol control policies in public health perspective* (Vol. 25). Helsinki: Finnish Foundation for Alcohol Studies.
- Cahalan, D. (1970). *Problem drinkers*. San Francisco: Jossey-Bass.
- Cahn, S. (1970). *The treatment of alcoholics*. New York: Oxford University Press.
- Calkins, R. (1901). *Substitutes for the saloon: An investigation originally made for the Committee of Fifty*. Boston: Houghton, Mifflin.
- Chafetz, M. (1967). Alcoholism prevention and reality. *Quarterly Journal of Studies on Alcohol*, 28, 345–348.
- Chafetz, M. (1971). Introduction. In *First special report to Congress on alcohol and health* (pp. 1–4). Washington, DC: National Institute on Alcohol Abuse and Alcoholism.
- Chafetz, M. (1974). Monitoring and evaluation at NIAAA. *Evaluation*, 2(1), 49–52.
- Clark, W. (1966). Operational definitions of drinking problems and associated prevalence rates. *Quarterly Journal of Studies on Alcohol*, 27, 648–668.
- Culver, D.C., & Thomas, J.E. (1940). *State Liquor Control Administration: A statutory analysis*. Berkeley, CA: University of California Bureau of Public Administration.
- Davies, D.L. (1962). Normal drinking in recovered alcoholics. *Quarterly Journal of Studies on Alcohol*, 23, 94–104.

- deLint, J., & Schmidt, W. (1968a, September). *The distribution of alcohol consumption*. Paper presented at the International Congress on Alcohol and Alcoholism, Washington, DC.
- deLint, J., & Schmidt, W. (1968b). The distribution of alcohol consumption in Ontario. *Quarterly Journal of Studies on Alcohol*, 29, 968-973.
- deLint, J., & Schmidt, W. (1971). Consumption averages and alcoholism prevalence: A brief review of epidemiological investigations. *British Journal of Addiction*, 66, 97-107.
- Dunham, H.W. (1954). *Homeless men and their habitats: A research planning report*. Detroit, MI: Wayne University, Dept. of Sociology and Anthropology.
- Edwards, G., Gross, M.M., Keller, M., Moser, J., & Room, R. (Eds.) (1977). *Alcohol-related disabilities*. Geneva: World Health Organization.
- Elinson, J. (1967). Epidemiologic studies and control programs in alcoholism: Discussion. *American Journal of Public Health*, 57, 991-996.
- Erratum, (1961). *Canadian Medical Association Journal*, 84, 34.
- Feldman, H. (1927). *Prohibition: Its economic and industrial aspects*. New York: D. Appelton.
- Gusfield, J.R. (1972). A study of drinking drivers in San Diego County. Report prepared for the Department of Public Health, San Diego County, San Diego, CA
- Gusfield, J.R. (1975). The (f)utility of knowledge? The relation of social science to public policy toward drugs. *Annals of the American Academy of Political Science*, 417, 1-15.
- Gusfield, J.R. (1976). The prevention of drinking problems. In W.J. Filstead, J.J. Rossi, & M. Keller (Eds.), *Alcohol and alcohol problems: New thinking and new directions* (pp. 267-292). Cambridge MA: Ballinger.
- Guttorp, P., & Song, H. (1977). A note on the distribution of alcohol consumption. *Drinking and Drug Practices Surveyor*, 13, 7-8.
- Harrison, L.V., & Laine, E. (1936). *After repeal: A study of liquor control administration*. New York: Harper and Brothers.
- Johnson, B. (1973). *The alcoholism movement in America: A study in cultural innovation*. Unpublished doctoral dissertation, University of Illinois, Urbana-Champaign.
- Knupfer, G. (1967). The epidemiology of problem drinking. *American Journal of Public Health*, 57, 973-986.
- Koop, C.E. (Ed.). (1989). *Proceedings, Surgeon General's Workshop on Drunk Driving*. Washington: U.S. Government Printing Office.
- Koren, J. (1899). *Economic aspects of the liquor problem: An investigation made under the direction of a sub-committee of the Committee of Fifty*. Boston: Houghton, Mifflin.
- Kuhn, T. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.
- Kurtz, N.R., & Regier, M. (1975). The Uniform Alcoholism and Intoxication Treatment Act: The compromising process of social policy formulation. *Journal of Studies on Alcohol*, 36, 1421-1441.
- Kuusi, P. (1957). *Alcohol sales experiment in rural Finland* (Vol. 3a). Helsinki: Finnish Foundation for Alcohol Studies.
- Lanu, K.E. (1956). *Poikkeavan alkoholikayttaytymisen kontrolli* [Control of deviating drinking behavior]. Helsinki: Finnish Foundation for Alcohol Studies.
- Law and Contemporary Problems (1940). *Alcoholic Beverage Control*, 7, 4, pp. 543-751 (a special issue).

- Lemert, E.M. (1976). Comment on the Uniform Alcoholism and Intoxication Treatment Act: The compromising process of social policy formulation. *Journal of Studies on Alcohol*, 37, 102–103.
- Levine, H., & Smith, D. (1977). A selected bibliography on alcohol control, particularly before and at repeal (Working Paper F71). Berkeley, CA: University of California, Social Research Group.
- Levy, J.E., & Kunitz, S. (1974). *Indian drinking: Navajo practices and Anglo-American theories*. New York: John Wiley and Sons.
- Light, D. (1976, September/October). Costs and benefits of alcohol consumption. *Society*, 11, 13, 18–22, 24.
- Mäkelä, K. (1974). Types of alcohol restrictions, types of drinkers and types of alcohol damages: The case of personnel strike in the stores of the Finnish Alcohol Monopoly. In *Papers presented at the 20th International Institute on the Prevention and Treatment of Alcoholism* (pp. 16–26). (Manchester, England) Lausanne, Switzerland: ICAA.
- Mäkelä, K. (1975). Consumption level and cultural drinking patterns as determinants of alcohol problems. *Journal of Drug Issues*, 5, 344–357.
- Mäkelä, K., Room, R., Single, E., Sulkunen P., & Walsh, B., with 13 others. (1981). *Alcohol, society and the state: I. A comparative study of alcohol control*. Toronto: Addiction Research Foundation.
- Marden, P., Zylman R., Fillmore, K., & Bacon, S. (1976). Comment on “A national study of adolescent drinking behavior, attitudes and correlates.” *Journal of Studies on Alcohol*, 37, 1346–1358.
- Medicine in the Public Interest. (1976). *A study in the actual effects of alcoholic beverage laws* (2 Vols.) Report to NIAAA under contract ADM 281–75–0002.
- Miller, G.H., & Agnew, N. (1974). The Ledermann model of alcohol consumption; description, implications and assessment. *Quarterly Journal of Studies on Alcohol*, 35, 877–898.
- Mizruchi, E.H., & Perrucci, R. (1962). Norm qualities and differential effects of deviant behavior: An exploratory analysis. *American Sociological Review*, 27, 391–399.
- Moore, M., & Gerstein, D. (Eds.). (1981). *Alcohol and public policy: Beyond the shadow of Prohibition*. Washington, DC: National Academy Press.
- National Advisory Committee on Alcoholism. (1968, December). Interim report to the secretary of the Department of Health, Education and Welfare.
- National Institute on Alcohol Abuse and Alcoholism. (1974). *Second special report to the U.S. Congress on alcohol and health from the secretary of Health, Education and Welfare*. Washington, DC: U.S. Government Printing Office.
- National Institute on Alcohol Abuse and Alcoholism. (1979). *Third special report to the U.S. congress on alcohol and health: Technical support document* (DHEW Publication No. ADM 379–832). Washington DC: U.S. Government Printing Office.
- Odegard, P. (1928). *Pressure politics: The story of the Anti-Saloon League*. New York: Columbia University Press.
- Parker, D., & Harman, M. (1980). A critique of the distribution of consumption model of prevention. In Thomas Harford, Douglas Parker, & William Light (Eds.), *Normative approaches to the prevention of alcohol abuse and alcoholism* (NIAAA Research Monograph No. 3, pp. 67–88). Washington: U.S. Government Printing Office.
- Pearl, A. (1960). Report of sociologists and social psychologists. In *Multidisciplinary programming in alcoholism investigation* (pp. 24–25). Division of Alcoholic Rehabilitation, California Department of Public Health, Berkeley.

- Pittman, D. (1980). *Primary prevention of alcohol abuse and alcoholism: An evaluation of the control of consumption policy*. St. Louis: Washington University, Social Science Institute.
- Plaut, T. (1967). *Alcohol problems: A report to the nation*. New York: Oxford University Press.
- Popham, R., Schmidt, W., & deLint, J. (1971). Epidemiological research bearing on legislative attempts to control alcohol consumption and alcohol problems. In J. Ewing & B. Rouse (Eds.), *Law and drinking behavior* (pp. 4–16). Chapel Hill: University of North Carolina, Center of Alcohol Studies.
- President's Commission on Crime in the District of Columbia. (1967). The drunkenness offender. Reprinted from the 1966 report as Appendix E of President's Commission on Law Enforcement and Administration of Justice, *Task Force Report: Drunkenness*. Washington, DC: U.S. Government Printing Office.
- Rachal, J.V., Williams, J., Brehm, M., Cavanaugh, E., Moore, R., & Eckerman, W. (1975). *Adolescent drinking behavior, attitudes and correlates. A national study* (Final Report prepared for NIAAA). North Carolina: Research Triangle Institute.
- Regier, M., & Kurtz, N. (1976). Policy lessons of the Uniform Act: A response to comments. *Journal of Studies on Alcohol*, 37, 382–392.
- Roizen, R. (1977a). *Alcoholism treatment's goals and outcome measures: Conceptual, pragmatic and structural sources of controversy in the outcome debate* (Working Paper F61). Berkeley: University of California, Social Research Group.
- Roizen, R. (1977b). Comment on the "RAND Report," *Journal of Studies on Alcohol*, 38, 170–178.
- Roizen, R. (1987). The great controlled drinking controversy. In Marc Galanter (Ed.), *Recent developments in alcoholism* (Vol. 5, p. 245–279). New York and London: Plenum.
- Roman, P., & Trice, H. (1967, August). *Alcoholism and problem drinking as social roles: The effects of constructive coercion*. Paper presented at the Society for the Study of Social Problems Meetings, San Francisco, CA.
- Room, R. (1971, August). *The effects of drinking laws on drinking behavior*. Paper presented at the Society for the Study of Social Problems annual meetings, Denver, Colorado.
- Room, R. (1972). Notes on alcohol policies in the light of general-population studies. *Drinking and Drug Practices Surveyor*, 6, 10–12, 15.
- Room, R. (1976a). Ambivalence as a sociological explanation: The case of cultural explanation of alcohol problems. *American Sociological Review*, 41, 1047–1065.
- Room, R. (1976b). Comment on the Uniform Alcoholism and Intoxication Treatment Act; The compromising process of social policy formulation. *Journal of Studies on Alcohol*, 37, 113–143.
- Room, R. (1979). Priorities in social science research on alcohol. *Journal of Studies on Alcohol* (Supplement no. 8), pp. 248–268.
- Room, R. (1980). New curves in the old course: A comment on Polich, Armor and Braiker, "The Course of Alcoholism." *British Journal of Addiction*, 75, 351–360.
- Room, R. (1983). Sociological aspects of the disease concept of alcoholism. In *Research advances in alcohol and drug problems* (Vol. 7, pp. 47–91). New York and London: Plenum.
- Room, R. (1984). Alcohol control and public health. *Annual Review of Public Health*, 5, 293–317.
- Room, R. (1989). Cultural changes in drinking and trends in alcohol problem indicators: Recent U.S. experience. *Alcologia* (Bologna), 1, 83–89.

- Rubington, E. (1958). *What to do before skid row is demolished*. Philadelphia: Greater Philadelphia Movement.
- Ruggels, W., Armor, D., Polich, J., Mothershead, A., & Stephen, M. (1975). *A follow-up study of clients at selected alcoholism treatment centers funded by NIAAA*. Menlo Park, CA: Stanford Research Institute.
- Schmidt, W., & Popham, R. (1980). Discussion of paper by Parker and Harman. In T. Harford, D. Parker, & W. Light (Eds.), *Normative approaches to the prevention of alcohol abuse and alcoholism* (pp. 89–105, NIAAA Research Monograph No. 3). Washington: U.S. Government Printing Office.
- Seeley, J. (1960). Death by liver cirrhosis and the price of beverage alcohol. *Canadian Medical Association Journal*, 83, 1361–1366.
- Skog, O.J. (1977). On the distribution of alcohol consumption (Monograph No. 4). Oslo: National Institute for Alcohol Research.
- Skolnick, J.H. (1958). Religious affiliation and drinking behavior. *Quarterly Journal of Studies on Alcohol*, 19, 452–470.
- Smith, N.M.H. (1976). Research note on the Ledermann formula and its recent applications. *Drinking and Drug Practices Surveyor*, 12, 15–22.
- Snyder, C.R. (1958). *Alcohol and the Jews: A cultural study of drinking and sobriety* (Monograph No. 1). New Haven: Yale Center of Alcohol Studies.
- Spradley, J.P. (1970). *You owe yourself a drunk*. Boston: Little, Brown.
- Straus, R. (1960). Research in the problems of alcohol—A twenty-year perspective. In *Multidisciplinary programming in alcohol investigation* (pp. 28–31). Division of Alcoholic Rehabilitation, California Department of Public Health, Berkeley.
- Straus, R. (1975). Reconceptualizing social problems in light of scholarly advances: Problem drinking and alcoholism. In N.J. Demerath, O. Larsen, & K.F. Schuessler (Eds.), *Social policy and sociology* (pp. 123–134). New York: Academic Press.
- Straus, R. (1976). Problem drinking in the perspective of social changes, 1940–1973. In W.J. Filstead, J.J. Rossi, & M. Keller, (Eds.), *Alcohol and alcohol problems: New thinking and new directions* (pp. 29–56). Cambridge, MA: Ballinger.
- Straus, R., & Bacon, S. (1951). Alcoholism and social stability: A study of occupational integration in 2,023 male clinic patients. *Quarterly Journal of Studies on Alcohol*, 12, 231–260.
- Terris, M. (1967). Epidemiology of cirrhosis of the liver: National mortality data. *American Journal of Public Health*, 57, 2076–2088.
- Thompson, W. (1935). *The control of liquor in Sweden*. New York: Columbia University Press.
- Törnudd, P. (1968). The preventive effect of fines for drunkenness: A controlled experiment. *Scandinavian Studies in Criminology*, 2, 109–124.
- Trice, H., & Roman, P. (1972). *Spirits and demons at work: Alcohol and other drugs on the job*. Ithaca, NY: Cornell University.
- Ullman, A.D. (1958). Sociocultural backgrounds of alcoholism. *Annals of the American Academy of Political and Social Science*, 315, 48–54.
- Wallace, S.E. (1965). *Skid row as a way of life*. New York: Harper and Row.
- Warburton, C. (1932). *The economic results of Prohibition*. New York: Columbia University Press.
- Whitehead, P. (1977). *Alcohol and young drivers: Impact and implications of lowering the drinking age* (Monograph No. 1). Ottawa: Non-Medical Use of Drug Directorate.

- Whitehead, P.C., & Harvey, C. (1974). Explaining alcoholism: An empirical test and reformulation. *Journal of Health and Social Behavior, 15*, 57-65.
- Wilkinson, R. (1970). *The prevention of drinking problems*. New York: Oxford University Press.
- Wines, F.H., & Koren, J. (1897). *The liquor problem in its legislative aspects: An investigation made under the direction of a Subcommittee of Fifty*. Boston: Houghton, Mifflin.
- Wiseman, J. (1970). *Stations of the lost: The treatment of skid row alcoholics*. Englewood Cliffs, NJ: Prentice-Hall.
- World Health Organization. (1980). *Problems related to alcohol consumption* (Technical Report Series 650). Geneva: World Health Organization.
- Wuorinen, J.H. (1931). *The prohibition experiment in Finland*. New York: Columbia University Press.