ALCOHOL
AND SOCIETY

By ROBERT STRAUS, Ph.D.

Author’s Note: When Dr. Dana Farnsworth invited me to prepare this issue of Psychiatric Annals on the general subject of alcohol and society, I saw both an opportunity and a challenge to review some selected aspects of this complex yet fascinating area of human problems in the context of changes which have occurred since the early 1940s when my own participation in the study of drinking behavior began.

Within the space available, I have prepared a series of position papers, reviewing selected topics in the light of changing perspectives. In part, these brief essays reflect the attitudes and perceptions of American society; in part, they report some current scientific findings and interpretations; and in part, they represent my personal effort to conceptualize drinking behavior and alcohol problems.

INTRODUCTION

The uses of alcohol by human beings and the many problems associated with drinking can be traced to before the beginnings of recorded history and to most parts of the world. Although there have been considerable variations in the patterns of alcohol consumption in different areas and different periods of time, alcohol has been described as a substance which “permeates, pleases and yet plagues most of the world.” Yet, despite massive problems associated with alcohol use,
serious efforts to understand the nature of alcohol, its impact on the human mind and body, and the role of alcohol in the reciprocal relationship between individuals and societies are very recent. Scientific concern with the problems of alcohol had meager beginnings in the late 1930s, struggled to gain support in the 1940s and 1950s, has had a noticeable growth during the last decade, but is still pitifully modest in relation to the magnitude of the problems.

In its report dated March 22, 1973, the National Commission on Marihuana and Drug Abuse noted that “Alcohol dependence is without question the most serious drug problem (in the United States) today.” After a decade of increasing concern in American society and in many parts of the world over the apparent growing prevalence in the use of mood-modifying drugs and related problems, it is significant that a Commission charged with looking at illegal and dangerous drugs has so pointedly singled out the problems of alcohol. In the same vein, numerous reports from college campuses, law enforcement agencies and other sensing posts of drug-use behavior, after a decade of preoccupation with hallucinogens, barbiturates, opiates and marijuana, are again recognizing alcohol as by far the most commonly used mood-altering chemical in our society and as the drug associated with the greatest prevalence of problems.

These papers will present an analysis of current perceptions about problems associated with alcohol use by man; how we have tried to study them; how we identify and label these problems; what we think we know about them; and how, in terms of social policy, we currently are attempting to deal with them. Significant developments in the last five or six years have challenged long-held scientific conceptions, and work currently in progress makes it mandatory that these essays be viewed with appropriate respect for the tentative nature of scientific “facts.” In this spirit, we will be as much concerned with raising questions as with answering them.

Our understanding of the problems of alcohol has been greatly limited by the number and complexity of factors involved in the relationship between alcohol, man and society. These include the nature of alcohol and its several pharmacological properties; the broad variations of responses to the action of alcohol on the human mind and body; the different meanings of alcohol in terms of human psychology; variations in social customs regarding drinking generally and drinking according to different age, sex and occupational status and roles; and changes in the nature of life in society which alter the balance between functions and liabilities of drinking that pertains for particular groups at particular times and places.

So widespread are the customs of drinking that alcohol use, in some way, permeates almost every aspect of living, both for those who drink and for those who abstain. It is a major economic commodity, an important source of employment, and provides a very significant basis of tax funds for all levels of government. Drinking customs and drinking problems permeate family living and significantly involve our educational, religious, economic, medical, government and recreational activities.

In almost every setting in which drinking is significant, it plays a two-faced role. In fact, the essential dilemma that complicates the tasks of understanding and trying to cope with alcohol problems lies in the fact that alcohol is both functional and dysfunctional. As a medicine, its analgesic, anesthetic, antiseptic and anti-
anxiety properties have long been recognized, although only partially understood. Because they have recognized alcohol’s great capacity for alleviating pain, relieving tension and providing a sense of well-being, relaxation and conviviality, many societies have placed great value on drinking customs.

Alcohol’s function in supplying calories is reflected in certain deep-seated customs and beliefs which relate drinking with nutrition. Paradoxically, the role of alcohol’s calories in contributing to illnesses frequently encountered by the heavy drinker has been less well recognized.

Because of alcohol’s profound effect on mind and body, many societies have relied on its intoxicating properties to help prepare their warriors for fighting, their leaders for negotiating trade or treaties, and their citizens for facing such major changes in life status as birth, puberty, marriage and death. Aside from warfare, the intoxicating effects of alcohol were also used “functionally” by individuals who were called on to perform other particularly difficult, dangerous or daring tasks associated with hunting, mining, lumbering, exploring and manning ships at sea. In these situations, intoxication was sometimes seen as an individual incentive or as a reward. In the case of merchant seamen, alcohol was used to drug victims who were thereby impressed into service against their will. While such practices were devastatingly detrimental to the individuals involved, they were rationalized as “benefiting” the societies which depended heavily on sea commerce for both economic and international advantages.

Only a few societies have been able to experience the benefits or functions of alcohol and avoid its severe liabilities. For most of the world, wherever alcohol use has been widespread, it has been accompanied by severe problems. The problems of alcohol are generally associated with excessive patterns of use. These tend to be manifested in intoxication (with or without addiction) or organic damage, or both. Intoxication can affect any drinker on any occasion when he uses alcohol more rapidly than it can be metabolized by his body. Under the condition of intoxication, a usually moderate drinker can experience an incidental problem. However, most of the behavioral problems of alcohol tend to be concentrated in persons who frequently or habitually become intoxicated. These problems are further compounded for those drinkers who find themselves unable to control how much or when or where they drink and become alcoholics.

In societies where drinking customs support the frequent use of alcohol in amounts and under circumstances which lead to intoxication, social concerns about the problems of alcohol have increased as industrialization, urbanization and related factors of social change have increased the dangers which intoxicated persons can pose, both for themselves and for the well-being of innocent others. Today, the recognized problems of alcohol throughout the industrialized world, include not merely drunkenness and alcoholism, but the accidents caused by driving vehicles while under the influence of alcohol; the defective industrial production associated with alcohol-related absenteeism, hangover, inefficiency and accidents; the incapacitation through drinking of young people, especially when their drinking is assumed to symbolize their perceived rejection of prevailing societal norms and values; and the apparent relationship between excessive drinking and such problems as poverty, mental illness, physical illness, family instability, suicide and crime.

The problems of alcohol are generally associated with excessive use.
ALCOHOL AS A DRUG

In emphasizing that alcohol is the most serious contemporary drug problem in the United States, the National Commission on Marihuana and Drug Abuse has offered some compelling comparisons between alcohol and other drugs. The Commission cited estimates that at least 100 million Americans are using alcoholic beverages and that at any one time 10 per cent of these demonstrate "intensified and compulsive use" with a "serious decrement in social functioning ... noticeable in half of this group." The magnitude of alcohol use was compared with that of other drugs by noting that the alcohol industry produces annually over one billion gallons of spirits, wine and beer for which consumers pay 24 billion dollars. Psychoactive drugs, in contrast, involved only 214 million prescriptions with a retail value of one billion dollars, and the illicit drug market was estimated at having a two-billion-dollar annual volume.

In repeatedly referring to alcohol as a drug, the Commission on Marihuana and Drug Abuse was using the term "drug" to encompass "psychoactive drugs ... which have the capacity to influence behavior by altering feeling, mood, perception, or other mental states." Certainly, alcohol fits this criterion, yet the Commission reported that a majority of the general public do not perceive alcohol in this way. In an opinion survey conducted with a national probability sample, only 39 per cent of the adults (18 years and over) and 34 per cent of the youths (12 to 17 years) who were questioned classified alcohol as a drug. In comparison, those who classified amphetamines, marijuana, barbiturates, cocaine and heroin as drugs ranged from 80 to 96 per cent. Furthermore, only seven per cent of the public mentioned alcoholism as a serious social problem, compared with 53 per cent who mentioned drugs. The Commission suggested that the misperceptions which exclude alcohol from substances people usually think of as drugs can seriously compromise the national effort to cope with drug abuse by adopting uniform policies to deal with all drug abuse and drug problems. More important, by excluding alcohol from the connotations of a drug, the Commission notes that most people "do not think about the alcohol experience as an altered state of consciousness but rather as a means to some other end, such as promoting conviviality or stimulating conversation."

In this regard, I believe that the Commission has been too restrictive in its classification of alcohol. The Commission notes that "from a strictly scientific point of view, a drug is any substance other than food which by its chemical nature affects the structure of function of the living organism." Certainly alcohol is a psychoactive drug, but I wonder if the Commission has adequately considered that, unlike the other substances—marijuana, heroin, barbiturates, amphetamines and tobacco—with which alcohol is compared as a drug, alcohol is also a food. The caloric value of alcohol is almost as great as that of fat. The caloric properties of alcohol distinguish it from other drugs in at least two important ways. They provide some basis for the widespread beliefs in societies across the world which include alcohol as a form of food and closely relate drinking and eating customs. They also appear associated with a whole set of alcohol-related diseases that are experienced by man in addition to those caused by alcohol as a psychoactive drug. Actually, because it is both a drug and a food, alcohol is distinguished from other drugs and other foods in the purposes for which it is used, the ways in which it is used, and in the consequences of excessive use.
SOME EARLY RESEARCH ON DRINKING AND PROBLEM DRINKING

Until the 1950s, virtually nothing of a systematic nature was known about even such basic questions as how many people in the United States were using alcoholic beverages. In part perhaps because the issues of drinking and nondrinking had been cast in a highly moralistic context for more than a century, it was assumed that most people considered their drinking to be a very private matter and would not be willing to provide reliable information. Also, the recent national prohibition experience and continuing regional prohibition under local option provided situations in which people who admitted to using alcohol would be providing evidence of law violation. These circumstances resembled in many ways those which limit contemporary efforts to gain basic descriptive...

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data about the use of marijuana and other illegal drugs.

Prior to the 1940s, it must also be remembered, most people who were interested in questions of drinking were identified with either "wet" or "dry" ideologies and were quite content to accept, believe and perpetuate emotionally charged statements without too much concern for their scientific validity. Furthermore, the techniques of survey methodology were relatively primitive and, without modern computer technology, there were severe limits on the amount of data that could be measured and the number of variables that could be analyzed. Crude estimates on the numbers of people in the United States who used alcohol, based on public-opinion-type polling, began to appear in the mid-1940s. These were limited to such criteria as age (by decades for adults only), sex, urban-rural, region, and sometimes preference for beer, wine or distilled spirits.

An initial effort to develop a more systematic and comprehensive body of information about drinking but limited to a very specific segment of the population—college students—was initiated by the Yale Center of Alcohol Studies in 1947." Based on the reports of 17,000 students in 27 colleges, data collection consumed three years, and with an IBM sorter-counter machine operating 12 hours a day, data processing and analysis consumed more than a year. In introducing the report of the study, the Center noted in 1953: "The basic facts about drinking in the United States, in college or not, have never been fully determined. Instead, conjecture and misinformation have led to stereotypes from which many sincere persons have acquired distorted impressions of drinking behavior and alcohol problems." Basic facts included such fundamental questions as who drinks and who does not; when and where those who drink first started drinking; what and how much, and how frequently they drink; the influence of parents, peers, and others on drinking attitudes and practices; the relationship between drinking and income, religious affiliation and participation, and ethnic background; and the kinds of problems experienced in association with drinking and by whom. Although the findings of the drinking in college study, now more than 20 years old, have only historical significance, it is noteworthy that only very recently have comparable data for the general population become available, and the paucity of basic information about drinking has been so great that the now ancient book Drinking in College was reissued as recently as 1971.
A FOLLOW-UP STUDY OF DRINKING IN COLLEGE

Of considerable contemporary significance, as far as the drinking in college study is concerned, is the fact that provisions were made for a subsequent study or studies which could follow the respondents over time and identify changes in drinking patterns and problems. All of the participants in the 1949-52 survey were asked if they would be willing to be available for a possible follow-up study which would be designed to measure changes in drinking experiences and attitudes over time. Although the anonymity of respondents in the original study was carefully protected, those who agreed to be identified for purposes of follow-up recorded their names on cards numbered to correspond with code numbers on the original survey forms. Respondents were assured that the forms on which their names were recorded would be kept in locked files separate from all other survey data and would be referred to only for use in selecting a sample for further study. Seventy-eight per cent of the students in the original study were sufficiently interested and apparently felt sufficiently secure to provide their identification. In 1971, steps were initiated by the Center of Alcohol Studies, now at Rutgers University, to undertake the anticipated follow-up which will trace drinking careers over a 20-25-year period. Two years have been devoted to ascertaining the feasibility of locating participants in the original study, determining their current willingness to participate in the follow-up study, and pretesting alternative research methodologies. Because no other data for such a “before and after” study exist, the proposed follow-up offers a unique and significant opportunity to learn about changes in drinking behavior over time during the adult lives of a

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population group for whom detailed data on early drinking are available.

The following paragraphs from an April, 1973 statement on progress and purpose, prepared by Selden D. Bacon and Kaye M. Fillmore, suggest some of the anticipated insights that the follow-up study may provide:

The element of time is of utmost importance in understanding how an individual becomes an alcoholic or does not become an alcoholic. Of the subjects we propose following up, some were abstainers in college, most were drinkers, and a minority were problem drinkers (i.e., people who when they drank got drunk frequently or got into trouble with the law or with school authorities or lost friends because of drinking or showed “alcoholic tendencies” and so on.) The primary question twenty years later is: “Who became problem drinkers or alcoholics later in life, who did not, and why?” Within this context is a second question, “Are there any symptoms, characteristics or signs which might help us distinguish those who are showing early signs of problem drinking as opposed to those who are not?” With exploration of these basic primary questions, it is suggested that data of this sort would lend themselves toward ways and means by which we might prevent the development of alcohol problems among young people.

The proposed study’s first concern is to evaluate whether drinking per se and drinking problems in people in their late thirties and early forties can be predicted from behavior or attitudes in the late teens and early twenties. But there is more to be asked which relates to what happened between these two points in time. For instance, do people who make extreme upward or downward movements in occupation, in income or in social class tend to be more “susceptible” in developing alcohol problems than those who remain stable? Another question might be: do some people who experience series of critical stressful events like divorce or death of loved ones tend to lean on alcohol as a crutch more than do others? Thus, the very nature of one’s life style may provide indicators for the development of alcohol problems.

Another consideration that enters into a study of this type is that at the present time in the 1970s there are “coping mechanisms” other than alcohol such as barbiturates, amphetamines and so on. We know that substantial numbers of Americans use these legal drugs and we suspect that a number of them use combinations of these drugs with alcohol. When our subjects were in their early twenties most of these drugs were not available; today, they are readily available either over-the-counter or with a doctor’s prescription. The basic question in this context is if the early use of one “coping mechanism,” alcohol, is related not only to the later use of alcohol but the later use of other drugs.

A major question for any study conducted over time relates to the feasibility of relocating participants. Significantly, it was found that 80 per cent of the people who as students provided their names could be found without even employing outside professional help. It was estimated that at least 90 per cent could be located with a modest investment of extra time and funds.

Preliminary findings from the drinking in college pretest study are reported in the following section prepared specifically for this review by Kaye M. Fillmore of the Rutgers Center of Alcohol Studies.
College Drinking Study

Preliminary analyses of a small pilot study indicate relationships between early drinking and later drinking per se as well as early problem drinking and later problem drinking. The pilot study utilized two methods of data collection: (1) a mailed questionnaire and (2) a telephone interview. The total response rate was 83 per cent for men and 71 per cent for women. The sample was stratified by area of the country lived in, by sex, and by drinking vs. abstinence (a 60:40 ratio) at the time of the original study. This method of stratification was justified by its promise in terms of increasing subgroups of special interest for preliminary analyses. Data were collected for 116 men and 99 women. Based on only the most elementary analyses, several tentative results stand out.

A) Of both men and women who abstained from alcohol when in college, 70 per cent now drink. Although the majority of the one-time abstainers who now drink may be characterized as “moderate drinkers,” at least 10 per cent may be characterized as serious problem drinkers, about a third now experience some problems (ranging from very mild to very serious); however, this trend is not as pronounced among women as men. These tentative results indicate that (1) a substantial number of the study participants who were abstainers as students eventually became drinkers and (2) some of these later drinkers eventually experienced problems. This latter finding suggests support for the theory that young people who are not socialized into the act of drinking later may have difficulties once they do start drinking. The crucial questions regarding these findings relate to identifying differences between (1) abstainers who continue to abstain, (2) abstainers who become social drinkers with no associated problems, and (3) abstainers who become problem drinkers.

B) Regarding those persons who were drinkers in college, the vast majority not only remain drinkers some 20 years later but the relationship between the type of drinking done at the two measurement points in terms of quantity and frequency (without controlling for additional variables) is moderately high. In other words, although turnover does
occur (for instance, 10 per cent of the drinking men and seven per cent of the drinking women later abstain), there is a tendency for heavy drinkers to maintain their style of drinking and light drinkers to maintain their style.

C) A most striking finding, one which shows the greatest challenge for analyses of a larger and more representative sample, is that to a considerable extent early problem drinking may be related to later problem drinking. Using Cahalan and Room’s problem drinking scoring technique, 50 per cent of both the men and women who exhibited any signs of problem drinking between the ages of 18 and 24 are currently experiencing some problems. This is not to say that this group represents those experiencing serious alcohol problems. However, of even greater interest is the group who were classified as “high” problem drinkers in their youth. A substantial percentage of these early problem drinkers are now showing signs of problems. Sixty-six per cent of the men and 43 per cent of the women who showed early signs of serious problem drinking are now classified as moderate to serious problem drinkers. More important, 29 per cent of both

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men and women who were serious or high problem drinkers in their youth continue as serious problem drinkers 20 years later. This may be contrasted to early moderate problem drinkers, of whom only 19 per cent of the women and only 10 per cent of the men are currently "high" problem drinkers, and to early nonproblem drinkers, of whom only 16 per cent of the men and none of the women are "high" problem drinkers today.

D) Within the context of using early problem drinking as a "predictor" of later problem drinking, it is hypothesized that early alcohol problems per se may not explain later alcohol problems, but that some unique sets or combinations of early drinking problems may well explain later serious drinking problems more effectively than others. Using but a few case histories for intensive analysis, this hypothesis shows some promise.

E) Noticeable differences between men and women have been observed in studying case histories in regard to the types of problem drinking signs exhibited over time as well as their nature of development. Only utilization of considerably more cases and quantitative analyses will yield effective description of these possible differences.

F) Of special interest in regard to fairly well established theory, these few cases also suggest that the development of alcohol problems over time does not show a cumulative steady progression. Instead, these very tentative data suggest that alcohol problem signs are age-related and that periods of remission occur. In other words, for subjects who exhibited problem signs at both measuring points, retrospective information gathered in the follow-up pretest indicates that some periods of time in the intervening years were characterized by excessive and problem drinking, whereas other periods of time were characterized by nonexcessive and nonproblem usage of alcohol. Assuming that these data are suggestive of findings in the larger proposed study, the possibility of relating such changes to life events and life crises may provide a greater understanding of the development of the problem drinker. Although based on only the preliminary stages of analyzing the results of a pilot sample, these tentative findings suggest that there may be evidence for isolating high-risk groups at a relatively early age.
V

CURRENT EPIDEMIOLOGICAL RESEARCH

One of the most significant current developments in the study of drinking customs and drinking problems in the general American population has been the initiation of comprehensive surveys of drinking behavior through the interviewing of national probability samples of people living in households. For many years after the techniques for such research were available, it was assumed that people would not talk freely or honestly about their drinking. The deep-seated stigma of alcoholism and the moral overtones of drinking were assumed to be insurmountable obstacles. Then pioneer work, including that of Genevieve Knupfer in California\(^n\) and Harold Mulford in Iowa,\(^{77}\) demonstrated that such surveys of drinking behavior were possible and opened the door for the application of modern epidemiological techniques, including computer-determined sampling and computer-based analysis, to the study of drinking practices and drinking problems. There have followed a series of national studies now being conducted by Don Cahalan and several associates. The findings of this continuing research have now been reported in three volumes which provide important new perspectives on the nature and distribution of drinking practices and problem drinking.\(^{7, 9, 11}\) Clearly, this work represents a most significant breakthrough in the scientific understanding of alcohol problems. For review here, I shall comment specifically on findings reported in a 1972 paper by Cahalan and Room pertaining specifically to problem drinking among American men aged 21-59.\(^{19}\)

The paper under consideration is based on the findings about drinking problems and their correlates from one group of men that was initially surveyed in 1964-65 and restudied in 1967 and a second group of men aged 21 to 59 that was sampled nationally in 1969. It must be stressed that these findings are based on men living in households and exclude those living in institutions and the homeless.

The criteria for problem drinking employed by Cahalan included 13 problem categories: 1) "heavy intake" (based on quantity and frequency); 2) "binge drinking" (intoxicated for more than a day at a time); 3) "psychological dependence" (reliance on alcohol to change moods); 4) "loss of control" (inability to stop drinking once one has started or to refrain from drinking at inappropriate times); 5) "symptomatic drinking" (including sneaking drinks, anticipatory drinking, blackouts after drinking, drinking to alleviate hangovers); 6) "belligerence;" problems with 7) wife, 8) other relatives, 9) job, 10) friends or neighbors; or difficulties involving 11) the police, 12) finances, or 13) personal health. Specific problems were classified according to two levels of severity and whether they had been experienced "ever" or within the last three years ("currently"). In addition, an index of high social consequences of drinking was employed.
Several of the key findings reported by Cahalan will be summarized and discussed briefly:

1. A majority (72 per cent) of American men interviewed in their homes had at some time experienced at least one type of problem associated with drinking which was of sufficient significance to be recalled and reported. Half of the men had experienced one or more problems within the past three years. More than half of the men (55 per cent) reported one or more problems at a "high" level of severity, including a third of the total sample (36 per cent) who had experienced a high-severity-level problem within three years. Problems most commonly reported, according to the percentages reporting these problems both "currently" and at "high levels of severity," included: heavy intake (13 per cent), trouble with wives (14 per cent), psychological dependence (nine per cent), belligerence (nine per cent), and symptomatic drinking (eight per cent).

The high prevalence of drinking problems reported by this sample of American men indicates that previous estimates of the number of persons involved in problem drinking have been too low and based on an unrealistically narrow conception of the dimensions of alcohol-related pathology.

Definitions of alcoholism have been and are still subject to much variation, and Cahalan finesses the question of definition by using the term "problem continued"
drinker.” The criteria of problem drinking employed by Cahalan are not all consistent with the lay public’s conception of alcoholism, which is still primarily derived from institutionalized persons and those undergoing rehabilitation and is more that of a progressive, irreversible phenomenon that invariably involves a vicious spiral acceleration toward greater and greater complications.

Cahalan’s household population study suggests that many persons who have once manifested some symptoms of problem drinking have been able to alter their drinking to avoid problems. In fact, only about half the men who reported ever having had most of the particular problems reported experiencing these problems within the past three years. This clear indication of a remission phenomenon in problem drinking points to a need to identify and study in depth the sizable population of problem drinkers who do not become caught in irreversible progression. It is quite possible that this previously unidentified and unheralded population can provide important clues regarding experiences and motivations which contribute to changes in destructive drinking patterns in young problem drinkers. This could lead to a major breakthrough toward the development of effective preventive intervention.

2) All types of drinking problems studied by Cahalan were found to be more prevalent among men aged 21-24 than in any other age group considered. Fully 40 per cent of these young men living in households were reported as having a “high current overall problems score.” These included 26 per cent who reported symptomatic drinking, 19 per cent problems with wife, 15 per cent problems with friends or neighbors, 15 per cent belligerence, 12 per cent loss of control, 11 per cent financial problems, 10 per cent problems on job, 10 per cent binge drinking, and 10 per cent problems with police. These prevalence figures for young men were roughly twice that for any other age group.

Cahalan’s findings indicate that in the late 1960s problem drinking was a very significant phenomenon for young adult males. Although data for all men, comparing rates of problems “ever” experienced with those of “current” problems, would support the optimistic view of an apparent rapid decline in drinking problems after the age of 25, only future studies will tell us whether these findings also indicate the more alarming phenomenon of prevalence rates which are particularly high for this generation. Such a finding would have distressing future implications, because Cahalan’s data clearly support his conclusion that “the seeds of longer-term serious problems with alcohol are usually sown by one’s drinking habits in one’s early twenties and not so much by habits not acquired until one’s forties.”

Missing from Cahalan’s study are any data on drinking practices and problems among young men prior to age 21. Other studies indicate that drinking in American society begins during the teen years for most persons and suggest that the nature of drinking practices and problems is closely related to such varied factors as parental example (role model), peer group pressures (conformity), and perceived restrictions (rebellion, assertion or alienation). One must therefore be cautious about interpretations based on drinking by persons in their early twenties without considering also that the seeds of such drinking occurred at even earlier ages.

3) A comparison of the “wetter” (few areas of local option prohibition, legal restrictions on availability of alcohol or concentrated temperance-oriented religious and social groups) and “drier” (more local option prohibitions
and other legal restrictions, greater concentration of temperance orientation) regions of the country revealed that dry regions had three times as many abstaining men as wet regions (21 per cent vs. seven per cent) but that more drinkers in dry areas than in wet areas tended to have problems and get into trouble associated with their drinking. In addition to residents of dry areas, men belonging to conservative Protestant religions, irrespective of area of residence, tended to have a high prevalence of social consequences if they were drinkers. High social consequences included health, injury or financial problems, together with specific interpersonal or social problems, all associated with high intake and/or binge drinking.

Numerous studies have suggested that temperance orientations and legal prohibitions of alcohol use, while they reduce the number of drinkers in a population, may actually contribute to more problem drinking; that in such situations persons who drink in defiance of restrictions tend to drink heavily, frequently and in socially inappropriate situations. The significance of Cahalan's finding lies in the fact that data from men living in households add support to other indications of the paradoxical impact of both legal prohibition and a temperance orientation on problem drinking. The finding suggests the presence of subcultures in most "dry" regions which impose pressures to drink heavily.

4) Drinking problems of high consequences are reported most frequently by men from the lowest social class (using Hollingshead's Index of Social Position) and more frequently by men from the lower-middle than from the upper-middle or highest social positions. The greatest prevalence of high consequences (33 per cent) is found among men age 21-24 in the lowest and lower middle social positions.

Early sociological studies of problem drinking, based on institutionalized populations, revealed a heavy lower-class weighting. Studies based on alcoholics seen in special alcoholism treatment programs and members of Alcoholics Anonymous have found in these populations a heavier weighting of alcoholics in the middle and even in the upper social strata, of course reflecting, in part, factors of social selection in these particular samples. The weighting of problem drinkers in the lower social strata revealed in these data from probability household sampling is especially significant, because the sampling excluded the institutionalized and the homeless who would weigh the distribution even more heavily toward the lowest class. These findings show high-consequence drinking to be three times more prevalent in the lowest than in the upper-middle and highest social classes. They compel a modification of recently common perceptions which held that problem drinking was relatively well distributed throughout all social classes.

5) In addition to age, socioeconomic status and religion, other significant independent correlates of problem drinking are large city residence, childhood deprivations and race. Among the various correlates of problem drinking, environmental factors predominated for the most part, although certain personality characteristics such as impulsivity and lack of ego resiliency were found to be significant.

The overwhelming significance to problem drinking of such social factors as age, socioeconomic status, urban residence and race, as identified by Cahalan's study, makes it incumbent upon students of social behavior to concern themselves with the formulation of social policy aimed at effective intervention as well as with policies concerned with responding to the more usually identified consequences of problem drinking.

Persons who drink in defiance of restrictions tend to drink heavily

More drinkers in dry areas than in wet areas tended to have drinking problems
CONCEPTUALIZATION AND DEFINITION

As with many fields of human inquiry, so with the scientific study of alcohol; the more knowledge we have gained, the more difficult it has become to conceptualize and communicate what we think we know. In particular, increased inquiry and study have demonstrated many varieties of pathological drinking and associated problems. These have been identified by almost as many varieties of descriptive terms. Without some agreed-upon, behaviorally based definitions, such commonly used terms as “alcoholism” or “problem drinking,” or “addictive drinking” have little value. As an example, the estimate of more than nine million alcoholics in the United States, which is being used by the National Institute on Alcohol Abuse and Alcoholism and has been generally adopted by the popular media, was based on evidence from epidemiological studies reported by Cahalan and his associates which covered numerous varieties of problem drinking, including but not restricted to alcoholism. Thus, a sudden jump in the “official” national estimate for the number of alcoholics from a figure of “five to six million” used by the National Advisory Committee on Alcoholism in December, 1968 to the figure of more than nine million used by the NIAAA in December, 1971, is indicative of how changes in the use of terms can alter perceptions and give a false illusion of change in the nature of a phenomenon.

Many of the differences in perception about the nature and magnitude of alcohol problems can be traced to differences in terminology and in the particular categories of problems that are included under such terms as “alcoholic,” “problem drinker,” “addictive drinker,” “alcohol dependence,” and even such terms as “drinker” and “abstainer.” Obviously, the precipitous change in official national estimates of alcoholism from five to nine to 10 million over a three-year period does not reflect sharp changes in drinking patterns and problems but merely differences in labels and what they stand for.

Viewed retrospectively, it appears that many of the perceptions that we have about alcoholism have been to a great extent both determined and influenced by the methodologies that have been used in studying alcoholics and drinking behavior. Each method employed thus far has altered previous perceptions, but each has its own built-in limitations, so that we still must accept the fact that there are many important as yet unanswered, and also as yet unasked, questions.

In an effort to provide some conceptual clarity, I shall discuss here several of the most commonly used terms for classifying drinking behavior. However, before proceeding to examine various classificatory terms in current use, it is necessary to review, with historical perspective, how some of our current perceptions about alcoholism and related problems have been derived. Since the serious scientific approach to the study of alcohol prob-
blems dates only to the late 1930s and is symbolized by the founding in 1940 of the *Quarterly Journal of Studies on Alcohol*, it is appropriate to begin our historical review with conceptions that prevailed in the early 1940s. At that time, studies of alcoholism were limited to the then visible and captive population of alcoholics. These included, primarily, studies of mental hospital patients, jail inmates, and some descriptive reports from skid row. The general public took comfort in thinking of these groups as the core of alcoholism, and this assumption helped to sustain the stigma with which alcoholics were held. Since alcoholism was described primarily in terms of the characteristics of these captive groups, it was relatively easy for other people who repeatedly drank to intoxication to deny their alcoholism, for they had not been jailed or incarcerated in a mental hospital, and they still held on to family and employment ties. It was also rather comforting for the average citizen to be able to speak of friends, neighbors, or relatives as people who sometimes drank too much but certainly weren’t like those people called alcoholics. When alcoholism was suspected in a relative or fellow employee, family and friends usually conspired with the alcoholic to deny his problem or at least keep it “hidden in the closet.” Studies in the early 1940s of jail, mental hospital and skid row populations reinforced the stereotype, but also paved the way for a major reconceptualization.

Two factors brought the more respectable alcoholic—husband, father, fellow worker, neighbor and friend—out of hiding. One was the emergence of Alcoholics Anonymous which had, in its early days, a special attraction for men and women with long histories of problem drinking and a motivation, out of desperation, to find help. Although open to all alcoholics and offering its services in hospitals and jails, A.A. had then, and has continued to have, its greatest appeal and success with alcoholics who have some remnants of community or family stability and some employability.

A second major factor was the development of the community outpatient clinic approach to the treatment of alcoholics. Ironically, the prototype Yale Plan Clinics of 1944 and most similar programs which were rapidly developed throughout the country in the late 1940s justified their original funding by promising to reduce the public investment in jails and mental hospitals. Actually, they had little impact on such populations but developed instead an immediate and major clientele from among the more stable elements of society. By the late 1940s, both A.A. and the outpatient clinics provided a newly recognized population of alcoholics. Alcoholics Anonymous members and clinic patients tended to be similar in that they usually reported having long histories of progressive problems with drinking. Often there was cross-referral and duplication in these two populations. The characteristics of the first 2,023 male patients seen in nine outpatient clinics, as studied by Bacon and myself in 1950, were so different from the prevailing stereotypes that we entitled our report “Alcoholism and Social Stability,” and used the term “occupational integration” in the subtitle. Numerous subsequent studies picked up the emphasis that a majority of alcoholics were not fallen skid row, jail, mental patient types, but men and women who were struggling to maintain family and job stability and integrity.

Even prior to this, in 1946, Jellinek published a paper on the phaseology of alcoholism that was based on the responses of 90 members of Alcoholics Anonymous who happened to respond to a questionnaire prepared by some of their fellow members. When he prepared this paper, Jellinek pointed out...
that the sample was ridiculously biased, the questions scientifically imperfect, and the findings limited by retrospective recall. However, the data represented something entirely new to the field and Jellinek was challenged to see what kind of sense he could make of them. He acknowledged privately that the paper represented a kind of a game.

Of significance here is the impact which Jellinek’s original phaseology had on the field of alcohol studies. It provided a neat, sequential, pat life history of alcoholism. Soon it had been popularized in numerous versions, and some pamphlet listing the phases was often one of the first pieces of literature an alcoholic saw when he entered a clinic or A.A., or the first thing he heard when he attended a talk or lecture. It is my thesis that, quite unintentionally, Jellinek’s phaseology became the self-fulfilling prophecy for subsequent studies of the drinking histories of long-time alcoholics. Because all alcoholics had experienced at least some of Jellinek’s phases, and the description of the phaseology was clearer in the minds of most alcoholics than their hazy memory of their own actual experiences, they tended to recite the phaseology as their own.

Because the phaseology study was based on the reports of men who had by and large progressed into alcoholism over a period of 15 to 20 years of increasingly problematic drinking, the progression phenomenon became reinforced as a major characteristic of alcoholism. The image of progression into alcoholism over a long period dominated both assumptions and the research designs which supported them until into the 1960s. As an example, when Bacon and I identified a segment of college students who were repeatedly getting into trouble because of drinking, we felt obliged, in 1953, to label them “potential problem drinkers.”" Because they did not fit the prevailing assumptions about problem drinking, we felt we had to label them “potential.” In retrospect, it is obvious that at least some of these people were quite clearly problem drinkers at the time of our study when they were in their late teens or early twenties.

Against this background, I now believe that most studies aimed at identifying characteristics of alcoholics in society have had built into them some self-fulfilling prophecies. First, our perceptions that alcoholics were largely the chronically arrested or mentally ill limited what we studied to these types. Then, with changing perceptions, based on A.A. membership and clinic patients, the popularization of Jellinek’s phases so contaminated the subject population that their perceptions tended to predetermine that further studies would simply reinforce perceptions about phases and progression.

Reference has already been made to some of the findings of Cahalan’s epidemiological studies which, by introducing an element of longitudinal perspective, have suggested the presence of a remission phenomenon in problem drinking. Further studies aimed at differentiating problem drinkers who are capable of achieving remission and those who progress to alcoholism are essential. The follow-up study of college students has already, through its pretesting, identified both a remission pattern and a pattern of alternating in and out of problem drinking. When it is completed, by contributing to our understanding of changing patterns of drinking, problem drinking, and alcoholism as they are related to life experiences from early to middle adulthood, the study should also significantly contribute to the development of a more accurate conceptualization of different patterns and processes of drinking and of alcohol problems.

Alcoholics tended to recite the phaseology as their own.

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STUDIES IN BEHAVIORAL LABORATORIES

In addition to epidemiological and longitudinal studies, a third major source of important new perceptions about the nature of drinking behavior in certain types of problem drinkers is found in a series of studies first reported in the mid-1960s, based on the use of hospital wards as controlled human experimental laboratories.

This significant development in the study of alcohol problems has permitted direct empirical observations of the process of becoming intoxicated and the use of alcohol in drinking episodes. Prior to these studies, data about drinking processes were primarily restricted to the experiences which alcoholics reported retrospectively to investigators. In a 1972 review, Nancy K. Mello has discussed the status of these laboratory studies, along with a summary of her own collaborative research with Jack H. Mendelson.22

Subjects selected for study by Mendelson and Mello are described as having had histories of from five to 30 years of alcoholism and demonstrating the "pharmacological criteria" of dependence on alcohol or the appearance of withdrawal signs and symptoms upon the abrupt cessation of drinking and tolerance for alcohol or the need to "ingest progressively larger amounts of alcohol through time in order to produce a change in feelings and behavior which had previously been attained with smaller doses of alcohol." It was emphasized that use of these objectively measurable pharmacological criteria for addiction avoided the
problems of inconsistency and subjectivity that are encountered when alcoholism is defined solely in terms of social consequences or sociocultural values.

Subjects were volunteers, under 45 years of age, with no evidence of organic alcohol-related diseases, selected from a local correctional institution and abstinent for at least two weeks prior to the initiation of the research. They were studied on the research ward for periods of from seven days to three months. The subjects were described as "for the most part, homeless men with a history of repeated incarceration for public drunkenness."22

In these studies, a wide variety of experimental variations have been employed, aimed at comparing subjects' responses to drinking in situations involving both the programmed administration of measured doses of alcohol at regulated time intervals and a free-choice administration in which the subjects determined the volume and periodicity of their own alcohol intake.

Mendelson and Mello have interpreted their findings as rejecting the concepts of "loss of control," or craving, or the notion that every time an alcoholic starts to drink he feels compelled to continue until he reaches a state of severe intoxication. This is supported by laboratory observations in which subjects who were allowed to program their drinking freely did not generally drink to oblivion or consume all the alcohol available. Furthermore, in the laboratory experiments there was considerable evidence that subjects could, when motivated, control their drinking, and some subjects were observed to taper their drinking in order to avoid or moderate an abrupt withdrawal syndrome. Of special significance is the observation that, aside from "pharmacological commonality of tolerance for and dependence upon alcohol," the subjects showed "a persistent idiosyncrasy in their drinking patterns both within and between individuals studied over long periods of time."22

The significance of having controlled experimental studies of human drinking behavior employing such varying factors as quantity, frequency, timing, free choice, work tasks and social context represents a major breakthrough in the scientific study of alcohol.

However, while the investigators working in this field have correctly identified potentially serious limitations in descriptions of alcoholism that have been based primarily on nonverifiable recollections of alcoholics, a major possible flaw in human laboratory experiments must also be suggested. This is the contrived nature of the experimental situation, which may be particularly significant in the study of alcoholism. Because alcoholism is a form of dependency behavior, the drinking behavior of these subjects may be biased by conducting research in a setting in which many of the basic dependency needs of the subjects are automatically being met. Since the subjects in this research were described as, for the most part, homeless men with a history of repeated incarceration for public drunkenness, they were in all probability characterized by a complex variety of dependency needs which exceeded prevailing sociocultural norms for acceptable levels of dependency.

Numerous prior studies of homeless, chronic police case inebriates have identified a syndrome of dependency on custodial living. In 1951, based on a study of 444 homeless men seen on the Bowery in New York City, Raymond G. McCarthy and I described what we called "nonaddictive pathological drinking of homeless men" which is strikingly similar to the controlled-drinking, noncraving phenomenon described by Mendelson and Mello.
NONADDICTIVE PATHOLOGICAL DRINKING

Nonaddictive pathological drinkers are persons whose drinking repeatedly interferes with health or interpersonal relations or reduces effectiveness and dependability, but who do not experience such criteria of alcohol addiction as insatiability or loss of control over drinking. As observed from the reports of several hundred skid row habitues (who included both addicted and nonaddicted drinkers as well as abstainers), the nonaddictive drinker is primarily concerned with achieving a limited level of alcohol-induced oblivion from reality and with maintaining a state of alcoholic euphoria for a convenient period of time. In contrast to the addictive drinker who was striving for a peak effect from alcohol, the nonaddictive alcoholic seemed to be seeking a plateau. It was observed both that the nonaddictive drinker could control his drinking and that he would often plan it quite carefully in order to attain the most desirable combination of effect and duration within the limits of resources for obtaining alcohol and time for drinking. The nonaddictive pathological drinker was also described as being able to vary his drinking practices, apparently without severe difficulty. The similarities in findings between the 1951 study of 444 homeless men and recent reports of behavioral laboratory studies suggest that the pharmacological controlled experimental research has supported rather than contradicted sociological studies based on subjects' reports of their experiences. However, because the laboratory studies have used homeless men as subjects, I would suggest that they do not necessarily provide a basis for rejecting the concepts of compulsion or craving which are derived primarily from the reported experiences of nonhomeless alcoholics.

Further support for this interpretation lies in the fact that the laboratory setting for the pharmacological studies was in reality an institutional environment in which almost all of the basic needs of subjects were automatically being met. Particularly for homeless men of skid row, the pattern of dependency on jails, mental hospitals and other institutional settings is very closely interrelated with their pattern of alcohol use. Drinking, in fact, is almost always alternated with institutional living and is most important for these men when their dependency needs are not being met by institutions. For some, on occasion, deliberately induced public intoxication is used as a means to regain the protective custody of an institution. I have had a rare opportunity to study this phenomenon extensively through a 41-year retrospective and 27-year prospective life record of one such homeless problem drinker, Frank Moore, whose story, to be published in 1974, has provided an unusually detailed analysis of dependency behavior.
ALCOHOL AND DEPENDENCE

The concept of dependence has received special emphasis in relation to alcohol use in recent years. In an effort to bring some clarity to the classification of psychoactive drugs and to distinguish between physical and psychological mechanisms associated with what was generally referred to as drug addiction, the World Health Organization, in 1964, adopted the term "dependence-producing drugs" to replace "addiction-producing drugs." Drug dependence was defined by the WHO Expert Committee as "a state, psychic and sometimes also physical, resulting from the interaction between a living organism and a drug, characterized by behavioral and other responses that always include a compulsion to take the drug on a continuous or periodic basis in order to experience its psychic effects, and sometimes to avoid the discomfort of its absence." The WHO report carefully differentiated drug dependence which is only sporadic or infrequent in the population and in which adverse effects are
likely to be limited to the individual user, from forms of dependence which have a significant potential for becoming widespread and are “associated with behavioral or other responses that adversely affect the user’s interpersonal relations or cause adverse physical, social or economic consequences to others as well as himself.”

In short, the WHO committee recognized that drug dependence is a very relative condition in terms of its impact on individuals, its distribution in the population, and its impact on society. From the perspective of the social sciences, dependence (with or without drugs) is also a relative concept, and refers to many forms and varieties of behavior. A somewhat broader conception of dependence than that defined by WHO will be suggested here, in the hope that it may contribute to a clearer understanding of drinking, problem drinking, and alcoholism.

Although the term dependence, as applied to the use of alcohol and other drugs, implies necessity, or the sense of requiring the drug in order to meet some goal or need, dependence is actually a universal phenomenon of life. We all depend on food, pure air, water, rest and shelter in order to survive. Human beings particularly, because of the relatively incomplete nature of the newborn, are dependent on each other from birth. Most dependence behavior is functional in that it seeks the amount of a particular object or activity that brings satisfactions that can be measured physiologically and experienced psychologically. Thus, when we acquire the amounts and varieties of food that are compatible with our bodies’ needs at a particular time, we experience physiological relaxation and psychological sense of well-being. The same can be said for water, sex, rest, exercise and a whole range of basic and derived human needs, yet we are dependent on the various sought-after substances or body states in order to feel comfortable and to survive. At the same time, with all of these examples there is a point of satisfaction beyond which we experience physiological stress and tension rather than relaxation, and a sense of anxiety and foreboding at the psychological level. Thus, there is a point of overindulgence in every kind of activity at which the same behavior which has been functional in preventing stress and promoting satisfaction becomes excessive, dysfunctional and damaging. People who feel compelled to seek what for them is too much food, too much sex, too much exercise, or even too much sleep can be said to be dependent on an abnormal or pathological or destructive degree. This use of the term dependence is quite comparable to the concept of addiction.

Although the drinking of alcohol is certainly a less basic behavior than eating or sexual intercourse or exercise, the fact that most societies for thousands of years have known and used alcohol in a wide variety of contexts suggests that the functional dependence on alcohol to achieve a desired and useful state of mind and body has been and is a predominant form of human behavior. However, as far back as we can trace through recorded history, we also know that there have been societies in which some people have used too much alcohol. There are even suggestions that the demise or destruction of some societies may have been associated with the development of drinking customs whereby too many people were using too much alcohol.

The term dependence as currently applied to alcohol and other drug misuse is restricted to individuals who feel the need to use the drug in quantities, frequencies or situations which are either “too much” for their bodies physiologically to handle, or “too much” in terms of the intoxicating effect of the drug on their central nervous sys-

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tem behavior, or "too much" in terms of their inability under the toxic influence of the drug to meet social expectations and responsibilities or to avoid violating social rules or amenities. In other words, the term refers to dysfunctional or pathological rather than functional or normal dependence.

Within the context of dysfunctional dependence, I believe that three major categories of dependence on alcohol should be considered: physical, psychological and situational. Physical dependence on alcohol can be relatively clearly described in terms of specific behavioral manifestations, although the underlying mechanisms are still unknown. Usually it is a phenomenon which generally develops only after fairly heavy drinking over long periods of time has produced physiological changes so that the interruption of usual drinking practices can produce a clinically characteristic syndrome of withdrawal. However, withdrawal symptoms have been observed in subjects who have been drinking relatively moderately for only a few days. Common withdrawal signs include gross tremors, seizures, disorientation, hallucinosis and sometimes the classical delirium tremens.

Persons who develop physical dependence on most drugs other than alcohol reach a stage where their drug use seems more motivated by the need to avoid the frightening and life-threatening withdrawal experience than by the desire for satiation. Alcoholics, on the other hand, have tended to report that their compulsive drinking is associated with a craving for some intensive experience of alcohol-induced gratification or euphoria.

Although, as noted above, recent controlled experiments in human behavioral laboratories have led to the rejection by the investigators of the concepts of "craving," "loss of control," and "compulsion" as applied to the subjects under study,²⁷ the facts that the subjects were primarily homeless men and the experiments were conducted in an institutional setting have led me to suggest that these findings cannot, at this time, be assumed to apply to all alcoholics. Until or unless these laboratory findings are replicated under experimental conditions more similar to those of community living and with subjects in whom a nonaddictive form of pathological drinking has not already been demonstrated, I believe that the concepts of "loss of control" and "craving" should be retained as characteristic of physical dependence on alcohol.

Associated with physical dependence there may be an increase in tolerance to alcohol, although this is minor when compared with the tolerance frequently developed to opiates or barbiturates. In alcoholics, tolerance may merely mean that they can achieve a blood alcohol level of, say, 0.15 or 0.2 without demonstrating the gross evidence of intoxication that would be seen in most drinkers. Some alcoholics can also consume and retain greater amounts of alcohol day after day than would be possible for social drinkers. The effect of tolerance on levels of overdose also appears to be relatively minor. Of greater significance is the fact that persons who develop physical dependence on alcohol seem virtually compelled to consume amounts that will cause metabolic damage in the liver and often to damage other body tissues and organs. For this reason physical dependence on alcohol is commonly associated with alcohol diseases. Some of these problems are directly related to alcoholic malnutrition, a phenomenon common to individuals who obtain more than about 40 per cent of their caloric needs through alcohol and are thus deprived of adequate amounts of other important nutrients in their overall diet. It should also be stressed that many of the physiological concomitants of

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Physical dependence on alcohol is associated with alcohol diseases
Alcoholics may have a need to drink without demonstrating a withdrawal syndrome.

chronic excessive alcohol consumption, such as cirrhosis or cardiomyopathy, can occur in heavy drinkers who do not appear to be physically dependent on alcohol and have manifested no other apparent serious consequences of their drinking.

While all persons who have a physical dependence on alcohol are psychologically dependent as well, a very significant segment of alcoholics manifest a need to drink without demonstrating a withdrawal syndrome, tolerance or any of the usual disease concomitants of physical dependence.

Most references to the terms alcohol addiction or dependence on alcohol relate them to the “loss of control” phenomenon. Loss of control is manifested in two ways: the inability to stop once drinking has started and the inability to refrain under circumstances in which drinking is blatantly inappropriate. As described by alcoholics who have experienced it, loss of control over stopping usually develops in individuals who have been drinking heavily for some time and whose drinking with increasing frequency seems motivated by the seeking of a peak intensity of intoxication. It has been theorized that the association of alcohol with this particular form of painful gratification eventually leads to a kind of conditioned response so that with any exposure to alcohol the drinker feels impelled to seek this ultimate impact. For such alcoholics, this impulsive response remains even through long periods of abstinence from alcohol. That is, no effective mode of extinction is known, and so the recovered alcoholic is warned that he cannot ever drink safely. This phenomenon is sometimes described by saying that such alcoholics lack a terminal facility; once they start they cannot, of their own free choice, stop drinking until the episode has reached a peak and run its course. This pattern has also been referred to as “peak” alcoholism, in contrast to a “plateau” pattern where the alcoholic places greater emphasis on the duration than on the intensity of his intoxication.

Another major kind of psychological dependence that may or may not be associated with the inability to stop is the inability not to start drinking. For such individuals, a fear of being without alcohol seems to be the compelling force. Such fear can of course be associated with withdrawal avoidance, but in psychological dependence it is more an expression of the intensive need for alcohol-induced mood modification in order to face situations which, for the alcoholic, pose unbearable anxiety. The most threatening kinds of situations are often those which involve some testing of an individual’s capabilities under circumstances where success is very important. Common examples include taking an examination, being interviewed for a job, trying to make a sale or complete a contract, meeting an important stranger, or even making love to a spouse or providing a special treat for a child. For alcoholics, their need to become intoxicated in order to face the test is often most compelling in the very situations in which drinking is most inappropriate and self-defeating.

As noted earlier, dependence is a relative phenomenon and not always dysfunctional or abnormal. Psychological dependence on alcohol can exist in drinkers who have not lost control over the termination or the initiation of drinking, but who simply feel a desire for and usually seek alcohol in response to or in anticipation of a wide variety of somewhat stressful situations. These particular psychologically dependent drinkers are neither compelled to start drinking nor to continue drinking once they have started. They are simply responding to mood discomfort by resorting to one of the most readily available mood-modifying drugs. If such use of alcohol be-
comes incapacitating or leads to an inability to function without alcohol, this form of psychological dependence can rapidly change from functional to dysfunctional and the user would be considered an alcoholic.

Although not generally recognized in the literature, I believe that a third kind of alcohol dependence—situational dependence—should be identified and distinguished. Situational dependence is associated with psychological dependence when the psychological feeling of a need for alcohol is limited to certain kinds of situations rather than generalized to undifferentiated mood discomfort. The wife who regularly takes a drink in anticipation of her husband’s return from work and the husband who mildly fortifies himself at the bar before facing his family for dinner are both demonstrating a situationally specific psychological dependence on alcohol. In many such situations the use of alcohol may be quite functional. The wife may be more relaxed, more loving, more attractive; the husband less tense, more able to show interest in and meet the emotional and activity needs of his family. Only if such drinking increases to the point of interfering with rather than facilitating the individual’s ability to fulfill family and other responsibilities would it be considered a problem.

Situational dependence on alcohol can also exist quite apart from physical or psychological dependence. The customs of American and many other societies define numerous situations in which drinking, sometimes heavy drinking, is required in order to meet particular situational demands. Many salesmen feel that they must drink with their prospective customers because alcohol is an important factor in “softening” the customer for the sale. College students may have to drink in order to be accepted in fraternities or other peer groups. Factory workers may have to drink at a bar after work in order to be one of the boys. Army officers may have to demonstrate their ability to drink to attain desirable assignments or promotions. Diplomats may have to drink to meet expectations of protocol. These are just a few examples of countless social situations in which drinking is perceived as expected or required behavior. Because individuals vary in their capacity to handle alcohol comfortably, in many of these situations the socially required amount of alcohol consumption may far exceed the limits at which some individuals can drink in comfort and safety. Physical and psychological dependence on alcohol does develop out of such situational drinking, but for some drinkers, including those who become problem drinkers, the dependency factor may remain primarily situational.

It is my belief that these situational drinkers account for most of the remission phenomenon that has been identified by Cahalan and others to account for the decrease in the prevalence of problem drinking in American males after their mid-twenties.

The concept of situational dependency can also help explain why some problem drinkers report a history of moving “in and out” of problem drinking patterns at several different periods of their life. I am not speaking here of alcoholics who go “on the wagon” for prolonged episodes, while basically continuing to crave alcohol or at least feeling they must religiously abstain in order to maintain sobriety. I am referring to men and women who for certain significant periods of time in their lives have been repeatedly using alcohol in ways which led to problems, while for interspersing significant periods of time they have been able to drink moderately or abstain comfortably. It is my suggestion that problem drinking for these people is primarily situationally related and that as their work or other situations requiring excessive drinking have changed they

Situational dependence is limited to certain kinds of situations

Situational drinkers account for most of the remission phenomenon

continued
have been able to modify their drinking patterns accordingly. An example might be found in the young man who first experienced problem drinking in high school or college while trying to gain peer group acceptance or join a drinking fraternity. Having demonstrated that he could drink heavily, he may have been able to relax into a more comfortable consumption pattern without experiencing problems. Some years later, a job situation might again require regular drinking in amounts which for him are "too much," with such complications as intoxication, traffic accidents, missed appointments and marital stress. Assuming simply situational dependency, a change in job, for this man, could solve his drinking problem until or unless he should later meet another setting in which heavy drinking is required to fulfill situational expectations.

Situational and psychological dependence are often combined in people who use alcohol in situations when their psychological dependency needs are not being otherwise met, but who can be quite comfortable without alcohol as long as they are in a protected environment. A prime example is found among the population of homeless men whose way of life takes them in and out of the revolving doors of our jails, public infirmaries, mental hospitals, live-in menial jobs and skid row shelters. As noted earlier, most of these men display a syndrome of institutional dependency. Retrospective studies of the life histories of homeless men have revealed that a majority have come from broken families and have experienced some form of institutional living, either in childhood, during the adolescent years, or both. In particular, these men missed the normal transition which most people in our society experience from dependence on a parental family to independence with respect to obtaining basic necessities of living, value orientation, decision making, expression of initiative, economic roles and close interpersonal associations. As a result, they tend to be undersocialized and often unprepared to cope with even the simplest amenities of relating to other people and meeting their own needs in a community setting. A similar problem has been identified for people who spend significant periods of time as adults in prisons, long-term hospitals or other institutions and become desocialized for community living.**

Quite typically, institutionally dependent persons turn to alcohol to help dull the intense feelings of anxiety, inadequacy, helplessness and degradation which they experience when their dependency needs are not being met through institutional living. Their drinking is more often oriented to achieving a plateau rather than a peak of intoxication, for they want to use such resources as they have to maintain an alcohol-sustained antidote for their discomfort for as long as possible. When they do get very drunk it is often in a deliberate attempt to regain custodial security. Although the homeless, skid row population includes many types of alcoholics and problem drinkers, all forms of alcohol dependence in various combinations, and nondrinkers as well, it has been demonstrated that for many of these men their drinking is primarily situational and involves the substitution of dependence on alcohol for dependence on institutional living. Although their need to drink when outside of an institution is manifested in terms of acute psychological stress, it is situationally specific. Also, although obviously the option to drink is not available inside of most institutions, homeless men who are primarily situationally dependent on alcohol report that they don't have a particular desire to drink within the security of an institutional setting.

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A PARADIGM OF ALCOHOL USE AND ABUSE

In the preceding sections, several different approaches to classifying and labeling behavior associated with problem drinking and alcoholism have been reviewed. If one thing is clear from these discussions, it is that the field lacks clarity. In an effort to bring some greater precision and ease of conceptualization, Mark Keller recently suggested a simple paradigm for classifying alcohol use. This is depicted in the accompanying chart. In American society, we assume that the total population is roughly divided between drinkers and abstainers or non-drinkers. We assume that at any one time about 10 per cent of the drinkers are problem drinkers and that perhaps half of these are alcoholics.

Nondrinkers include all individuals
who are not using and have not, for some stipulated period of time, used any form of alcoholic beverage. I am suggesting that abstention for at least a year be considered as the time criterion for nondrinker classification. Also, I would include as nondrinkers those persons who may have occasionally, even within a year, experienced just a small taste of alcohol as an experiment, a joke, or in order to comply with some particularly forceful social convention. Nondrinkers in the United States include most individuals under the age of 10, perhaps 60 per cent of those between 10 and 18, and probably no more than 30 per cent of those 18 and over.

Drinkers include all individuals who have used some form of alcoholic beverage within a year's time (except occasional tastes as an experiment, joke or convention). Drinkers comprise about half of the total population. Some undetermined number of people move back and forth between the status of drinker and nondrinker, but this group probably comprises no more than five or 10 per cent of each category in any one year. For at least the last 30 years in the United States the proportion of users has risen by only a few percentage points. The majority of drinkers, probably 90 per cent, are social drinkers. That is, their use of alcohol is primarily related to achieving mild relaxation, complying with social conventions and/or enhancing social conviviality. They usually drink in ways which cause no problems for themselves or others. Social drinkers may experience occasional isolated incidents of intoxication, but these will usually occur in protected settings. They may even experience an incidental complication of intoxication or an incident of problem drinking. However, if and when such problems occur with any repetition, the social drinker is considered a problem drinker.

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Within the overall category of drinkers, roughly 10 million persons can be classified as problem drinkers. This figure corresponds with the estimate of the National Commission on Marihuana and Drug Abuse for persons who show what they call a “prevalence of intensified and compulsive use of alcohol.” Unfortunately, the Commission’s description of this group, while vaguely connotative, falls short of providing a behaviorally descriptive definition. For operational purposes in this essay, I am suggesting that problem drinkers be defined as individuals who repeatedly use alcoholic beverages in ways which for them lead to problems of health or interpersonal relationships, destroy their sense of self-worth, or interfere with their abilities to carry out their basic responsibilities to family, job and community in accordance with prevailing social expectations. This is a functional definition. It takes into account a possible biological basis for suggesting that different people can handle alcohol differently because of variations in chemical sensitivity to alcohol, or in metabolic efficiency in handling alcohol, or because of some other as yet unidentified and still not demonstrated factors of significance. The definition recognizes considerable variation in the ways in which different patterns of drinking (quantity, frequency, situation) affect different people. It allows for variations in the drinking capability of people at different times in their lives and for variations in the relative acceptability of different drinking practices and their outcomes in different social settings and in relation to different cultural norms. The definition excludes individuals who may incur a problem or problems in connection with an isolated experience of intoxication, serious as the incidental problem may be. The essential elements of our definition are that at the time an individual is classified as a problem drinker, his particular patterns of drinking are repeatedly causing problems, either because of the direct impact of alcohol on his body or mind, or because of inappropriate acts of omission or commission associated with his behavior while under the influence of alcohol or in a state of post-intoxication incapacitation. It is important to stress that this definition of problem drinking is not related to any specific quantities or frequencies of drinking. Quite clearly, what is one man’s social drinking may be another man’s problem drinking. Nevertheless, most problem drinkers frequently consume large amounts of alcohol.

Just as people can move back and forth between the categories of non-drinker and social drinker, so there is reversibility for some problem drinkers back to social drinking or non-drinking status. Data from studies by Cahalan and associates,9 11 and by Bacon and Fillmore,10 that have already been discussed demonstrate the existence of a remission phenomenon for a significant segment of problem drinkers. However, within the category of problem drinkers is found another significant segment, perhaps half of all problem drinkers, who have lost control over their ability to stop drinking once they have started, to refrain from drinking in inappropriate circumstances, or both. These are addictive drinkers, or alcohol addicts, or those labeled by WHO as having “drug dependence—alcohol type.” These, I am calling alcoholics. They are the group generally estimated to number about five or six million in the United States. They are distinguished from other categories of problem drinkers by the fact that they are suffering from a complex and not fully understood syndrome characterized behaviorally by the apparent compulsive need to use alcohol in self-destructive ways. For the alcoholic, according to current knowledge, there is no cure in the
sense that they can return to controlled forms of drinking. Their choices are restricted to gradual self-destruction and death or adherence to strict abstinence from alcohol, often with considerable accompanying stress. Most alcoholism develops after fairly long periods of increasingly heavy drinking, and therefore most alcoholics have progressed through phases of social drinking and nonaddictive problem drinking. However, there is evidence that some individuals move rather directly from social drinking to alcoholism without manifesting any nonaddictive problem phase, and there may be some people with particular sensitivities to alcohol who move from nondrinkers to alcoholics rather rapidly after their first exposure to alcohol.

The principal actions of alcohol associated with most behavioral definitions of problem drinking and of alcoholism involve the central nervous system and the intoxicating effects of alcohol on motor function, perception, memory, decision making, judgment and other essentially brain-centered functions. These are the actions of alcohol as a drug in the psychoactive or behavioral modification sense. In addition to its impact on CNS behavior, alcohol is known to affect other body systems and to be associated with a number of specific pathological which I will call alcohol diseases. These can include some forms of hepatitis, cirrhosis, gastritis, various hematological disorders, cerebral degeneration, peripheral neuropathy, cardiomyopathy, and several nutritional diseases. In the United States excessive alcohol intake is said to account for as much as 85 per cent of all cirrhosis, and alcohol is being increasingly suspected as a major contributing factor to diseases of other major body organs and systems. The significance of alcohol to morbidity in general is dramatized by several indications that around a third of the male patients in most general hospitals at any point in time are problem drinkers, although few such patients are hospitalized for the specific treatment of drinking or with a direct diagnosis of alcoholism. These are patients with neurological, cardiological, hepatic, pulmonary, orthopedic and other problems who are also chronic heavy drinkers. Most can be said to be suffering from alcohol-related diseases, although there is far from agreement on the relationship between most of their diseases and their alcohol consumption. Some theories blame the direct action of the excessive fat contained in alcohol; others point to alcohol as an irritant; others blame malnutrition caused by the fact that heavy drinkers meet their need for calories through alcohol and neglect diets which provide vitamins, minerals and other nutrients required for good health; others suggest that alcoholics purposefully avoid other food, not because of caloric satiation but in order to enhance the effect they experience from alcohol when they do not eat; others suggest that there are metabolic factors associated with or resulting from alcoholism which prevent alcoholics from properly utilizing the foods they eat. Although alcohol diseases are generally associated with alcoholism and persons diagnosed as having such diseases are almost invariably so labeled by physicians and other medical personnel, it should be stressed that alcoholism in the addictive sense is not a prerequisite for alcohol diseases. In fact, a significant amount of alcohol-related liver cirrhosis, cardiomyopathy and other pathologies is found in persons who have records of heavy drinking but who have manifested none of the other behavioral criteria of either alcohol addiction or nonaddictive problem drinking. For these drinkers and their families and associates, the onset of an alcohol-related organic disease may provide the first suggestion that they have any problems associated with drinking.

About a third of the male patients in most general hospitals are problem drinkers

Addictive alcoholism is not a prerequisite for alcohol diseases
THEORIES OF ETIOLOGY

Until relatively recently, the search for an understanding of the causes of alcoholism has been impeded by the tendency toward undisciplinary approaches and the blinders associated with adherence to the theories or methods of single disciplines. Theories of etiology have been associated with three major disciplinary directions: biological, psychological and sociocultural.

Many studies have been concerned with an effort to identify some specific factors of metabolism or nutrition or endocrine balance or neurological mechanism which can be said to cause alcoholism. The question of a possible hereditary factor in alcoholism has been repeatedly raised by increasing evidence that alcoholism does tend to run in families. At this time, a general evaluation of biological research on the etiology of alcoholism suggests that although a number of possible contributing factors have been identified, there is as yet no conclusive evidence of direct cause and effect. Instead, most research supports a theory of multiple causation. In this connection, Mendelson and Mello have suggested a useful paradigm of alcoholism modeled after the infectious-disease model which assumes the interaction among host, agent and environment.23

Even assuming several interacting contributing factors, the impact of excessive alcohol intake on body tissues and mechanisms is such that it may never be possible to determine which apparent etiological factors may make
A person prone to alcoholism and which factors may develop as a result of heavy drinking and contribute to the further development of alcoholism or to the manifestation of some of its concomitants such as one or more of the various alcohol diseases. In this connection, Harold Kalant has observed:  

**With the expansion of knowledge on functional interrelations, it has become clear that the metabolism of the liver affects the function of the central nervous system, that neurological and peripheral sensory stimuli acting on the central nervous system affect the release of various hormonal factors, that the resulting hormonal imbalances affect the metabolic behavior of the liver and of all other tissue, including the brain and so on and on. Because of this, it has become very difficult indeed to pick out those effects of alcohol which are primary, and those which are secondary and nonspecific consequences of the disturbance resulting from alcohol.**

Psychological theories about the causes of alcoholism are as numerous and varied as theories about human behavior itself. Roebuck and Kessler have classified these under six headings. First there are the effects of alcohol, due to its chemistry and pharmacological properties, on the human mind and body. These effects include those that are neurophysiological, such as brain waves or cerebral dysfunctions; other physiological effects, such as blood chemistry, metabolism, respiration, cell and tissue structure and liver or endocrine function; effects on psychological response, such as reaction time, motor, auditory and visual skills and articulation; effects on psychological arousal, such as relaxation, sedation, aggression, inhibition, euphoria; and effects on perception and cognition, such as decision making, attention and thinking, form perception, organization and time, space and color perception, hearing and vision.

The second group of psychological theories are labeled “reinforcement orientation” by Roebuck and Kessler. These include the applications of learning and stimulus-response theories which see the alcoholic drinking for the effects produced by alcohol. For the alcoholic these effects, devastating as they may be, are reinforced because they meet some need, such as helping him to alleviate unbearable feelings of stress or anxiety or inadequacy. Eventually alcohol use is conditioned as a response to these feelings or to experiences with which they are associated.

The third set of theories, labeled “transactional orientation,” focuses on the meaning of alcohol in “interpersonal transactions” (rather than in “intrapsychic processes”). Emphasis here is placed on the meaning of alcohol use and intoxication to specific social roles and the reinforcement of alcoholism within a social context. Claude M. Steiner has termed this process the “alcoholic game.” There are some parallels between these theories and the concept of situational dependence on alcohol suggested earlier.

The fourth category of psychological explanations for alcoholism is derived from psychoanalytic theories. These are quite varied and relate alcohol misuse to such processes and problems as regression, oral passivity, latent and overt homosexuality, deficient ego functioning, masochism, hostility and identification problems. A fifth approach, labeled the “field dependence orientation,” is based on various tests of perception designed to help identify a hypothetical alcoholic personality. A sixth approach focuses directly on efforts to delineate particular traits of an alcoholic personality.

On the basis of their review and analysis, Roebuck and Kessler conclude that “the general theme best characterizing the psychological approach to alcoholism is one depicting **continued**
the alcoholic as an escapist—alcohol being the means of escape. The type of personality most frequently associated with alcoholism is a passive-dependent one.” They suggest that “alcoholics are basically dependent personalities which have turned to alcohol as a means of escape from internal or external stress.”

Social scientists have approached the study of alcoholism primarily by considering the cultural components of drinking, including varying beliefs, attitudes, values and practices associated with alcohol use in different societies and among members of different subgroups within societies. This approach has been supported by the truism that alcoholism and problem drinking occur only among persons who happen to participate in the customs of drinking, and also by the observation of striking differences in the types and prevalence of drinking problems that have been identified with variations in drinking customs and in the beliefs, attitudes and values which are transmitted through group behavior on the ways in which individuals drink (or abstain).

R. F. Bales has suggested three general ways in which culture and social organization can influence how people use alcohol. First are the factors in the society or culture which create a high volume of inner tension for individuals, such as culturally induced anxiety, guilt, conflict, suppressed hostility and sexual tensions. Second are culturally supported attitudes about drinking and intoxication which determine whether drinking or intoxication are acceptable modes of behavior for seeking tension relief, and also cultural norms regarding just how much tension an individual is expected to endure before seeking relief. Third are the alternative modes of tension resolution provided by the culture. Bales’ theory, expounded nearly 30 years ago, has been tested in numerous studies of different cultural and social groups within the United States, particularly the Irish who have demonstrated relatively high rates of alcoholism among men, and Jewish, Italian and Mormon groups which traditionally have been noted for low rates of problem drinking. Of striking significance has been the fact that such studies have clearly demonstrated an association between the strength of traditional cultural norms and the impact of such norms on drinking behavior and problem drinking. Furthermore, as Jews, Mormons and others whose drinking is influenced by religious sanctions have moved from orthodoxy toward secularism in their religious identifications, the impact of religious norms on drinking behavior has lessened and the patterns of drinking have become more closely related to those of the larger society. The same phenomenon has been observed according to selected ethnic identities. As individuals have moved from the close-knit communities isolated from the rest of society that were particularly characteristic of first-generation immigrants toward residential and cultural assimilation within the larger society, their drinking behavior and drinking problems have changed accordingly. For Jews, Italians and others from traditionally moderate drinking cultures, at least two factors seem to be operating to increase their vulnerability to problem drinking or alcoholism. One is the exposure to a whole new set of sanctions and purposes for using alcohol in ways that involved more frequent consumption of larger amounts. A second factor for persons who begin to drink in quantities, frequencies, situations, or with consequences which are in conflict with the norms of their basic cultural identities is the probability that they feel quite guilty about their drinking. If guilt about drinking is sufficiently stressful, there can develop a self-perpetuating situation in
which the effects of alcohol become meaningful as a way of alleviating the feelings of guilt brought on by the act and manner of drinking.

A cultural theory of alcoholism can be summarized by noting that societies and sub-groups within societies vary greatly in their drinking customs and in the extent to which predominant drinking practices appear to be functional, dysfunctional or ambiguous. Generally speaking, few problems are associated with drinking in societies that define alcohol as a food or a condiment, where alcohol has important symbolic religious or ceremonial meaning, where drinking is treated as a matter of course, where the goals of drinking are associated with conviviality or enhancing social occasions, and where there are consistent sanctions against intoxication. In contrast, the problems of alcohol are more prominent where customs define drinking as a way of dealing with problems of stress or of asserting oneself, where the circumstances in which drinking takes place focus special attention on obtaining and consuming alcohol, where prevailing sanctions condone or commend intoxication, where factors such as legal limits on drinking serve to enhance the consumption of alcohol as a status symbol, and where individuals experience conflicting subgroup norms regarding the propriety of drinking.

Two studies already discussed in this review have provided additional dimensions for considering sociocultural factors in problem drinking. The Drinking in College study provided baseline data on a broad range of social characteristics associated with a range of drinking practices, including patterns of problem drinking and abstaining. The 20-25 year follow-up of this study will provide an opportunity to determine what combinations of social and drinking variables are associated with changes in drinking practices and problems, and also what new variables occurring over time are particularly related to changes in drinking status. The epidemiological research of Cahalan and his associates has already identified such factors as socioeconomic status, large-city residence, age, childhood deprivations, race and religion as primary independent correlates of problem drinking, along with a number of so-called environmental influences and perceptions and some social psychological correlates such as impulsivity, tolerance of deviance and alienation, and lack of ego resiliency.

In concluding this brief consideration of etiological factors in alcoholism and problem drinking, it is important to acknowledge numerous recent suggestions that heredity may play an important role in contributing to alcoholism. The question of genetic predisposition to alcoholism is by no means new and has been raised repeatedly by studies which have focused on preference for alcohol in animals, on a possible relationship between alcoholism and color blindness, on attempts to correlate alcoholism with blood groupings, and on comparisons of separated twins.

Recent reports that indicate a high probability of alcoholics having blood relatives who are also alcoholics have renewed interest in the genetic question. The December, 1971 report of the National Institute on Alcohol Abuse and Alcoholism concludes that, although the possibility that humans may inherit a predisposition for alcoholism (or an immunity to it) has not been ruled out, the existing evidence for a genetic inheritance is unsatisfactory. Therefore, the report suggests that “the onset and development of alcoholism is not solely under biological control.”

Roebuck and Kessler, after reviewing the literature of the last 30 years dealing with genetic, physiological and biochemical variables, conclude that
there is evidence of some hereditary predisposition factors in alcoholism. However, they believe that there is not an hereditary predisposition toward alcoholism per se, but that there are factors of heredity which predispose "an individual to many types of pathological behavior patterns," and that "one of these ... under certain environmental conditions might be alcoholism."

In order to account for the relative frequency with which alcoholism tends to reoccur within families, more than a genetic explanation is required. Like theories of alcohol causation in general, the clustering of alcohol in families also requires a multidimensional and open theory of cause. An open theory allows for the possible presence of as yet unidentified factors of biochemistry or metabolism or other genetically determined characteristics which may make individuals more susceptible by increasing or decreasing sensitivity to alcohol, impeding or accelerating the metabolic process, or affecting the action of alcohol on the central nervous system or on body tissues. In the meantime, in the absence of evidence for such a factor there are some quite obvious psychological and cultural theories for suggesting why the children of alcoholics seem more likely to become alcoholics than the children of nonalcoholics. First, there are cultural factors that contribute to the family environment. Most alcoholics have come from backgrounds in which the cultural norms either supported and provided frequent opportunities for drinking for the purpose of intoxication, or condemned drinking altogether. Rarely are families of alcoholics neutral on the subject of drinking. Either drinking or heavy drinking is supported as a rationalization for supporting the alcoholic consumption patterns of one or both parents, or drinking is condemned because of the impact it has had on a parent. In either event, the use of alcohol to excess is modeled for most children of alcoholics, and often the child is torn between identification with the alcoholic parent or the suffering other parent. Ambivalence about his feelings toward the alcoholic parent is usually associated with ambivalence about alcohol, but however the child may feel or think he feels, alcohol is an important factor in his life.

Added to conflicting customs and feelings about alcohol, the child of an alcoholic parent has a good chance of growing up in either a broken home or in one in which experiences inconsistencies in his relationship with both parents. The alcoholic who is often a kind and considerate, sometimes overbearingly affectionate individual when sober, may become cruel, hostile or withdrawn when intoxicated. The nonalcoholic parent, responding to contrasting mood swings in the alcoholic spouse, may appear equally inconsistent to the child. Inconsistencies in the affection, support and security offered by one or both parents can have a profound impact on the child's own sense of security and his sense of self-worth and contribute to a so-called dependent personality. If, as some theories suggest, persons who suffer from greater than usual feelings of anxiety, insecurity and dependence are more prone than others to use alcohol excessively, the psychological environment of an alcoholic home can quite logically contribute to alcoholism proneness in children. Although twin studies have been suggested as the most promising method for investigating the hereditary questions in alcoholism, the number of variables involved in a theory that includes cultural, environmental and psychological factors along with numerous possible genetic considerations, poses serious problems for the construction of a satisfactory experimental design.
STIGMA AND DERIVED STIGMA

For years, a major roadblock in combating the problems of alcoholism has been the factor of stigma with which the alcoholic and those associated closely with him have been held by the larger society. Although much has occurred in recent years to combat stigma, it is deep rooted and still tenacious. In order to understand the background for contemporary feelings about alcoholism, some historical perspective regarding attitudes toward drinking and drunkenness is desirable.

Although the drinking customs and attitudes of the American population reflect a configuration of practices and beliefs and feelings that have come from many parts of the world and many cultures, contemporary beliefs, feelings and responses toward problem drinking and alcoholism include a survival of attitudes which were developed during the 18th and 19th centuries and which have stoutly resisted change. These attitudes emerged at a time when the population of this country included large numbers of unattached male immigrants who were deprived of the gratifications, responsibilities and stability of family living.
and not subject to the control of family sanctions. For this element of the population, the frequent use of alcohol to the point of intoxication became a characteristic way of life. Because such drinking practices were often accompanied by wild, destructive behavior, they became a major issue of social concern. Intoxication was seen as a threat to the personal well-being and property of peaceful citizens, and the loss of productive manpower through drunkenness was seen as a threat to national vitality and economy.

It was against such a background that social concern about drinking began to be expressed in the latter part of the 18th century through the temperance movement. In its origin, the temperance movement was directed at excessive drinking and was concerned specifically with distilled spirits. It condemned drunkenness on moral, medical, economic and nationalistic grounds and advocated governmental controls. During the first part of the 19th century, the temperance movement became identified with almost every facet of social life in America. It involved not only religious organizations, but the national Congress and state legislatures, organizations of farmers, business men and educational leaders, and there were even temperance hotels which advertised that they did not offer distilled spirits for sale. Sometime before the middle of the 19th century, several changes took place that altered the concepts and goals and the place of the temperance movement in our social structure. First, there was a shift of emphasis from drunkenness to drinking, from moderation to abstinence, and from distilled spirits to all alcoholic beverages. There was also a shift from a reliance on moral persuasion for moderation to proposals for legal enforcement of total abstinence. Finally, women began to succeed men as leaders of the temperance movement, and it became associated with programs advocating suffrage and higher education for women. Gradually, the movement became more radical, more militant, and it lost the support of the more stable and respected community leaders. But the temperance movement has continued to be an important force with respect to American drinking attitudes. Waves of state prohibition occurred in the 1850s, the 1880s and 1910s, resulting finally in national prohibition from 1919 to 1933. Even today, legal prohibition prevails in hundreds of counties under local option.

While the temperance movement and issues of prohibition dichotomized public attitudes and feelings into two ideological and political camps, the “drys” and the “wets,” there was one point on which these opposing forces could agree. This was on the condemnation of the conspicuous, chronic public drunkard, who until well into the 1940s symbolized alcoholism for the vast majority of Americans, drinkers and abstainers, layman and professional alike. Drys condemned the drunkard or alcoholic as the worst example of the many evils associated with the sin of drinking. If drinking was immoral, then the drunkard represented the wages of willful sin. Wets saw the drunkard as the symbol of provocation for drys and as providing drys with a persuasive issue with which to promote prohibition. Wets, too, tended to stigmatize the public drunkard as a willful and immoral nuisance. Because of the temperance movement’s emphasis on irresponsible drunkenness among “lower” elements of society, and “respectable” wets’ convenient blindness for overindulgence among the good people who constituted their family, friends and neighbors, both militant extremes perpetuated a stereotype through a hundred years of changing drinking patterns and practices which assumed that alcoholism and the real problems
of alcohol were primarily restricted to those skid row, derelict or mentally deranged elements of society, who were the most convenient targets for stigma.

As noted elsewhere, changes in public perception and attitude toward alcoholism date only from the mid-1940s and are associated with the development of Alcoholic Anonymous and of the community clinic movement, both of which brought into recognition a significant segment of people who were at the same time alcoholics and struggling to retain social respectability and stability.

In the 1970s, the general public in the United States has made great strides in rejecting the stigma of alcoholism. References to alcoholics and alcoholism have become commonplace in the mass media, and successful people are increasingly identifying themselves as recovered alcoholics. The federal government, which until the late 1950s totally neglected the problems of alcohol, is now providing modest support for research, training and treatment and even giving some attention, other than punitive, to alcohol problems among its own employees and in the military services. Much credit for this movement is due to Senator Harold Hughes of Iowa, himself a recovered alcoholic, who has combined the force and symbol of his office with his own personal persuasiveness and sound judgment to provide leadership and enlightened direction and example.

While attitudes and responses of the general public, the mass media and governmental bodies reflect a marked reduction in the stigmatization of alcoholism and more acceptance of and desire to help problem drinkers, a distinct lag in changing attitudes prevails among many members of the various helping professions that are looked to for key roles in the diagnosis and treatment of alcoholism. The importance of sympathetic and supportive attitudes on the part of therapists has long been recognized as of particular importance with respect to alcoholism and problem drinking.

Even in the early 1940s the remarkable effectiveness of Alcoholics Anonymous was being attributed by some observers to the sympathy, understanding and the positive attitudes that alcoholics could find in their A.A. sponsor "therapists." Writing in 1944, Florence Powdermaker noted that it was essential for the effective treatment of alcoholics that the therapist have no hidden or overtly critical attitudes toward the symptoms. She also stressed that the effective therapist should have "sincere appreciation of the patient's capacities and potentialities, and friendliness toward him."

A year later, Howard W. Haggard wrote, "There is no group of individuals—except children—which is more responsive to the attitude of the physician and senses his sincerity, or lack of it, more acutely than the alcoholic. It is the attitude of the physician and his depth of understanding which may be the deciding factors in the recovery of the alcoholic; if he understands him, and if he can make the members of the family and business associates likewise understand and cooperate, he has a good chance of steering the alcoholic toward recovery. Contrariwise, an adverse attitude, whatever its reasons may be, and may remain, is the insurmountable obstacle to recovery." Haggard predicted that, increasingly, alcoholics and their relatives would turn to the physician for aid, thus confronting him with "a condition to which, in the past, he has usually given little serious medical regard."

Despite significant recent diminution in the stigmatization of alcoholics, evidence that a negative image of the alcoholic still prevails among the very people who, because of their professional training and roles, are assumed to have the most understanding, empathy and support for these individuals.
to be best equipped to offer help is found in recent studies conducted by two of my students.

In the summer of 1971, James W. Middleton, Jr. explored the feasibility of studying the economic aspects of treating problem drinkers in a general hospital. The project was initiated because several key members of the hospital's medical staff had assumed that the alcoholic patients were absorbing an inequitable share of the hospital's resources, both in terms of the facilities they occupied and the charges they incurred.

Using multiple criteria, Middleton identified as problem drinkers approximately 30 per cent of the male patients and four per cent of the female patients who were on the internal medicine, surgery and neurology services of the hospital during his study period. Interestingly, he found that physicians and nurses on the hospital staff consistently tended to overestimate the number of their patients with drinking problems. In this connection, Middleton reported that whenever he discussed with a physician the number of problem drinkers on a particular service, "the physician would always think there were more there than was actually the case. When we would sit down together and identify the problem drinkers on each floor he would invariably say he 'thought there were more than that,' 'this must be an off-time, usually we have more alcoholics than this,' or 'well, check medicine and plastics—there is always a big crop up there.'" After nearly two months of such experiences Middleton began to become aware of the fact that no matter what the time or how many alcoholics were present, it would be considered a time when the staff thought that the number of problem drinkers on the floors was unusually small. Repeated checks of other services convinced him that there "is definitely a tendency on the part of the physicians and nurses to overestimate the number of problem drinkers in the hospital as patients."

Associated with this observation was the finding that alcoholic patients, when compared with nonproblem drinkers, were generally sicker and had both more specific problems and more complex problems. Nonproblem drinkers averaged 7.7 days in the hospital, compared with 11.2 days for problem drinkers. Of these days of hospitalization the average utilization of intensive care facilities for all nonproblem drinkers was 0.14 days compared with 1.6 days for problem drinkers. Of those patients who were in intensive care, nonproblem drinkers had an average stay of 3 days compared with 5.33 days for problem drinkers. Among problem drinkers, those whose drinking was identified as directly contributing to their hospitalization (e.g., injury incurred when intoxicated, alcoholic cirrhosis) had an even longer average hospital stay (12.3 days) and made an even greater demand on intensive care facilities than problem drinkers in general. Problem-drinking patients were also incurring higher costs of hospitalization than other patients. In August of 1971, the mean charge against nonproblem drinkers was $964, compared with $1,506 for all problem drinkers and $1,811 for those problem drinkers whose drinking was directly associated with their need for hospitalization.

Regarding stigma, Middleton reported that after identifying a patient as having a drinking problem, no matter what service the patient was on, the staff member often took a negative attitude toward the patient. Although sympathy for the patient was almost always expressed, negative attitudes were revealed by such statements as, "T.W.S.T." (trash will survive and thrive), "the poor degenerate," or "is he really worth the effort?" Other attitudes frequently expressed by the
staff were defeatist, illustrated by such statements as "he (referring to the alcoholic) will probably be back in a year's time," "basically, nothing can be done to cure alcoholism," "alcoholism is a sad situation—there isn't a thing we can do for it." Although such opinions were not universal among the staff, these expressions were heard a significant number of times.

Middleton concluded that although hospital staff were aware of, concerned about, and even tended to exaggerate the prevalence of drinking problems among their patient population, their attitudes toward treating the alcoholism itself were negative. Although these patients tended to receive sympathetic, thorough and competent care for their injuries or organic diseases, virtually no efforts were made to initiate treatment or to provide other kinds of help for their drinking problems.

A second student, Mary C. Corley, has been studying "conceptualizations of alcoholism on the part of helping professionals" as a doctoral dissertation. Her preliminary findings suggest that members of the medical, nursing and social work professions of an eastern metropolitan area still, in 1972, reflect primarily negative attitudes toward alcoholics. With Mrs. Corley's kind permission, some preliminary findings from her study (which is still in progress) are included here as indicative of a still-prevailing tendency for professionals to stigmatize the alcoholic. These data must be considered as tentative, pending completion of the Corley study and publication of her final findings and analyses.

An anti-alcoholic mood was first identified when initial approaches were made to officers of various professional organizations seeking their help in arranging for the study. Consistently, Mrs. Corley was asked, "Why must you include us?" She found, with each professional group, the pervasive fear that professional persons who become too clearly identified as the champions or helpers of stigmatized persons will themselves derive a kind of stigma from their patients or clients. Interviews which she conducted with 120 physicians, nurses and social workers yielded a similar impression, although the respondents did not actually label their negative attitudes as due to a fear of stigma. For example, when asked what they liked about working with alcoholic patients, most respondents automatically gave "don't like" answers. When asked what kinds of help they could offer alcoholics, most respondents said that other resources could be more helpful. Although they expressed sympathy for alcoholics and their families, and acknowledged their need for help, the respondents tended to minimize their own potential helping role and were quick to relegate the task to others. When asked to classify various terms as characteristic or uncharacteristic of alcoholics, between a half and three-fourths of the respondents indicated as characteristic of alcoholics such terms as "uncooperative," "untrustworthy," "troublesome," "irrational," "nuisances," "hard to relate to," "hard to manage," "selfish," "disruptive," and "poor financial risk." At the same time, more than half found the alcoholic "gentle," nearly two-thirds called him "kind," and less than a fourth called him "threatening," "morally corrupt," "unable to tell right from wrong," or "unappreciative." Regarding treatment, more than 90 per cent cited the alcoholic patients as requiring "too much time," having a "relapse tendency," and having families who also need help. Nearly every respondent identified Alcoholics Anonymous as an appropriate source of referral for treatment; over 90 per cent recognized the need for a health team approach, nearly 80 per cent advocated treatment in "alcoholism hospitals" and nearly three-fourths in psychiatric...
hospitals, but only half in general hospitals.

From the findings of Middleton and Corley in the 1970s, of particular significance is the concern which members of the helping professions have over being "labeled" as alcoholism specialists and thereby deriving from their patients what they still perceive to be a severe stigma. We can only conclude that there is indeed a significant lag between the public's changing view of alcohol problems and the attitudes of many representatives of the helping professions.\(^2\)

Reluctance of many members of the health professions to serve alcoholic patients or clients may be due in part to a felt sense of inadequacy, for rarely do the curricula of health professional schools discuss the problems of alcohol in more than a superficial way. However, the prevailing stigma among professions reflects not just lack of knowledge but values and attitudes which imply that the other problems they deal with are more important. An illustration of this is found in an observed tendency for some multipurpose agencies to hire staff to work with alcoholics who have less formal training and are paid less for comparable training than staff whose primary responsibilities involve working with other kinds of problems.

Recently, the Council on Mental Health of the American Medical Association and its Committee on Alcoholism and Drug Dependence published a position statement encouraging medical schools and those of other health professions to strengthen their curricula relative to both knowledge about and attitudes toward the abuse of alcohol and other psychoactive drugs.\(^3\) Among other points, it should be stressed that alcoholics tend to have much higher rates of morbidity than persons who do not abuse drugs and are therefore frequently encountered as patients with symptoms other than those associated directly with alcohol abuse. The effective and successful treatment of such patients requires that cognizance be taken and therapy be initiated for their alcoholism as well as for their more medically respectable problems. It is also to be hoped that educators will examine their own attitudes and values, for these clearly serve as role models that influence the way in which students respond to and feel about particular patients and their problems.

Middleton's data on the identification of problem drinkers in a general hospital serve to substantiate a condition that has long existed with respect to alcoholic patients. Although general hospitals throughout the country can count among their patients at any time a large number whose problems include alcoholism, these are usually patients who have been admitted and are being treated only for their other diseases. Until quite recently, most hospitals specifically prohibited admitting patients with a frank diagnosis of alcoholism, at the same time that their beds were occupied by thousands of alcoholics admitted with a diagnosis of cardiac, pulmonary, liver, nutritional or orthopedic diseases. While making heroic efforts to treat more medically respectable problems, hospital staffs have tended to ignore the alcoholism. Although official discriminatory policies of hospitals against alcoholics are changing, the practices and attitudes needed to implement actual change have been slow to develop. Partly this reflects the organic-disease orientation of most general hospitals, partly the sense of inadequacy and fear of derived stigma that characterize hospital staff at most levels, and partly perhaps a concern about the high economic costs of treating alcoholics associated with relatively low rates of treatment success and low rates of financial reimbursement for services.
PROBLEM DRINKING IN WORK AND LEISURE SITUATIONS

In the section on alcohol and dependence I have suggested that a significant amount of problem drinking in the United States is related to situations in which individuals feel required to drink in amounts or frequencies which for them are "too much." I called this situational dependence on alcohol and suggested that situationally dependent problem drinkers, if they can avoid loss of control, can often move out of problem drinking (and in again) as they experience changes in their life situations which are particularly associated with the perceived situational necessity to drink. This thesis will now be explored further with special consideration to drinking that is expected or required as a part of fulfilling role expectations in relation to work and leisure.12

In the history of man, drinking has long been associated with patterns of both work and leisure. Employers have plied their workers with alcohol in order to dull the pain of tortuous labor, to incapacitate the potentially rebellious, and sometimes even to reward a job well done or commemorate the completion of a task. During the exploration and settlement of the American frontier, heavy drinking became identified with the way of life known as frontier society and was extended to such exploitative frontier industries as lumbering, mining and railroad construction. Here, men who lived in work camps under conditions of primitive deprivation and who worked long hours on dangerous and arduous tasks drank to intoxication as an automatic response to release from work. The term skid row is a modification of "skid road," the name applied to areas of towns near lumber camps where lumberjacks came to get drunk whenever they were free from work.

As noted earlier, the temperance movement originally emerged as an effort to control the uninhibited violence associated with intoxication in the single unattached worker or sailor. Most port communities established areas where sailors were encouraged to drink to the point of incapacitation. In this way the threat to the safety and virtue of wives and daughters could be averted until the drugged men could again be indentured aboard ship. Communities near military camps and various types of work camps took similar precautions to protect their women and property. Thus, for the unattached, homeless man in the 19th century and still today, a certain kind of intoxication has been institutionalized and accepted, as long as it occurs within the confines of prescribed areas. Now, as then,
only when such men step out of bounds and enter the business or residential areas of the community does their drunkenness usually lead to the label of an offense to public morals and lead to arrest. Studies of skid row drinking have identified drinking behavior as intrinsically related to situational and institutional dependence. As already noted, the need for alcohol is most keenly felt by many of these men when their dependency needs are not being met in other ways. Also, outside of the institution, the use of alcohol in bottle gangs represents just about the only way these men have of socializing with other human beings.

In contemporary society, drinking in association with specific kinds of work has become characteristic of business and industrial life. For business leaders, government officials, and military officers, advancement or promotion is often perceived as depending on their ability to “hold their liquor.” The negotiations of contracts, treaties, and simple sales agreements are quite normally accompanied by and assumed to be facilitated by drinking. In some situations, drinking is perceived as a required part of the job; in others drinking “on the job” by workers has become part of the management-labor game in which the worker must drink to prove that he is not “on the other side.” For many workers, belonging to a carpool means stopping at a bar on the way home from work.

Drinking at conventions has also become an expected institutionalized form of behavior. The “convention” industry is heavily dependent on alcohol. Through alcohol, a function identified with and justified by work is transformed into an essentially recreational, leisure-oriented event. In many recreational or leisure time activities, drinking has become so ritualized that the event itself (bowling, ball game, golf, theater, party or television watching) is not considered complete or adequate or even appropriate unless alcohol is available. In summary, I am suggesting that the use of alcohol is seen as a required aspect of many work and leisure situations. In some extreme situations, intoxication is encouraged; in many situations, the individual is expected to drink heavily without showing the effects; sometimes, drinking is required as a demonstration of loyalty; in many situations, the event itself is considered incomplete without alcohol.

Another kind of relationship between alcohol and the work-leisure continuum involves drinking aimed at coping with “too much” stress or “too little” meaning. In contemporary industrial society, most jobs available to men and women seem to fall into two categories—either they involve more stress, greater responsibilities and more time involvement than most humans can comfortably or healthfully withstand; or they are underdemanding and provide insufficient challenge, opportunity to advance, or time involvement, thus creating a void of purpose and meaning. Both of these work conditions create stress for which alcohol is often the most available and socially acceptable response.

The first instance may possibly apply to about 10 percent of our working population—executives, officials, professionals, public leaders. Some of these exhibit the “Peter Principle.”

They are men who, after successful advancement in their careers, are eventually promoted to their natural level of incompetence. Some are victims of the false assumption that competence and success are transferable without limit. Others are simply promoted to a level of demand which is beyond human endurance. Relatively few so-called “successful” men are truly comfortable physically and emotionally with the responsibilities that symbolize their success. Alcohol provides a convenient, quickly effective,
temporary, and sometimes dangerous antidote for their discomfort.

At the other extreme are found men and women whose capabilities are never quite utilized enough. In great measure, they are caught between societal pressures for job security and rapid technological changes which make many jobs and workers quickly obsolete. Forced to provide job security so that a significant percentage of workers must be retained in employment long after they become obsolete, many large industries tend to freeze all but the chosen few into jobs somewhat below their levels of capability. By so doing, management reasons that it is protected from carrying these workers and executives at high levels of pay after they can no longer perform at their peak capability.

Men and women who find their jobs empty, meaningless and intrinsically unsatisfying and their tasks so fragmented that they have little or no identification with the purpose or with the end product can feel no loyalty and no sense of pride. Their jobs become hateful necessities, leaving a large unfilled void. Complicating this dilemma is the trend toward shorter and shorter working days, working weeks, working years, and earlier and earlier displacement or retirement from work. Added then to relatively meaningless working lives is the growing spectrum of leisure time. Few societies around the world have ever experienced a period when most men and women did not have to work during most of their waking hours. Leisure time, as we know it in contemporary societies, is a phenomenon to which man has as yet adjusted very poorly. For many, the options have been so meager and unfulfilling that alcohol oblivion has emerged as the major state of existence on evenings or weekends or vacations, or during all nonworking periods. As Arthur Hailey has described this phenomenon for the automobile assembly worker in his novel, Wheels, leisure-time drinking quickly encroaches on working time effectiveness by contributing to absenteeism, hangover and frequent mistakes.

Another illustration can be found in the usually light volume of mail delivered in the United States on Mondays, in spite of the fact that one might expect that weekend accumulations would have the opposite effect. Two explanations are suggested—one a higher-than-average rate of absenteeism for postal workers on Mondays; the other, the unwillingness of enough workers to sort mail on weekends. Both are related to weekend drinking.

American industrial leaders who face these problems realistically know that absenteeism, errors of judgment, and acts of omission associated with the use of alcohol and other chemicals are major factors in the high costs and poor quality of American industrial products today. The effect, as far as alcohol is concerned, comes from some drinking on the job but, more significantly, from the absenteeism and poor work resulting from post-weekend (or holiday) hangover and from pre-weekend tension which is anticipatory to drinking.

For leisure time drinking, I believe that the problem lies not directly in patterns of alcohol use, but in the absence of attractive alternatives. Faced with high-density living, few chores, frozen meals, canned or frozen entertainment, crowded highways, we face a major challenge to provide some active, participating and meaningful things for people to do with the increasingly significant portions of each day and week when they neither sleep, eat nor work.

Cahalan's studies of drinking problems among American men suggest that the significance of alcohol consumption in relation to work and leisure varies greatly according to types of employment and socioeconomic sta-
Cahalan’s finding of a heavy weighting of drinking problems in the lower socioeconomic strata, especially in younger men, suggests that young-adult, low-income men should be a special target for study, with special reference to the general questions that we raised about the relationship between drinking and the work-leisure continuum. To what extent is drinking related to unemployment or apparent unemployability? How does it relate to the monotony of totally impersonal assembly line jobs? How does it relate to the length of the working day, week or year? To what extent is drinking correlated with absence of opportunities for active participant involvement in recreational or other so-called leisure time pursuits? To what extent do work-related drinking experiences of women vary from those of men? Some factories are experimenting with “humanizing” their production lines and trying to give their workers more identification with the product of their efforts and are measuring “results” in terms of quality and quantity of production. Drinking behavior might be introduced as an added variable to such studies. In a similar way, studies might be designed to measure the use of alcohol among persons engaging in participant as compared with passive recreation. Other studies should focus on the use of alcohol in relation to jobs which call for unusual concentration or on persons who are employed beyond their levels of ability. It must also be remembered that drinking has become ritualized in many work and recreational situations. A special target for study should be those responsible for high-level decision making in business, industry, government and the military establishments, although it may be expecting too much to ask such groups to sponsor research on the role of alcohol in their own decision-making behavior.

Thus far, and only in recent years, many businesses and industries, and even our federal government have been responding to alcohol problems in two ways. First, they have been modifying their conditions for employment to provide some short-term alternatives to discharge from employment for those workers who are detected as having drinking problems. It has been hoped that more liberal attitudes and regulations would help bring the problem drinker out of hiding, permit early detection and facilitate effective treatment. Second, a number of large employers have initiated programs of treatment or have arranged to refer suspected alcoholics and problem drinkers to appropriate community resources where these have been available. Although reports of some successful rates of intervention have been issued by a number of industries, there remains an impression that efforts by employers (and unions) to treat alcoholic employees have thus far been minuscule in relation to the magnitude of drinking problems among employees.

Based on the theory that situational dependence on drinking is a significant factor in the move of nondrinkers and social drinkers into problem drinking and alcoholism, I believe that government, management and labor could all more significantly attack alcohol problems if they would carefully examine the situations in the work-leisure continuum of contemporary American life that require or inspire drinking. Although some such situations may be firmly entrenched in the customs of life in society, others may be quite subject to modification in response to wise policy, effective leadership and attractive alternatives. These include both situations that are expected or required in order to meet role expectations and those that reflect responses to too much stress or too little meaning in work responsibilities or leisure activities.

A number of large employers have initiated programs of treatment.

Drinking has become ritualized in many work and recreational situations.

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ALCOHOL AND THE AUTOMOBILE

Because contemporary man has tied his daily life so closely to the automobile—socially, economically and even psychologically—it is not surprising that some of the major problems of alcohol are related to drivers and their vehicles. The complex of problems related to drinking and driving has been described by the Advisory Committee on Traffic Safety to the Secretary of Health, Education and Welfare as “one of the most costly aftermaths of the introduction of technology in modern society.”

The problems associated with alcohol use in transportation are by no means new. Historically, there are references to intoxication-related accidents involving Roman chariots, clipper ships and even “mule-skinners.” But the problems of alcohol and traffic have been exacerbated by the introduction of various mechanical modes of transportation. As the railroad industry developed and expanded, strict rules were adopted against employee drinking while on duty, especially by engineers. Today, the airline industry not only forbids drinking by pilots while on duty, but for a specific period of time prior to reporting for duty.

The lethal potential of the automobile was recognized quite early and assumed increasing proportions as the numbers of vehicles and their capacity for speed increased. By 1924, the Connecticut Motor Vehicle Commission concluded that “any person who... drinks and then operates a motor vehicle must be considered drunk... no person who has been drinking ought to be allowed to operate a car.”

The relation between drinking and driving is primarily due to the fact that alcohol’s depressive action on the central nervous system can modify perceptions, motor responses and emo-
tional states, all of which are involved in drinking behavior. Although tests on simple sensory and motor capabilities show little effects of alcohol except at very high doses, the detrimental effects of alcohol increase sharply as the tasks become more complex. Tests of actual driving which require the simultaneous coordination of several motor and perceptual responses reveal high sensitivity to the influence of alcohol. In fact, the impairment of performance has been demonstrated in drivers whose blood alcohol concentration is as low as 0.05 per cent. Roughly speaking, this level would be experienced by a 190-pound person who had consumed three 12-ounce beers or three drinks each containing one ounce of 86 proof alcohol within an hour before driving. However, a 120-pound person or woman would achieve this level with less than two beers or less than two drinks containing an ounce of whisky each.

Since the deleterious impact of alcohol on skills like those required in driving increases sharply as the task becomes more complex, individual experience can be dangerously misleading. A drinker who is an experienced driver may be able to handle his car without mishap as long as driving is routine, but be unable to respond to even moderate demands for extra effort or rapid perception and reaction. Contemporary driving is rarely “routine,” but the complexity of the task is certainly increased with higher density of traffic, accelerated speed, poor visibility or darkness, bad road conditions, faulty vehicles, or the unpredictable dangerous actions of other drivers. Unfortunately, an associated effect of alcohol on the drinking driver is that it can give him a heightened illusion of competence or increase his impulsiveness and recklessness at the very same time that his actual abilities have been compromised. Intoxicated drivers, compared with sober ones, generally tend to use greater speed and less caution and be more erratic.

The relationship between alcohol and the automobile is particularly confusing because it involves so many factors, each subject to great variability. These include the level of alcohol concentration in the driver’s blood, the driver’s experience with drinking, his experience and skills with driving, and a large number of factors like traffic density and speed which contribute to the driving task. For example, a disproportionate number of fatal accidents tend to occur at night, especially between 10 p.m. and 6 a.m. These are also the hours when heavy drinkers are most likely to be driving home from drinking situations, thus often combining the worst conditions of driving with highest degrees of driver intoxication. In a 1971 Kansas City study, drivers were stopped for 22 nights and asked to volunteer to participate in breath alcohol measurements. Ninety per cent of those who were asked agreed and about a third of these had been drinking.

The problem is intensified then by the fact that driving is rapidly becoming a more and more complex task. For example, in just 30 years (1940 to 1970) the number of motor vehicles registered in the United States has risen by more than 330 per cent, from roughly 33 to 109 million; the total number of miles traveled annually has risen 400 per cent, from 268 to 1,071 billion, and the average vehicle speed has increased by 16 miles per hour, from 44 to 60.

The impact of alcohol on traffic accidents in the United States has been starkly demonstrated by numerous studies based on tests of the blood alcohol levels of drivers and on data contained in the arrest records. From these it is concluded that there are at least 800,000 alcohol-related motor vehicle accidents annually in the United States. It is estimated that these ac-
Accidents involving alcohol tend to be more severe and contribute disproportionately to problems of drinking and driving, and perhaps together account for as much as 75 or 80 per cent of alcohol-related traffic accidents, the fact remains that any one who drives after drinking is incurring some extra risks.

Much research has focused on the levels of alcohol in the body which can affect psychosensory and psychomotor responses sufficiently to compromise driving ability. This has involved the development of numerous chemical tests for quantifying the concentration of alcohol in the blood as it reaches the brain. These include the analysis, by various means, of samples of breath, urine and capillary blood. Since the 1930s, a large number and variety of packaged laboratories have been available to police departments for use in obtaining quick measurements of the blood-alcohol concentration of drivers from samples of blood or breath that would be obtained at the scene of the accident. After much litigation over the admissibility of some evidence in courts, many states now have laws which tie implied consent to give such samples to their requirements for driving licensure.

In the meantime, controversy has prevailed over the level of blood-alcohol concentration that should be considered as evidence of intoxication sufficient to impair driving. In 1938, a committee of the National Safety Council recommended a uniform code for designating the legal evidence of intoxication. At that time it was suggested that a blood-alcohol concentration of 0.05 per cent or less be considered as evidence that alcohol influence was insufficient to impair driving ability; levels between 0.05 and 0.15 per cent be considered as relevant but not conclusive, and levels of 0.15 per cent or more be accepted as clear evidence of intoxication sufficient to impair driving. On the basis of current knowledge, it is clear that the early attempts
to provide a precise basis for nationwide standardization of statistics regarding drinking and driving were far too liberal. A level of 0.1 per cent involves some risk for most drivers and even levels below 0.05 per cent can impair the driving of some individuals, especially if they are poor drivers or inexperienced drinkers, or if they are faced with driving conditions which are particularly complex or novel.

The National Safety Council did achieve an important goal, that of initiating the acceptance of blood-alcohol-level data as admissible evidence in court. However, in establishing the concept of dangerous alcohol levels when people should not drink and drive, it left the implication of safe levels when people can drink and drive. Since even small amounts of alcohol often impair good judgment in a diner, and since alcoholics particularly are prone to rationalize their own special need for alcohol, the concept that there are any "safe" levels in and of itself may be an invitation to trouble. Even mild sensations produced by alcohol, if they are experienced at the particular moment when a novice drinker-driver must respond to an unusual traffic crisis, may cause an accident. For both poor-risk drivers and poor-risk drinkers, the implication of a "safe" level may be providing a dangerous justification for driving when under the influence of alcohol. Furthermore, the concept of safe limits does not account for the variations in the curve of blood-alcohol concentration that occur following drinking. There are some accidents in which a driver might conceivably have been at a "safe" level when entering a vehicle, reach a peak at a dangerous level of alcohol concentration coincidental with having an accident, and be back at a "safe" level shortly after the accident when a breath or blood sample would be taken for analysis. Such relatively precipitous but brief peaks of alcohol effect may be particularly common in persons who have been drinking moderately but hastily on an empty stomach, such as after a late afternoon cocktail party.

Currently, there is a movement enacted into law by many states to reduce the level for legal evidence of intoxication to 0.10 per cent and some states are even adopting a 0.08 per cent level. Another movement now being tested in seven or eight states would establish uniform state laws giving police the right to perform blood-alcohol-concentration tests on any suspected driver prior to arrest.

At this time in the United States, efforts to control drinking and driving by legal means have been largely ineffective. Currently a considerable investment is being made by public agencies, including the Department of Transportation, the National Institute of Alcohol Abuse and Alcoholism, and numerous state alcoholism programs, and by the private sector, including the National Council on Alcoholism and the insurance industry, to publicize the extent to which drinking and driving violates the interests of public safety. However, thus far, despite the dramatic evidence of death and disaster for drinking drivers and innocent victims alike, neither laws, punishment, nor appeals to intelligence, reason and emotion have been effective deterrents to driving under the influence of alcohol. Furthermore, when legal charges are leveled against drinking or intoxicated drivers, it is difficult to get American judges and juries to return convictions. Sympathy and identification are more often with the drunken driver than with his innocent victim. Such public resistance seems rooted in the moves associated with the "right to drink" even against legal prohibitions and in equally strong mores that have developed around the "right to drive." Whenever controls on individual "rights" seem involved, public senti-

Even small amounts of alcohol impair good judgment

Efforts to control drinking and driving by legal means have been ineffective

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ment in the United States seems generally resistant to efforts to protect the public safety. This has been seen with respect to proposals for reexamining drivers, inspecting vehicles, controlling guns and punishing chronic traffic law violators, as well as with respect to punishing intoxicated drivers. The rights to drive and to drink at this point in time appear to have greater value in the hierarchy of American mores than the right of protection from the drinking driver. Despite our reluctance to convict drinking drivers, court cases in which they are included constitute a demand on our police and courts second only to public intoxication among alcohol problems.

Outside of the United States, several countries, notably Scandinavia and Great Britain, instituted very strong sanctions against drinking and driving in the early 1960s. A driver with a blood-alcohol level of 0.05 per cent is legally under the influence. Laws have made both loss of driving license and imprisonment mandatory for persons convicted of driving while intoxicated. In 1962, 46.5 per cent of all prison sentences in Norway were imposed for drunken driving.\textsuperscript{12} Public opinion seemed to support such stringent laws, and social customs were modified to provide nondrinking drivers for parties where alcohol was served and to remove pressures to drink from persons who had to drive. However, despite some dramatic reductions in the incidence of alcohol-related accidents, traffic accident rates in these countries remain high and the involvement of alcohol remains significant (15 per cent in Norway and Sweden). In Great Britain, after an initial drop, the rates of improvement have been gradually slipping. This phenomenon seems primarily due to two particular high-risk groups—alcoholics and youths. The condition of alcoholism, with its impulsive need to drink, makes alcoholics less able to be influenced by legal sanc-

tions or even punishment. For some youth it is apparent that the threat of punishment has created a paradoxical response. It has provided drinking with the symbolic meaning of a special challenge and a peer-supported, prestigious way of expressing bravado and rejecting authority perceived as oppressive.

Most attention in the United States and elsewhere on the relationship between alcohol and the automobile has focused on the drinking driver. However, in addition to those accidents which involve drivers or pedestrians who are under the influence of alcohol, there are an undetermined number of crashes caused by faulty vehicles. There is evidence emerging that would place the blame for a significant number of vehicle defects on the impact of alcohol or the poor quality of work in automobile assembly lines and repair shops.

Also, most attention on drinking and driving assumes that alcohol is the only form of intoxicant being used. Yet data on the prevalence of use of sedatives, anti-anxiety drugs and antihistamines in the society make it obvious that at any one time, many millions of the 100,000,000 persons using alcohol in the United States will simultaneously be taking some additional psychoactive drugs. Future considerations of problems of alcohol and the automobile should give more attention to drug combinations which may intensify the degree of intoxication and incapacitation in drinking drivers. This is a subject which requires more epidemiological research, more knowledge on the pharmacology of combining various drugs with alcohol, the development and implementation of simple toxicology tests for other psychoactive drugs, and much more public awareness of the heightened risks to driving which occur when alcohol and other drugs are used at the same time.

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ALCOHOL AND SOCIAL CHANGE

The consideration of alcohol and the automobile serves to bring into sharp focus the impact of social change on the nature of drinking problems. Clearly the contemporary problems for society associated with an intoxicated individual trying to operate a powerful automobile or an airplane or a delicate piece of machinery are very different from those caused in times past by a lumberjack, seaman or wanderer whose drinking may have given vent to uninhibited aggression.

In the 18th and 19th centuries, intoxication by frontiersmen and lumbermen was perceived as a problem only when they brought their drunkenness into populated communities. Urbanization and industrialization have sharply increased the impact that intoxicated individuals can have on their fellowman, and this is complicated also by the sheer growth in numbers of people. Just since 1940, the population of the United States has grown by 55 per cent, from 135 to 210 million, and the percentage of the total population who are living in urban areas has increased from 55 per cent to 75 per cent, while the number of urban dwellers has risen from 75 to 160 million. Conditions of urban life include residential crowding, an increased tempo of living, fewer opportunities to express individualism and more and more pressures for conformity. There are fewer and fewer opportunities for an individual to "do it my-
their ability to function in accordance with social expectations or personal safety.

Although estimates of the number of problem drinkers or alcoholics in the society at different points of time are based on such different criteria that we cannot really determine whether or to what extent problem drinking has been increasing, there is some suggestion that the amount of alcohol consumed has been rising in the last decade. Estimates on the apparent consumption of absolute alcohol in the United States reveal rather remarkable stability at close to 2 gallons per capita for the drinking age population (15 years and over) from shortly after the years of National Prohibition through the 1930s. However, beginning with an estimate of 2.06 gallons in 1961, there has been a steady rise to an estimated 2.66 gallons in 1971. It should be noted that these figures are based on consumption of legal beverages, and it cannot be determined whether the apparent rise is a real one or merely represents replacement of illicit by legal beverages. Irrespective of whether the per capita amount of alcohol being consumed in the United States is rising or not, the spectrum of nearly 10 million problem drinkers, at least half of whom are alcoholics, constitutes a problem of enormous magnitude.

Contemporary social change is bringing about some major alterations in sex status and roles. Thus far, there is no evidence that the women’s liberation movement includes a trend toward similarity in the amounts, frequency and situations of alcohol use. Should women try to emulate men with respect to drinking, because men now far exceed women in rates of problem drinking, one could anticipate an equalization of rates. However, because women weigh, on the average, much less than men, the impact of equal drinking would go beyond equalization of problem drinking. Since the amount of alcohol a human body can metabolize in a given period of time and the concentration of unmetabolized alcohol in the blood reaching the brain are both factors of body weight, all other factors being equal, the more a person weighs the more he or she can drink in order to achieve a given level of intoxication. Therefore, as far as alcohol is concerned, the only way women can gain “equality” with men is to gain weight. If the women’s liberation movement should aspire toward equalizing drinking customs at the levels of alcohol intake now “enjoyed” by men, society can anticipate precipitous rises in the incidence of intoxication, problem drinking and alcoholism among women.

One positive impact of women’s liberation on problem drinking in women may be a reduction in the incidence of plateau-type problem drinking in middle-aged housewives. A significant pattern of such drinking has been common, especially in educated non-working mothers whose children have grown up, whose husbands are busy, and who have seemed to seek, in an alcohol-induced euphoria, an escape from realization of the emptiness and meaninglessness of their lives. Opportunities and supportive social sanctions that will enable such women to use their good minds and various talents in productive activities which take them out of their homes can provide both rehabilitation for and prevention of a rather common and tragically wasteful form of alcohol problem.

The problems of alcohol consumption and intoxication have been greatly complicated in the last three decades by the introduction and widespread use of a wide variety of other intoxicating substances, a majority of which are being used for real or apparent medicinal purposes. Although some publicity has been given to the

There are nearly 10 million problem drinkers in the U.S.

Men far exceed women in rates of problem drinking.
problems of overdose that occur when a prominent person combines a powerful drug such as one of the barbiturates with alcohol, and there has been some mention of a trend toward multiple drug use "on the street," most people are quite ignorant and innocent of the potential dangers of combining alcohol with various medicinal substances that are being used quite routinely by millions of Americans. I am referring particularly to the cold remedies and over-the-counter sleeping pills that contain sedative antihistamines and the prescribed anti-anxiety substances. Although small print directions warn users not to combine either antihistamines or anti-anxiety remedies with alcohol, few self-medicators are aware of the precaution or, if aware, few recognize the reasons and potential dangers of a synergistic effect. When such substances are prescribed, precautions regarding their use with or without alcohol are rarely conveyed or, if mentioned, are rarely explained. This omission is particularly serious because most people are totally oblivious of the fact that when they engage in their usual drinking while taking one or more other psychoactive substances, they are greatly increasing the probability that they will experience serious incapacitation. Of additional significance is the fact that the public is being urged through advertising for self-medication items and by the prescription practices of many physicians to look upon the use of psychoactive substances as appropriate responses to the regularly occurring stresses and mood swings that are part of life in contemporary society or as appropriate ways of anticipating situations which may involve stress or discomfort. With this development, a climate that supports the use of chemicals for coping purposes has influenced the way in which many drinkers rationalize their use of alcohol.

While advertising for alcohol has not yet picked up a direct medicinal theme, it does include many illusions to mood alteration. Primarily, however, the alcohol beverage industry has chosen to identify alcohol use with hedonistic values, with attaining otherwise unattainable dreams, and with altering the image by which the drinker is perceived by others and perceives himself. Social drinking is associated with being well thought of, or admired, or loved (but not with loving), being a winner (but never a loser), being a popular, distinctive and successful man of glow and gusto. Emphasis is on what a man does and how he is perceived by others; never on what he is. And drinking is depicted over and over again as appropriate to a variety of work and leisure situations. The images of drinking that are promulgated by the mass media are biased almost entirely in terms of the functions and safety of drinking. In television and movies, the public is exposed to countless examples of uncomplicated intoxication, the uses of alcohol for coping, the casual consumption of huge quantities of alcohol without complications, and the association of heavy drinking with status, prestige, popularity, wealth, success, and sexual fulfillment. The propriety of many types of situational drinking is also reinforced.

These observations lend support to a recent recommendation of the National Commission on Marihuana and Drug Abuse that advertising for alcohol should "point out the dangers of excessive use" and that the alcohol industry should "reorient its advertising to avoid making alcohol use attractive to populations especially susceptible to irresponsible use." A similar recommendation with respect to more responsible and realistic depicting of drinking behavior and its consequences by the mass media would seem appropriate.
ALCOHOL AND YOUTH

It has been characteristic of many human societies that adults have tended to be anxious about the behavior of youth, particularly as they go through the period of transition from childhood into adulthood. Expressions of these kinds of concern are reported by anthropologists for preliterate societies and are found far back in recorded histories. Most societies that have become concerned about drinking and intoxication have expressed special apprehension and imposed special controls on drinking by their youth.

In American society, the protection of youth from moral corruption became a major theme of the temperance movement, and one of that movement’s most visible accomplishments was to assume responsibility for the education about alcohol for which they successfully lobbied as a legal requirement in the schools of every state. Until the 1950s, virtually all children in the United States were exposed to compulsory education on the evils of alcohol, and even now no one can legally obtain alcohol before the age of 21 in most states. The ineffectiveness of anti-alcohol education and age-related prohibition has been documented by numerous studies of drinking patterns of high school and college youth. Although there are significant regional variations, probably half of our young people have at least experimented with alcohol in their early teens, and it appears that about 80 per cent are using alcohol in some way during the years 18 through 20. In other words, the percentage of users of alcohol in the population is as high or higher in the years just before drinking becomes legal as it is after legal adulthood with respect to drinking is reached. There is also evidence that communities, colleges and other social units that have been “liberal” in terms of law enforcement have

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experienced fewer problems, while in strict areas, though fewer young people may drink, those who do tend to experience a very high prevalence of problems. Research findings provide some basis for expecting that a nationwide reduction of the legal age for drinking to 18 would permit more casual drinking in the 18-21 age range and would reduce the incidence of problem drinking that is particularly associated with defiance, assertion of adulthood or demonstrating conspicuous consumption. It is interesting that society’s concern over drinking by youth has been focused primarily in terms of the immediate moral and long-term health consequences of drinking, and the consequences of incidental intoxication. Curiously, drunkenness by youth, even when repetitive, was labeled as “sowing wild oats” or “high jinks” or “letting off steam” and decried in terms of the damage a youthful drinker might inflict on others. No one seemed to think that young people might themselves be problem drinkers. Even when the Drinking in College study identified six per cent of the men and one per cent of the women participants as having a repeated pattern of difficulty associated with drinking, we merely labeled these people “potential” problem drinkers. Not until Cahalan’s reports on drinking problems based on a national probability sample of persons living in households revealed that the highest concentration of problems was found in men aged 21-25, have we been able to accept the fact that problem drinking and even alcoholism may occur at relatively early periods of life.

Issues associated with drinking by youth in contemporary society have become obscured and even de-emphasized in recent years by the acute societal anxieties associated with various other forms of drug use. It is interesting that through a series of mass experiments with the use of a wide variety of dangerous and illicit drugs, including the expansion of prevalence of users and substances used by the street drug culture, there is no evidence of a marked diminution of alcohol use by young people. The specially designated “pot party,” which was seen by some as replacing the beer party, now seems to have lost its special-purpose focus, and among most young people who are using marijuana, their use has become more casual and more integrated with other activities, including drinking. In short, although the use of alcohol and its consequences have become complicated by the use of many other drugs, they have not been diminished or replaced.

In the study of alcohol behavior and the search for methods of preventing and effectively treating problem drinkers, contemporary youth can play a very significant role. Because they are close to the decisions or experiences in which they began drinking, they can help us understand something about the onset of drinking in contemporary society and the situations which lead to dysfunctional rather than functional drinking patterns. Because we now know that they experience significant problems with drinking and that all problem drinkers do not progress on to alcoholism, studies of drinking in young adults should help us identify key factors which differentiate problem drinkers who achieve remission from those who experience progression. Because current youth represent the first and second generations of multi-drug using culture, they can provide valuable insights into this complex phenomenon both with respect to its pharmacological implications and with respect to the social values and personal motives that are involved.
THE SPECIAL CASE OF PUBLIC INTOXICATION

Several references have been made in this review to the category of problem drinkers usually found in skid row areas, jails and other public institutions. It has been noted that prior to the late 1940s these men provided the symbol for generally held stereotypes of alcoholism. Also, it has been stressed that most of these men manifest dependence on both alcohol and institutional living and that many seem to be nonaddictive problem drinkers.

Since the mid-1940s, a major change has been under way with respect to social policy for dealing with the homeless, skid row, chronic-police-case inebriate. This is a movement to decriminalize public intoxication.

For more than 350 years, tracing back to an English statute of 1606, public intoxication has been considered an offense against morality punishable by imprisonment. The essence of this English law carried over to the American colonies and was eventually adopted by the states and other jurisdictions in the United States.

Throughout the history of this country, a substantial portion of society’s investment in police, courts and jails has been absorbed by the “crimes” of “drunkenness” and such related offenses as “vagrancy” and “disturbing the peace.” Roughly, one of every three nontraffic arrests in America, or over two million arrests a year, have been for the offense of public intoxication. This is more than twice the number of arrests for the seven offenses listed by the FBI in their serious crime index (willful homicide, forcible rape, aggravated assault, robbery, burglary, thefts of over $50 and motor vehicle theft). The cost of handling annual arrests for public intoxication, if one assumes a conservative $100 per case, would come to $200 million without a cent being spent for treatment or prevention. The cost also involves a heavy burden on the entire criminal justice system, in terms of the overload on police, the clogging of courts, the crowding of jails. Public intoxicants occupy approximately two-thirds of all local jail cells at any period of time. The cost also involves the diversion of resources from attention to more serious crime. Recently, when Washington, D.C. established a special tactical police force to combat serious crime, even 44 per cent of the arrests made by this special force were for drunkenness.55

Most arrests for public drunkenness involve the same people, for whom arrest and incarceration over and over again have become part of a way of life. This category of offense, which involves no injury to another person or property but simply a violation of prevailing public morals, has been variously described as “the overreach of the criminal law” and as “crime without victims.” Arrest and disposition for such offenses generally depends heavily on such factors as age, sex, dress and appearance rather than on the actual behavior of the so-called offender.

Since 1966, a significant movement has been under way to challenge and change the legal basis for treating public intoxication in homeless alcoholics as a criminal matter. It has been argued that because drunkenness in alcoholics is involuntary and public drinking in homeless men is also involuntary, criminal sanctions which are applicable only to voluntary actions should be considered “cruel and unusual punishment” and a violation of the 8th Amendment to the Constitution.

Following several test cases, the matter reached the Supreme Court in 1967 in the now famous case of Powell continued
v. Texas. Although Powell’s conviction was upheld on a technicality, the effect of the Supreme Court’s judgment was to rule that a homeless alcoholic cannot constitutionally be punished for his public intoxication. Furthermore, the Uniform Alcoholism and Intoxication Treatment Act adopted in August, 1971 by the National Conference of Commissions on Uniform State Laws obligates state representatives to propose to their respective legislators the following provision: “It is the policy of this state that alcoholics and intoxicated persons may not be subjected to criminal prosecution because of their consumption of alcoholic beverages but rather should be afforded a continuum of treatment in order that they may lead normal lives as productive members of society.”

At this writing, the status of state laws on this matter is inconsistent, and even where legal reform has taken place, implementation of the intent of these changes is inconsistent. This is primarily because society as yet has few alternatives to the court and jail system for handling even the acute needs of the public intoxicant when he is incapacitated. A national movement to develop detoxification centers to replace jail drunk tanks is under way, but unless such centers are related to long-term comprehensive rehabilitative programs, they will only serve to provide revolving doors that are more humanitarian than jails. Of all problem drinkers, the homeless chronic public inebriants present probably the greatest challenge and greatest frustrations for contemporary treatment resources.

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XVIII

SOCIAL POLICY AND THE PROBLEMS OF ALCOHOL

It has been a theme of these papers that the customs of drinking and the problems of alcohol permeate almost every aspect of life in society. Special attention has been given to the problems of conceptualizing the various consequences of drinking for the individual drinker and to the consideration of key concepts like progression, addiction, dependence, alcoholism and
theories of etiology. We have also considered drinking and society in relation to some selected topics: stigma, work and leisure, the automobile, other drug use, social change and youth. Although not considered here, it is important to recognize that alcohol use and drinking problems are also related behaviorally and statistically to numerous forms of morbidity and to such other pressing social problems as poverty, unemployability, crime, suicide, dependence on other drugs, family instability, emotional problems in children, accidents, poor quality of work, industrial inefficiency, errors of judgment, and to the intrinsic unhappiness and despair experienced by millions of people who are themselves problem drinkers or whose lives are closely associated with alcoholism in others.

Many of the problems of alcohol are manifested indirectly, and the role played by alcohol becomes apparent only if special pains are taken to look for it. For example, the children of an alcoholic parent tend to suffer from quite understandable degrees of high anxiety, insecurity, uncertainty and guilt, often associated with their inconsistent and ambiguous relationship with one or both of their parents. In school, such children may have difficulty concentrating, many manifest what seem to be inexplicable emotional outbursts, or may underachieve, withdraw, or be delinquent or frequently absent. Perceptive school counselors have come to recognize that these “behavioral problems” are frequently associated with alcoholism in one or both parents.

Alcohol problems are caught up in a massive clustering of human pathology in which problems invariably beget problems. Because they do not occur as isolated problems, they are not receptive to intervention aimed simply at altering or preventing or treating self-destruction through drinking. The complexity of alcohol problems themselves and their relationship to a network of other pathology presents serious dilemmas for those who would devise enlightened social policy about drinking or its consequences.

Social responses to alcohol problems in the United States, aside from the temperance movement, have been relatively recent. Alcoholics Anonymous dates from the late 1930s, received its first major publicity in the early 1940s, and has experienced fairly steady growth since that time. Although the principles of this self-help movement were not new, A.A. represents the first and only widespread and successful application of these principles to alcoholism and indeed stands out as a unique activity in the health and social problem field generally.

The modern scientific interest in alcohol dates also from the late 1930s and was identified first with the New York-based Research Council on Problems of Alcohol. The Council helped launch the Quarterly Journal of Studies on Alcohol in the Laboratory of Applied Physiology, at Yale University, in 1940, and although the Council faded away in the 1940s, the activity at Yale prospered and expanded as a major center for multidisciplinary research on alcoholism and for training of personnel in varied professions. The Center of Alcohol Studies at Yale helped launch the National Committee for Education on Alcoholism, a voluntary health organization which is now the National Council on Alcoholism. Later, the Yale group sponsored the founding of an organization of professional persons associated with state and Canadian provincial programs on alcoholism which is now the Alcohol and Drug Problems Association of North America. In 1944, two experimental Yale Plan Clinics were founded, and these became the prototypes for modern comprehensive community clinics in the field. Through its Summer School of Alcohol Studies, the

continued
The future of federal support for alcohol research is uncertain

Yale Center provided training for personnel who were to staff state-sponsored programs for education and treatment that developed throughout the country in the 1940s and 1950s. Personnel for such programs are still trained by the Center, which has been located at Rutgers University since 1962, and many states and regions have their own schools of alcohol studies as well.

Beginning in the 1940s, persons concerned with the problems of alcohol began efforts to stimulate federal involvement and support for research, education, training and policy review. Despite the development of a national movement at the level of state governments and through national and local voluntary community citizens' committees, the federal government virtually ignored these problems until the late 1950s when very modest support for research became available through the National Institute of Mental Health. A federally supported, state agency-sponsored Cooperative Commission on the Study of Alcoholism functioned through the early 1960s, and delivered its Report to the Nation in 1967 with recommendations for substantial federal involvement. In anticipation of this report, a National Center for Prevention and Control of Alcoholism was established in the NIMH in 1966, and a National Advisory Committee on Alcoholism was appointed by the Secretary of Health, Education and Welfare at the same time. In 1969, the Center became a Division of the NIMH and in 1971, under provisions of legislation introduced by Senator Harold Hughes, the Division became the National Institute on Alcohol Abuse and Alcoholism within the NIMH. At the same time significant support for the treatment of alcoholism was made available through the National Community Mental Health Centers. Although some substantial investments of federal funds have been made in research and training during the past seven years through the NIAAA, the Office of Education, the OEO and the Department of Transportation, the future of federal support and the organizational structure for federal activity are now uncertain, being caught up in a massive de-emphasis and elimination of health and welfare activities and a dismantling of the federal apparatus for their implementation.

Clearly, the magnitude of the problems of alcohol and their bearing on almost every aspect of life in society and almost every member of society warrant a major national investment in efforts to better understand these problems, develop and implement better strategies of preventive intervention and provide comprehensive treatment for those who are already victims of problem drinking and alcoholism. During the past few years, some significant (though far from adequate) investments have been made in research, training, and treatment programs specific to alcohol and its problems. As long as so much remains unknown and the resources for dealing with alcohol problems remain so meager, the continuation and expansion of strong categorical programs seems essential. At the same time, it is obvious that adequate attention to the problems of alcohol must be developed throughout the society at their level of greatest impact. This means that persons responsible for policy relative to the mainstream of activity in business and industry, health and welfare, education and recreation, religion and government must be cognizant of, concerned with, and responsive to the varied problems of alcohol and society. The problems of alcohol are so vast and so interrelated with other health and social problems that only involvement of the mainstream of resources for human well-being can provide an adequate response. In this regard, there
is also a need for long-range commitment to planning and long-range support for research and intervention as a part of federal policy. This is essential in order to attract the best thinkers in the sciences and professions to invest their careers in a national effort that must be categorical in commitment, longitudinal in perspective, multidisciplinary in orientation, and comprehensive in organization.

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PSYCHIATRISTS The Washington State Department of Social & Health Services has openings for Psychiatrists licensed to practice in the State of Washington. Current openings are in two correctional facilities and involve supervision/participation in treatment programs. Salary range $1,703 to $2,164 plus excellent fringe benefits. Contact Dick Verme, Recruitment Supervisor, Department of Social & Health Services, P.O. Box 1788, Olympia, Washington 98504. An affirmative action employer.

SANTA ROSA, CALIFORNIA: PROGRAM CHIEF—Psychiatrist to assist Director of community mental health program. Comprehensive services. 1 hour north of San Francisco. Staff of 100 includes six Psychiatrists, Maximum starting salary $28,800, plus Civil Service benefits. Contact: C. W. Norton, M.D., Director, 3322 Chanate Road, Santa Rosa, Calif. 95404 or Sonoma County Personnel Department, 2555 Mendocino Avenue, Santa Rosa, Calif. 95401.

Residents wanted: Brown University psychiatry training program, accredited positions for 1st, 2nd, & 3rd year residents, first year offers intensively supervised inpatient, outpatient, and child psychiatry experience. Second year includes training in liaison psychiatry, emergency psychiatry, and clinical neurology. Third year experience includes community psychiatry and electives for in-depth experience in clinical or research areas. Opportunities for 4th and 5th year fellowships. For application or further information write: D. R. Fowler, M.D., Coordinator, Brown University Psychiatry Training Program, Box #7, Butler Hospital, 333 Grotto Avenue, Providence, R.I. 02906.

Psychiatrists (2). One to head Comprehensive Mental Health Center serving resort city of 225,000; another to provide psychiatric input into innovative delinquency/preventive program focusing on children 6-12 years. Contact: MH/MR Services Board, 1872 Wildwood Drive, Virginia Beach, 23454. Telephone (804) 481-4488.

Chief Psychiatrist and Staff Psychiatrists Needed Immediately. Established Community Mental Health Center Inpatient, Outpatient, Partial Care, Consultation and Education, Emergency Service, and Alcoholism Clinic in operation; 6.5 million dollar staffing grant just funded; multidisciplinary approach; Community Psychiatry emphasized. Central Pennsylvania; All seasons recreational area; urban-rural population; pollution free and ecologically sound; great place to raise a family; Board Certified or Board eligible. Pennsylvania medical license required. Salary Range: Chief Psychiatrist—$35,000 to $40,000; Staff Psychiatrist—$32,000 to $37,000 depending on experience. Good benefit package. Limited private practice optional. Contact Mr. Karl N. Miller, Administrative Director, Altoona Hospital Community Mental Health Center, Altoona, Pa. 16603; Tel. (814) 946-2141.

Braham—Psychiatrist-Medical Director. Well established MH Ctr. located within hour drive of culturally and sports oriented Minneapolis-St. Paul metro area. Recreational living on threshold of vacation paradise. Dynamic innovative program with built in flexibility. Eval., & trmt.; trng.; consul.; specializin.; com., organization, etc. Enlightened personnel policies; present staff: clinical psychol., 3 psychiatrists; social workers; & psychiatric nurse. Starting salary negotiable. Write: James L. Williams, ACSW, PGM, Dir., Five County Human Development Program, Inc., Box 328, Graham, MN 55006.

Psychiatrist-Medical Director. Salary to $34,000, full time. Case evaluation, program consultation, limited outpatient treatment, participation in alcoholism service development. Community and psychotherapy orientation. Small growing clinic of responsible professionals doing a variety of therapies. Live on beautiful northwest Florida/Gulf Coast. We are not a stepping stone to private practice (practise okay after hours). Contact P. D. Krones, Ph. D., Director, Okaloosa Guidance Clinic, 111 Westview, Valparaiso, Fla. 32580.

Staff Psychiatrist for a 300 bed general psychiatric hospital with a fully approved 3-year psychiatric residency program. Numerous community and university affiliations. Opportunities for outside supplementary work. Very pleasant community free of pollution and strife. Salary certified psychiatrist $33,240. Call collect (712-225-2594) E.L. Womers, M.D., Mental Health Institute, Cherokee, Iowa 51012.

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