A Historical Overview of Alcohol and Alcoholism

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Abstract

The product of natural fermentation was discovered by man in prehistoric time and was soon followed by deliberate production of wines and beers from sugary and starchy plants. Primitive alcoholic beverages served as foods, medicines, and euphoriants, in religious symbolism and social facilitation. They also caused such recognized troubles as diseases (including alcoholism itself), accidents, and quarrels, and they came under early social regulation, but the benefits sufficiently outweighed the costs that occasional attempts to banish them usually failed. Records of peoples from all over the world reveal essentially the same repetitious history up to modern times. Distillation provided a more potent intoxicant, a more efficient analgesic-anesthetic-euphoriant, and more dangerous pathogen; this intensified but did not essentially change the problems surrounding alcohol. A further intensification of problems occurred with industrialization and with frontier conditions in America. This led to the growth of an organized political antialcohol movement and to prohibition. As in several other countries, prohibition failed in America when large segments of the population persisted in resorting to illegal supplies of alcohol. The repeal of prohibition was followed by new recognition of the scope of alcoholism and its associated diseases, including alcoholic encephalopathies, liver cirrhosis, a fatal alcohol syndrome, and cancer of the aerodigestive tract. To enlist science in newer attempts to cope with the problems of alcohol misuse, a multidisciplinary Center of Alcohol Studies with a systematization of the knowledge about alcohol was founded; a National Institute on Alcohol Abuse and Alcoholism as well as additional centers specializing in research on alcohol have been established; and public health educational efforts aiming at prevention have been launched.

This overview of the history of the use, misuse, and effects of alcohol requires an exposition of some 50,000 years of history in less than 50 minutes. It is appropriate to begin, then, with the paraphrase of a famous brief statement:

"In the beginning there was alcohol."

It is hard to understand why the human liver should be endowed with enough alcohol dehydrogenase, the enzyme that catalyzes the first step in the oxidation of alcohol and does not seem to have very much else to do, to metabolize a quart of whisky a day unless alcohol was amply present in the dietary of man, or of his ancestors, in remote evolutionary time. From this suggestion, we must leap over eons to a period when homo sapiens was living in what the paleohistorians call the gathering stage, but does not yet have alcohol. By chance, some fruits or berries, quite possibly grapes, have been left unattended in a primitive vessel or in the hollow of a rock. The sun and the action of invisible devilish creatures which we now call yeasts have spoiled the fruit. They are a thick soupy mess. In modern technical terminology they are a mash. But a tired, hungry, thirsty man returned from an unsuccessful elephant hunt, feeds incontinently on this mishmash. We can imagine the impact of this fermentative accident. It not only satisfied his hunger and thirst but also made him feel exceptionally good all over: less tired; less achy; and even less disappointed. Maybe even more: maybe he saw wondrous visions and felt full of divine courage and demonic derring-do; he could talk back to his carping wife; and he uttered words which, although not understandable, sounded inspired and portentous.

Perhaps this imaginative depiction of the discovery of alcohol, the effect of natural fermentation of sugary plants, is more poetry than history. It constrains too much into a single event. It is safe to infer, however, that man discovered alcoholic beverages in prehistoric times. Primitive people were inventive. It is likely that they advanced rapidly from depending on accident to deliberate manufacture of this magical drink-food that relieved fatigue, assuaged pain, evoked gaiety, enhanced bravery, promoted friendship, and even facilitated communion with the invisible spirits that seemed to control mankind's fate. Paleobotanists are uncertain about which plant the primitive gatherers first deliberately cultivated in starting the agricultural stage. It is likely that that first plant was Vitis, the ubiquitous grapevine, for its fruit could be eaten fresh, as grapes, and preserved, as raisins, and with little effort could be converted into that heart-rejoicing drink of magical properties and potency. The memory of this fateful event is apparently preserved in the Biblical record of the flood-hero who, when he began to be a farmer, first planted a vineyard.2

Few preliterate people failed to discover or learn how to produce wine or beer from fruits, berries, flowers, cactuses, tree saps, honey, milk, and every sort of tuber and grain. In the case of starchy vegetation, the most primitive agriculturists discovered how to convert the starch to fermentable sugar by adding the necessary zymase from their saliva. How gratifying early man found his wines and beers may be inferred from the fact, certified by the instructive myths and legends, that these drinks were not consumed without a price in troubles, and that they very quickly became the object of important social regulation. From the very beginning alcohol was a double-dealer and demonic derring-do. Yet, with few exceptions, man has preferred to pay the price.

The values that came to inhere in alcoholic beverages are evidenced by the multiplicity of customs and regulations that developed around their production and use as reported from hundreds of preliterate societies (2, 15, 27, 43). They tended to become central in all significant personal and social occasions: in religious ritual; in all rites of passage from birth to


initiation to marriage to funeral; in all public happenings; in compacts, feasts, conclaves, crowning, warmaking, and peacemaking; in hospitality, magic, and medicine.

Archaeological records of the earliest civilizations, murals, wall paintings, and vessels from all over the world, provide a continuous line of evidence of the universality and importance of these beverages. The earliest written records are equally informative. There are the laws of the famous first recorded code by the Chaldaean King Hammurabi (14), the clay tablet prescriptions of the Sumerian physicians (22), and later the medical papyri of the Egyptians (25) and the cuneiform epics of the pre-Biblical northern Canaanites of Ugarit (13). The evidence in the classical literature is voluminous; the Hebrew Bible is only one source. The Greeks and Romans too have left us a rich literary heritage (30, 31), and there is no lack of reference in the Vedas of India (36). What is important to bear in mind is the evidence not only of ubiquitous production, use, and appreciation but also of trouble.

A tendency that keeps cropping up naively in the writings of any period is to blame the alcohol-related troubles on "modern," newly risen phenomena. Even the claimed recent burgeoning of alcoholism among women (42) or among adolescents (38) is pronounced a new phenomenon. This tendency betrays those who do not take account of history. All the records, archaeological and literary, to which I have alluded, are filled with praises of the goodness and beneficence of the wondrous potions derived from wines and beers. "Wine will rejoice the heart of man," sang the Biblical poet, while the poet of the Odyssey intoned that "Wine sets even a thoughtful man to singing, or sets him to softly laughing, sets him to dancing, sometimes it evokes a word that was better unspoken" (Ref. 24, Book 14: pp. 464—466), and equally the poet of the Finnish epic, the Kalevala, praised the "good beer" that "set women to laughing, put men in a good humor, the right temper or misanthropy that the Proverbist warned: "Who hath woe?...who hath babbling? Who hath wounds, without cause? Who hath redness of eyes? They that tarry long at the wine."4 That is an early description in the Bible of both mental and physical illness attributed to excessive drinking. Hippocrates, the father of medicine, in describing certain febrile illnesses noted that they began with heavy drinking (1). One of his patients, made sick "by drinking and much venery," exhibited rigors, nausea, insomnolency, continued palpitation throughout the epigastrium, a parched and tense skin, a softish distension of the hypochondrium, delirium, and incoherent speech. That clinical picture should not seem unfamiliar to present-day physicians. The ancients were familiar with alcoholism and with its effects.

Nor was alcoholism among the ancients strictly a masculine phenomenon. More than 3000 years ago in Israel, when the Priest Eli saw the gentlewoman Hannah leaning against the wall of the tabernacle and moving her lips without sound, he mistook her for a hallucinating drunkard, showed no surprise, but urged her to give up drink.5 The Greek Anthology tells this story (35) of the lady Bacchylis, unsympathetically characterized as "the sponge of Bacchic cups," who when she fell sick made this vow: "If I escape from the wave of this pernicious fever, then for the time of a hundred suns I will drink only fresh spring water and avoid Bacchus and wine." But "when she was quit of her illness, on the very first day, she devised this dodge: She took a sieve, and looking through its close meshes, saw even more than a hundred suns."

What modern writer has more pithily described an alcoholic than with the epithet, "sponge of Bacchic cups"? (As what modern alcoholic, swearing off booze when in distress, has not in his next need for alcohol quickly found a crafty sieve for the absolution of his vow?) That was a lady alcoholic; women's libation is not a modern phenomenon.

Neither is the mortality of drunken pedestrians (3). This is what a Greek orator said at the funeral of a drunkard (26).

I do not know whether to accuse the wine of Bacchus or the rain of Jupiter. For both jeopardize the feet. This grave contains Polyxenos, who, returning from a country feast, fell from a slippery slope. Let every toper dread rainy paths after dark.

Nor is the accident proneness of the drunken anything so new as might be supposed from the recent statistic (9) that alcoholics are 16 times more likely than others to die by falling. When Odysseus' companion Elpenor, "in search of cool air, had lain down drunkenly to sleep on the roof of Circe's palace, and when his companions stirred to go, he, hearing the tumult and noise of talking, started suddenly up, and never thought....but blundered straight off the edge of the roof, so that his neckbone was broken...and his soul went down to Hades" (Ref. 24, Book 10, pp. 554—560).

These citations have adumbrated the earliest beginnings and reports of alcohol use, and of the consequences through classical times. There was socially integrative public drinking, and private drinking for pleasure which was moderate and not apparently harmful. There was ceremonial, religious, and medicinal drinking. In short, drinking was widely practiced nearly everywhere in the world, and drink was appreciated as a good, often as a particularly divine blessing, so recognized in the Old and New Testaments of the religions that have chiefly influenced Western culture. There were also harmful overdrinking and pathological sequels common enough to attract the repeated condemnation of potentates, prophets, philosophers, and physicians. There was alcoholism. The belief that it was alcoholism rests on the numerous evidences that many of those who were given to gross, repeated, and self-injurious use of alcoholic beverages obviously could not help themselves. They were addicted.

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3 Psalms 104:15.


5 Samuel I, 1:13—15.
So-called Western culture is rooted in a grandiose mix of chiefly 3 cultures: Greek, Hebrew, and Roman. We inherited our alcoholic beverages and our drinking ideologies, along with much else, from this mix which occurred in the centuries immediately preceding and immediately following the beginning of the Christian era. We inherited not only drinking and its rewards, but overdrinking and its punishments, and our ways of reacting to the problems, from Christianized Europe. That history forms the backdrop for our history.

What happened as Christianity established itself in Europe? Alcoholic drinks were not unknown to the pre-Christian Europeans. They had been making and drinking wine and beer from remote times. The new Christian culture did not oppose drinking. Indeed, some of the religious orders became the skillful manufacturers of the finest beverages. Of course, drunkenness was condemned. It was, like gluttony, a sin; but a common sin, everywhere indulged in by all classes. A few striking examples are worth recalling from the historical record.

In 12th-century Russia, a moving sermon by St. Basil the Great is titled, "On how it is seemly to refrain from drunkenness" (11). The date is centuries before the advent of vodka; that country did not have to wait to discover its problem, neither for distillation, nor for industrialization, nor for communication. Moving westward, "The ocean cruise of the Viennese," by the 13th-century satirist Der Freudenleere (17), gives a lively picture of bibulous high jinx on an early ship of fools. Nothing has changed for the better in the depiction of "the horrible vice of drunkenness" by Sebastian Franck (12), published in Germany in about 1531. Franck, a follower of Luther, is by some regarded as a religious preacher and might be suspected of exaggerating. However, another depiction in the same century, written in Latin for the learned by a self-proclaimed friend of the Christian era. We inherited not only drinking and its rewards, but overdrinking and its punishments, and our ways of reacting to the problems, from Christianized Europe. That history forms the backdrop for our history.

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No other vice now so possesses great halls... the leading men drip with constant drunkenness... And what do the common people pursue away with a lot of wine... This is the ugly comedy of a bibulous life. Moving westward, "The ocean cruise of the Viennese," by the 13th-century satirist Der Freudenleere (17), gives a lively picture of bibulous high jinx on an early ship of fools. Nothing has changed for the better in the depiction of "the horrible vice of drunkenness" by Sebastian Franck (12), published in Germany in about 1531. Franck, a follower of Luther, is by some regarded as a religious preacher and might be suspected of exaggerating. However, another depiction in the same century, written in Latin for the learned by a self-proclaimed friend of the Christian era. We inherited not only drinking and its rewards, but overdrinking and its punishments, and our ways of reacting to the problems, from Christianized Europe. That history forms the backdrop for our history.

England is hardly different. John Skelton, who died in 1529, has left an entertaining description in verse of Elynour Rumying, an alewife whose brew was popular with lower-class people in the neighborhood of King Henry VIII's Castle None such (40). Her customers are described as

all good ale drinkers,/That will nothynge spare,/But drynke aly theyll they stare....

Skelton reports how some of the women customers paid:

Some brought a sylke lace,/Some brought a pyncase,/Some her husbands gowne,/Some a pellow of downe/... And all this shylfe they make/For the good ale sake.

At least some of these women were obviously alcoholics with manifest signs of alcoholic disease. Skelton describes one thus:

...Lyke tan leather hyded:/She had her so guedyed/Betwene the cup and the wall,/That she was there wythall/Into a palsy fall;/With that her hed shaked,/And her hands quaked;/Her face glystryng lyke glas;/All loggy fat she was;/She had also the gout/In all her ioyntes about;/Her breath was sour and stale,/And smelled all of ale.

Apparently, she had pellagra, an alcoholic encephalopathy with seizures, beriberi with edema, and probably cirrhosis of the liver with ascites. If she had cancer too, our poet had no means of detecting it.

Drinking, drunkenness, and alcoholism have been described thus far from the days of wine and beer. We have arrived at the century when distillation became established in Europe. From the Elizabethan age, it is interesting to cite the writings of Thomas Nashe, a contemporary of Marlowe and Shakespeare. In his "Pierce Penilesse" (33), an entire section is titled "The Complaint of Drunkenness." Curiously contradicting Skelton, Nashe represents the English as a sober people until corrupted by the Dutch spirits (it must have been the original gin). Nashe writes:

From Gluttony in meates, let me descend to superfluity in drinke: a sinne, that euer since we haue mixt our selues with the Low-countries, is counted honourable: but before we knew their lingring warres, was held in the highest degree of hatred... Now, he is no body that cannot drinke super nagulum... quaffe vpsey freze cross... He is reputa

Nashe then describes his famous eight species of drunkenness, including "Ape drunke" and "Lion drunke" (that one "flings the pots about the house, calls his Hostesse whore... and is apt to quarrel with any man that speaks to him"). He declares, "All these species, I have seene practised in one Company at one sitting."

That Nashe ignored the past and saw the drunkenness of his time as a bad habit newly learned from the Hollanders reminds us that Sebastian Franck claimed that the Germans had learned the horrible vice of drunkenness from the French. The French, too, claimed to have learned it abroad, from the Dutch. Scapegoating is not new either.

As already noted, we have reached the era of distillation. According to the still prevalent tendency to attribute the troubles that people experience with drink to whatever is new in society, distilled spirits were destined to become a scapegoat. That is why it was necessary to document the universality of drunkenness, alcoholism, and disease (and there were also all the social distresses accompanying them, which have hardly been mentioned), all before the era of distillation.

Distillation, if it did not create or increase, could intensify...
problems around alcohol. For now instead of beverages containing up to 14% alcohol, but usually less, people could drink dilute alcohol with strengths of 50% and more. Surely, at the very least, it had become easier to become drunk and likelier to irritate delicate tissues or absorb invisible pathogens.

With what speed the spirit of wine conquered most of Europe! It is a testimonial to man's eager willingness or need to medicate himself with this drug. People must have wanted a faster, easier, and more potent alcoholic effect. It was inevitable that magical-beneficent virtues should be attributed to the newly found potion. Indeed, *aqua vitae* was a more potent medicine, a swifter assuager of pain, a quicker dissipator of cares, a faster facilitator of fun, and a speedier inducer of longed-for euphoria. In many languages besides Latin, it was called the "water of life," and in some countries that name still survives for the most popular spirits, as in the Danish and Swedish *akvavit* and *akkvitt*, and, through Gaelic *uisge beatha*, in English whisky. The Russians took to it as vodka, the little water, and clearly they mean the dear little water.

In England, at least, drunkenness was to become connected with distilled spirits, especially gin. On the threshold of the industrial revolution the publicists depict gin as the instigator of all private and public mischiefs, especially as the ruiner of the lower classes. But it takes no profound research to discover that the alcoholism of the upper classes was merely better masked and more politely ignored, even as in recent times. Besides, the better classes got drunk not on gin but on brandy and wine, and gin, invented by foreign devils, was the popular villain. The conditions are dramatically pictured in such artistic works as Hogarth's *Gin Lane* (10), and Cruikshank's *The Bottle, The Drunkard's Children*, and *The Gin Juggernaut* (19).

English writers of the 18th century blamed the blights of London, the increase of diseases like dyspepsia and consumption, an appalling rate of infant mortality, and a decline of population, on high consumption of gin (32). When the government attempted to put some limit on the gin flood by imposing a duty on imports and a license on sales the result was mob violence. It is worth noting that in the depictions of drunkenness of those times there is no lack of women. Most of them are wretched paupers or nighthouse girls. Trevelyan (41) found it "hard to say whether the men of fashion or the rural gentry were the worst soakers." It is hard to believe that the English ladies evaded all contamination by the universal custom.

It is time to migrate to America. The story of the bringing over of alcoholic beverages and of drinking customs from Europe is familiar. The Pilgrims landed at Plymouth partly because they were running short of beer on shipboard (8). In colonial times, the tavern was the center of public life, the place to meet for business, for trade, or politics. Beer, cider, wine, and spirits were consumed copiously. They were the popular refreshment on all festive occasions: a wedding; a housewarming; a christening; or the ordination of a clergyman (29). The usual problems appeared. There was drunkenness. It is documented in laws, with their basis in old England (4), making it a punishable offense; in sermons condemning it; and in records of punishments meted out to named culprits, especially repeaters (6). Drunkenness is better reported in Puritan New England than in the Cavalier South; that may only show who cared more. Krout (23) noted that rum not only relieved the sorrowful and distressed but "gave courage to the soldier, endurance to the traveller, foresight to the statesman, and inspiration to the preacher." He says "It sustained the sailor and the plowman, the trader and the thrapper. By it were lighted the fires of revelry and devotion." Few doubted it was a boon to mankind. So the rum trade flourished along with the slave trade. Later whisky from native grains was to replace the rum made from imported molasses.

In the early colonial days, drunkenness was condemned because it was an abuse of the "Good Creature of God" (5), the good creature being not the drinker but the drink. Reading some of the cases tried in New England, hardly after it was founded, in mid-17th century, with repeated convictions of the same persons (6), it is impossible not to be reminded of recent cases known as Easter, Driver, and Powell heard only yesteryear in our high courts. Some of the Puritan defendants convicted of drunkenness were women. The court could recognize the helplessness of the confirmed drunkard, that it was dealing with "a sin rooted in him." Hardly anyone says "sin" nowadays. We apply different labels, such as alcoholism, problem drinking, or alcohol dependence syndrome, and different punishments or treatments to such people; but the descriptions of their behavior are remarkably similar as are the public perceptions of the problem. A speaker before the General Association of Connecticut in 1776 declared (5):

> Many gross immoralities shockingly abound, which are become so fashionable that in the estimation of many they almost cease to be Vices. Of this kind we may reckon Intemperance. How many wallow in the more than bestial sin of Drunkenness, and seek every Opportunity by the immoderate use of Strong Drink to deprive themselves of Reason, that distinguishing Badge of Humanity, and reduce themselves to a level with the Brutes! Almost beyond Account have been the Quantities of strong Drink annually consumed in this Colony; and the mournful Complaints under the present Scarcity show what a wretched influence it hath acquired over us.

Could this be an exaggeration of conditions in America in the year of the Declaration of Independence? But how reminiscent it is of Obsopoeus in Germany or Nashe in England centuries earlier! Changing only the style of language, how up-to-date it would sound!

An awe-inspiring mutation was to occur, the Good Creature of God transfigured as the Demon Rum. The transmutation got its start in the 18th century from the writings of 2 Philadelphians, the Quaker teacher Anthony Benezet (7) and the foremost physician Benjamin Rush. Both challenged the popular beliefs in the health benefits of spirits. Rush's "Inquiry into the Effects of Ardent Spirits upon the Human Body and Mind" (37) was reprinted in numerous editions well into the 19th century. He is not only the first American medical authority on alcoholism but the father of the American public health movement. Those who suppose it was the American Medical Association that discovered in 1956 that alcoholism is a disease should note that Dr. Rush explicitly referred to habitual drunkenness as a disease and explicitly called it an addiction.

The influence set in motion by people like Benezet and Rush became a movement under the leadership of men like President Timothy Dwight of Yale College and the Reverend Lyman Beecher. The latter finally denounced not only intemperance but any use of alcoholic beverages. He fathered not only Harriet Beecher Stowe, the reformist author of Uncle Tom's Cabin, but also the reformist total abstinence movement. Gradually, the growing popular movement for voluntary temperance in the use
of spirituous liquors was taken over by the teetotalers, with less faith in the power of moral suasion and more in the efficacy of legislative clout, all history notwithstanding. In their attacks on alcohol, following the lead of Dr. Benjamin Rush, they heavily emphasized disease. Colorful charts of the drinker’s rosyate nose, flaming brain, decayed stomach, and shriveled liver were the visual aids at every temperance lecture. They did not feature cancer or the fetal alcohol syndrome only because they had not heard of them.

As America spread westward in the 19th century, drinking expanded simultaneously with the frontier and with industrialization. Winkler (45) has detailed the drinking ways, and the troubles engendered by them, of the explorers, soldiers, Indians, trappers, hunters, miners, settlers, and cowboys. “Indian drinking” was merely a pejorative synonym for blitz drinking, a form of downing alcohol with the purpose and the effect of immediate gross intoxication and riotous bang-bang behavior. The antialcohol movement, representing any drinking as the problem, gained adherents.

No doubt there were respectable neighborhood taverns with benevolent free lunches. The saloon, as a center of all wickedness including thievery, gambling, prostitution, and political chicanery, became the whipping boy of the antialcohol movement, which had preempted the title of temperance. In a steadily mechanizing environment, industrialists realized the advantage of abstinent employees; the temperance cause gained new sources of support.

By the time of World War I, the antialcohol movement had the most skillful political leadership in its history, represented especially in the Anti-Saloon League. Prohibition won legislative approval in most of the states. A wartime national prohibition was passed by the Congress. The 18th Amendment to the Constitution was next adopted, followed by the Volstead Act. In 1920, the temperance movement celebrated John Barleycorn’s funeral, but the corpse refused to play dead.

There was probably more popular support for prohibition than most of its opponents and denigrators have been willing to concede. There was much hopeful, if naive, sentiment for putting an end to the evils of the saloon and of alcohol by a national prohibition. The 18th Amendment had not been submitted to popular referendums. It is doubtful that a popular national majority favored a total prohibition. The cause of prohibition was lost within an insignificant time of its adoption. Popular defiance again had its way; moonshine, smuggling, bootlegging, and corruption flourished. Popular referendums amended the Constitution and repealed Prohibition in 1933.

This history, a bare outline, has been a necessary prolegomenon to an important turning point.

Drunkenness with its accompanying disorders and alcoholism with its associated diseases are not the only problems connected with the misuse of alcohol. Peace-loving churches warred with each other over whether it is moral to drink, and this sort of problem tears at the roots of a society. School children were indoctrinated by legislative direction about the evils of drinking, contrary to the customs of their home cultures, and that sort of teaching is confusing to children and undermines the educational process. The obtrusive problems that society was willing to recognize in some degree were drunkenness and alcoholism.

A fantastic consequence of prohibition becoming the law of the land was that people acted as if there would be no more alcohol problems. Such a total disregard of history could hardly be believed but that we witnessed it. There was a temporary shortage of drink among those who had not laid up supplies. There was a reduction in arrests for drunkenness and in admissions to hospitals. Profitable sanitariums specializing in alcoholism closed their doors and went out of business. Doctors stopped seeing alcoholics and stopped recognizing alcoholic diseases. The alcohol problems curve sank precipitously but immediately started to rise again. There was a demand for liquor and, promptly, a booming illicit business in supplying it. Probably a lot less alcohol was consumed, on the average, by the total population during Prohibition than before. But it is likely that much of the amount not drunk was not drunk by those whose drinking does not give rise to problems, moderate drinkers to whom liquor was not important and who shunned dealing with bootleggers. Still a lot of pressure developed to have one’s bootlegger and to have entree to speakeasies, and a college sophomore had no status without a flask on his hip.

What happened to the obtrusive problems can be seen in the statistics of alcoholic admissions to hospitals as the years of the Prohibition era lengthened. They rose fairly steadily. During the first post-Prohibition decade, nearly every one of the tens of thousands of alcoholics admitted to such hospitals as the Psychiatric Division of Bellevue, in New York, had become an alcoholic during Prohibition (18).

A natural reaction among many thoughtful people to the repeal of prohibition was the fear of increased problems and puzzlement over how they might be brought under control. Strong appeals were written recommending the middle way, with incomparable Sweden appropriately held up as a model.

The new legislation adopted by the majority of states that legalized alcoholic beverages usually included a noble sentimental preamble of purpose: to promote temperance. A small sample of these laws reveals an inconsistent survival of the need to make concessions to the old temperance cause, especially in restricting the availability of alcohol. Some states thought temperance would be better promoted by a system of private licensed distribution; others preferred a system of state-owned liquor shops. Some laws required that drinks could be served only together with food; elsewhere the provision of food in liquor-dispensing places was forbidden. Some laws required that the windows of drinking places be curtained from public view; others required that they be uncurtained. Some laws forbade the presence of unescorted women in drinking places; others only forbade women to drink standing at the bar; seated at a table they might drink as heartily as any upright man. In some respects, all the legislation agreed. The young must be barred from buying, and alcoholic beverages must yield revenues to the government.

A small group of thoughtful people had a brilliant idea. Drinking and the associated problems had been around a long time, and neither legislation nor inculcation of the fear of hellfire or disease had been effective in preventing or ameliorating them. Were we not in the age of science? Could not the power of science be brought to bear on these problems? In the mid-1930’s, the Research Council on Problems of Alcohol was founded to seek funds to support scientific research on the problems. The members were predominantly M.D.’s but there were also Ph.D.’s, Sc.D.’s and D.D.’s. The
was for this that E. M. Jellinek (21) was lured away from
the effects of alcohol on man. An executive was needed, and it
year, the problem was where and how to publish the volumi-
Council raised only insignificant amounts but did obtain
journal but the beginnings of a systematic documentation of
Alcohol Studies. It began with the recruitment of a multidisci-
Alcoholism, which, like the clinics and the industry program,
emerged in the mid-1930's and burgeoned in the early 1940's,
and did research in the problems of drinking as well as drun-
ationalism and to the world an image of science in action getting
was to become a widely adopted and adapted model. It con-
dered interesting researches not only in its physiological-
productions and some of the costs of particular sorts of
We were confident that we knew a lot about the immediate
We were sure, although we no longer are, that any
educational colleagues everywhere could solve the fundamen-
It is time to mention the second phenomenon that also
not in knowledge about alcohol problems, a summer school of alcohol
in anthropology, and even in police science. It projected to the
that alcoholics were not all Skid Row bums and that
itself to help a growing multitude of alcoholics but
was not to remain confined to biology. Within a
year, the problem was where and how to publish the volumi-
was to become Yale to start what was to
Alcoholics Anonymous (44). The fame it got not only expanded
knowledge; production losses and traffic accidents; religious conflict;
We could identify most of the alcohol-associated diseases, and
affected the forms and some of the costs of particular sorts of
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studies, public clinics for the treatment of alcoholics, and a
and alcohol as well as alcoholism.
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Alcoholics Anonymous (44). The fame it got not only expanded
its own capacity to help a growing multitude of alcoholics but
also helped the Center of Alcohol Studies by reinforcing the
the teaching that alcoholics were not all Skid Row bums and that
they could be restored to health, family, and society.
Two questions need answers now. What was the state of
scientific knowledge in the early 1940's, and what did those
who had the knowledge propose?
We were confident that we knew a lot about the immediate
physical and psychological effects of various amounts of al-
We were sure, although we no longer are, that any
amount of alcohol always acts as a depressant. We knew a lot
about the effects of prolonged excessive drinking on health.
We could identify most of the alcohol-associated diseases, and
we could even successfully treat most of them; most, but not
all. Today we still do not know the whole truth about Korsakoff's
psychosis or about liver cirrhosis, or how the recently often-
reported alcoholic cardiomyopathy comes about, or what the
role of alcohol is in relation to cancer. We spoke with some
confidence about the nonheritability of alcoholism, and this
confidence is now shaken. We could describe in understand-
able terms the forms and some of the costs of particular sorts of
alcohol problems: poverty and crime; morbidity and mortal-
ity; production losses and traffic accidents; religious conflict;
and Wet versus Dry propaganda. We did not know and did not
pretend to know the cause or causes of alcoholism. We could
and did display a lot of new sophistication in discussing alco-
holism and personality or alcoholism and social conditions. We
knew there were many forms and degrees of misbehavior with
alcohol, and we spoke of inebriety and later problem drinking.
Within this rubric, we included something we called alcoholism,
and we were sure there was such a phenomenon, and we were
sure it is a disease. We chose to emphasize alcoholism and its
treatment because that seemed to be a magic key which, in
the new era that was beginning, with the added value of the
popularization of Alcoholics Anonymous, would open doors
and gain support for broader conceptions about research and
education. But we could only hold forth the hope and belief
that, given the chance to study with the skills of multiple
disciplines, we and a growing cadre of scientists and profes-
sional colleagues everywhere could solve the fundamental
questions. Such study, Jellinek predicted, would contribute "toward the prevention of inebriety" (16).
Beginning in the 1950's and increasingly in the 1960's, the
National Institute on Mental Health became a major supporter
of the Center and of research on a broad spectrum of alcohol
problems. In the 1970's, the National Institute on Alcohol
Abuse and Alcoholism was established. From that Institute, the
latest pronouncement is that alcohol problems are flourishing
(34).
So much for history. Now, is there a lesson in this history?
If we would believe popular current propaganda, we would
have to conclude that Jellinek's prediction was naive or that
scientific study is ineffective, for, 35 years later, we are being
told that about 1 in 10 drinkers in the United States is an
alcoholic. The actual numbers claimed are in the neighborhood
of 9, 10, or more millions which would represent an enormous
increase in the earlier estimated rates of alcoholism. These
recent gross numbers seem to have been derived by a new
system of statwistics or mythematics. We have yet to develop
a reliable epidemiology of alcoholism. There probably are sev-
eral million alcohol addicts among the more than 100 million
drinkers in this country, and that makes a serious public health
problem. Moreover, these alcoholics, and some of the several
million heavy drinkers from whose ranks the alcoholics de-
velop, are at risk for all the well-known alcohol-related dis-
eases, including increased risk of some forms of cancer.
But a grave social problem also lurks in what may be pro-
jected by the concerned health agencies. Evidently, the most
common addiction in this country, smoking, has been reduced
among some segments of the population since the knowledge
of the malign health consequences of smoking, especially in
relation to cancer, has been popularized. Yet at the same time,
in spite of the propaganda being aimed particularly at youth,
smoking has become more prevalent among adolescents. It is
as if what we are saying about smoking has a different effect
on different generations in the population.
At the same time, we are confronted with many evidences of
an increased incidence of drinking, or at least drinkers, among
adolescents. The reports of a greatly increased prevalence of

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alcoholism among adolescents may be exaggerated. More adolescents are drinking and perhaps drinking more often and in more quantity than formerly. This at least raises the possibility of more alcohol addiction in the future.

Is there something wrong with the messages about smoking and drinking? Are they having an adverse effect on youth? In the “education” about alcohol, are we falling into a false-propaganda trap by saying that alcohol causes liver cirrhosis, alcohol causes cardiomyopathy, alcohol causes the fetal alcohol syndrome, alcohol causes cancer, when in fact only gross alcohol intake over a long time is associated with these sequelae, whereas moderate drinking may be individually and socially beneficial? Do public health authorities and educators owe to tell people the whole truth?

The product of this workshop, after considering the relationship of alcohol to health and especially to cancer, might easily be a report solely in terms of adversity; there is ample evidence of an association between alcohol intake and increased risk of cancer. A public health institute has a responsibility to formulate its messages with the same caution that a physician must exercise in approaching a patient; first of all to be sure to do no harm. A public health institute has to determine how much alcohol over how much time entails what risks, and to take account of and give expression to a holistic perspective. That means that it has to take into account and give expression to all aspects of effects of alcohol use including beneficial health effects. No doubt some life spans are curtailed, some through the development of cancer, because of the use of alcohol. Yet the totality of the epidemiological evidence suggests that moderate drinkers outlive abstainers as well as heavy drinkers (20).

If that is true, then what is the propriety of public health messages that would discourage people from drinking at all?

History does hold valid and valuable lessons, and the recitation of the preceding history would be useless if we did not learn at least 5 things from it: (a), that the drinking of alcoholic beverages is deeply integrated in human, including American, society and entails some beneficial as well as harmful personal and social consequences; (b), that negative propaganda about alcohol, and especially legislative restrictions, do not stop most people from drinking and are least effective with those who are most endangered, those who are or who are on the way to becoming addicted; (c), that we have yet to learn why some, but not most, people drink so much as to harm themselves and why some of them become addicted, that is, the etiology of alcoholism; (d), that we have yet to learn how to prevent overdriking and alcoholism; and (e), that until we learn how to prevent we need to study the adverse consequences of overdrinking and alcoholism and how possibly to prevent or mitigate them, how to cope with them, and how to deal with the victims rationally and humanely.

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