

Alcoholic Beverages and Narcotics in the History of Civilization

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1. THE ORIGIN OF ALCOHOLIC BEVERAGES AS A HALLUCINOGEN

When one considers the origin of alcoholic beverages, one arrives at Shamanism. By altering his consciousness, the shaman's spirit went to the heavens and there received the revelation of the heavens or, in other cases, brought back a spirit that had left for the heavens. It was in this out-of-body experience (OBE)-type shamanism that alcohol was discovered and alcoholic beverages were developed.

There are several ways a state of altered consciousness, or trance, can be invoked. The most popular is the repetition of a simple rhythm accompanied by song and dance or mind-altering practices such as hunger, thirst, fatigue, and other forms of asceticism. An important supplementary method is the use of drugs, that is to say hallucinogens.

There are probably more than 100 kinds of hallucinogens developed by humans. Currently the majority of these are found in Latin America, but in the past many were also found in the Old World. However, most of these have not survived to the present, and records of only a very few remain. The reason why hallucinogens disappeared from the Eurasian continent is because OBE-type shamanism disappeared there. On the other hand, the reason why many hallucinogens still remain in Latin America is because the hunting and gathering tribes in this region have remained to modern times, as has OBE-type shamanism [LA BARRE 1970].

Alcohol was adopted as one of the many hallucinogens. It is thought that alcohol was developed independently in three locations. One such location is Eastern Siberia. This region is well known for OBE-shamanism and is known to have produced alcoholic beverages from berries and tree syrup. For example, in the Kamchatka Peninsula the bark of the *Betula* genus (Betulaceae) and syrup from the same plant were mixed and fermented to produce an alcoholic

drink. A distilled spirit was also made from the plant gimlost (*Lonicera pedunculis*), the bark of which contains sugar. Likewise, a variety of distilled spirits were made from the berries of morosky (*Rubus Raii* [syn. *Chamemoru raii*]), pianitza (*Vaccinium* sp.) and burshnitza (*Vaccinium* sp.). Additionally, the tubers from plants in the *Heracleum* species were scratched with shells to remove the outer skin, which was then bundled and placed in a container into which hot water was poured. Once the fruit of such plants as cranberry had been added, the concoction was left by the fire to ferment. A distilled alcohol was collected from the resultant liquid. When *Epilobium angustifolium* or *Heracleum lanatum* are added during the production of the drink, an even greater volume of distilled alcohol could be obtained [KRASHENINNIKOV 1764]. Examples exist such as this, in which distilled spirits were obtained, but in general, the alcohol was consumed as a brewed drink. However, although the Kamchadal and Koryak people had access to the berries of *Vaccinium uliginosum* and other plants and were able to produce alcoholic beverages, the Chukuchee people, being further north, were unable to obtain berries and thus did not produce alcoholic beverages [BOGORAS 1904-1906]. In other words, the distribution of berries was a limiting factor in the production of alcoholic beverages.

The second location is the region from the Caucasus to Western Siberia. Here again, berries were used to produce an alcoholic concoction. Among the berries, grapes were overwhelmingly important. This method of producing alcohol was taken into Mesopotamia and went on to develop significantly as wine.

The third location is Latin America. The Zacateca, Guachichil, and Pame, hunting and gathering people of the Titimeca group living in the dry central part of the Mexican mesa, produce alcoholic beverages from the fruit of the cactus *Opuntia*. The fruit itself is sweet and edible. In making the alcohol, the peel of the fruit was removed and the fruit crushed to obtain only the juice. Merely allowing this juice to sit for some time completes the process of making the alcoholic beverage. Although certainly not a strong drink, the Indios drank vast amounts until they lost consciousness. Further north, an alcoholic beverage was made from the fruit of the cacti *Carnegiea gigantes* and *Lemaireocereus thurberi*. An alcoholic beverage was also made from the pulp of a legume, the *Prosopis* (Leguminosae). The pod of this plant contains sugar and, if crushed with the pulp in a mill and baked, produces an edible food similar to bread. By adding water, a mixture resembling porridge was obtained. When more water was added and the concoction allowed to ferment, an alcoholic beverage was obtained [BRUMAN 1940: 70-82]. Of these various types of alcoholic beverage, it is believed that the drink obtained from the *Opuntia* is the oldest.

The Chaco people that lived in the region of northern Argentina were also a hunting and gathering people that used to produce alcoholic beverages by chewing on the *Prosopis* pod. As the pod of this plant contains sugar, there was in fact no need for chewing, since alcohol could easily have been produced simply by the presence of yeast. However, the fact that these people chewed the pod is of interest. The ripened pod was chewed without removing the pulp. After chewing, the result was placed in a bag made from goat skin and hot water poured into the bag. When left to stand, the concoction became an alcoholic beverage called Algaroba. This method of producing alcohol was not limited to *Prosopis* but extended to the fruit of *Acacia moniliformis* and *Gourliea decorticaus* (Leguminosae) and *Zizyphus mistol* (Myristicaceae) [LEWIN 1931: 173; METRAUX 1963: 246, 249]. Drinks made from *Opuntia* and *Prosopis* are

considered the original alcoholic beverages produced in this region.

Although alcoholic beverages were first consumed as a hallucinogen, other hallucinogens were also used. In fact, these hallucinogens were far more powerful than alcohol and they could be found in the same regions. In Eastern Siberia, *Amanita muscaria* was used, while in Western Siberia, *Cannabis sativa*, soma, *Ledum palustre*, *Papaver somniferum*, and so on were used. In Central America, Lophophora was used, while in South America, *Anadenanthera culabrina* was used. These hallucinogens were superior to alcohol in inducing a trance so that, eventually, alcoholic beverages began to be used for other purposes.

2. EARLY ALCOHOLIC BEVERAGES AND HALLUCINOGENS

Farming began and civilization was born. Shamanism that involved direct contact with the gods was also practiced among people in the early stages of building a civilization. In other words, priests entered a trance and performed the role of heeding the wishes of the gods. In Iran and Northern India soma was used for this purpose, while in China, alcohol was used. In the oases of Turkistan and Tajikistan, ruins of fortresses are found dating back to 1000 BC. These ruins include temple complexes where containers for the ashes of sacred fires have been found. In other rooms, tubs and filters used for making some kind of liquid have been found. According to pollen analysis, the presence of *Ephedra*, *Cannabis sativa*, and *Papaver somniferum* have been detected. As a result of this analysis, it is believed that hallucinogens were used in the temple, and that this relates to the later practice of Zoroastrianism in Iran [SHERATT 1995: 29-30]. In this region, wine that had been introduced from the west was already in production in 4000 BC. In other words, hallucinogens and alcoholic beverages coexisted.

Around the year 1500 BC, the Aryan peoples migrated to Northern India and built Indian civilization. These people drank soma to hallucinate. Although there are various hypotheses as to what soma is, the strongest candidate seems to be the seed of *Peganum harmale* or *Ephedra*. In any event, soma was a hallucinogen used by the Brahmans. On the other hand, the Dravidians who originally lived in this region are believed to have engaged in the production of alcohol. This was an alcoholic malt drink introduced from the west. However, the Brahmans did not drink this but merely adapted it into their ceremonies. This alcoholic concoction was called sura [EINOO 1995]. Here again alcohol and hallucinogens coexisted, and while hallucinogens were used by priests, alcohol was used by the ordinary people.

Hallucinogens are not found in China. In fact, alcohol is believed to have been the only hallucinogen used. In China, alcoholic beverages were already being produced in the Yang Shao Culture (4800-4300 BC). During the Shang Dynasty (1600-1050 BC), divine right in politics was believed to have been granted by divine intervention as an innate right and magical ceremonies were convened at which alcohol was consumed until inebriation in order to hear revelations from the god of heaven [HANAI 1992: 64]. In other words, alcohol functioned as a hallucinogen.

As has been seen, at the beginning of civilization, alcohol either coexisted with hallucinogens or was used as a hallucinogen in its own right. However, alcohol gradually changed to become a simple offering to the gods. For example, in the period of the Zhou Dynasty (1050-841 BC) that followed the Shang Dynasty, the belief was that divine right was

granted from the god of heaven through ethical behavior. Rather than referring to the will of the gods, what were left were ceremonies paying homage to the gods. Alcohol was also used in ceremonial offerings and rituals designed to strengthen cooperation among the royalty and nobility [HANAI 1992: 64-65].

3. INDEPENDENCE FROM HALLUCINOGENS

Why, then, among the many hallucinogens did only the use of alcohol change? There are several reasons why alcohol began to be used for other purposes. First, although in the discussion thus far the term hallucinogen has been used generally, hallucinogens can be categorized into those that produce hallucination in the narrow sense and substances that induce a trance. Alcohol belongs to the second category. Although hallucinations may be brought on by alcohol consumption, it is not a direct effect. Such hallucinations are caused when a trance is induced by alcohol and some other stimuli is applied during the trance. In this sense, alcohol is weaker in its effect than are more directly "hallucinatory" hallucinogens.

Second, alcohol has the added effect of bringing on a sense of well-being. In other words, alcoholic beverages create the urge to repeat the experience. However, it is a mistake to think of early alcoholic concoctions as being pleasant-tasting, as they are in the present day. Though certainly a fermented drink, the fermentation was merely a form of putrefaction. There is every possibility that sometimes the process went well while at other times the process failed. Conceivably, the concoction would sometimes rot or the fermentation process would continue until the result was vinegar. This is what alcohol production was like in the early stages. However, what is important here is not the taste but the fact that pleasant inebriation could be experienced.

The third reason was that technological advances were made. Technological progress that enabled the production of a consistent product with a more pleasant flavor spurred people on to produce and consume alcohol. As a result, alcoholic beverages with a pleasant taste were developed.

The fourth reason was that alcohol was produced from ingredients that were also used as food. In other words, obtaining the ingredients was relatively easy. Moreover, this was why a relationship between the harvest festivals and alcoholic beverages evolved. That is to say, the harvesting of food and the production of alcohol became related activities and, thus, alcoholic beverages became a part of harvest festivals or prayers for a bountiful harvest. Among hallucinogens in the wider sense of the term, only alcohol was blessed with these properties.

Although opium also brought on feelings of well-being, the drug was identified with sleep. Tobacco, while lacking the property of alcohol to produce a sense of well being, possessed a weak hallucinatory and calming effect, which explains its widespread use. *Cannabis sativa* also brought about a sense of well-being, but its hallucinatory properties were more powerful than that of tobacco. For this reason, the drug was not as widely accepted as tobacco but was still used fairly extensively, next to tobacco, for relaxation. Baths were also first used to induce a trance, but the sense of well-being brought on by sweating quickly changed its primary use to a means of relaxation and enjoyment [YOSHIDA 1995]. Apparently, humankind is partial when it comes to repeating experiences that bring about a sense of well-being.

4. MAN AND GODS IN COMMUNAL EATING

Offerings of alcohol to the gods existed in nearly all parts of the world, and alcohol was consumed in ceremonies in which man and the gods were conceived of as eating together. Communal eating with the gods took place on a variety of occasions, including ceremonies of homage to the gods in order to ensure a bountiful harvest, ceremonies of thanks to the gods for a bountiful harvest, and ceremonies praying for or giving thanks for victory in battle. Offerings of food and alcohol were sometimes made to the gods and then consumed communally by man after the ceremony. The ceremonies themselves were solemn, but afterwards the participants enjoyed unrestrained revelry. Such unrestrained revelry had the purpose of strengthening the sense of solidarity among the participants, but for the individual participants enjoyment was found in the consumption of alcohol. Eventually, the main emphasis shifted to this latter aspect entirely.

A similar change can be seen in the use of hallucinogens in the narrower sense of the word. The original use of hallucinogens was by shamans who would imbibe the substance to allow the spirit to leave the body. Eventually, ordinary men began to use hallucinogens. In South America, men would imbibe or snuff hallucinogens under the guidance of shamans to view the mythic world. This allowed them to see who they were and from whence they came, to retrace the footsteps of ancestors, to understand the meaning of the many rules that protected them, and to form a personal identity [YOSHIDA 1984]. This is similar to what happened when alcohol was consumed, in the sense that its use became pervasive among the ordinary people, but with alcoholic beverages enjoyment became the main objective and strengthening ties among people the secondary result. In the case of hallucinogens, viewing the mythic world became the main objective with a similar result of strengthening solidarity among people. However, the use of hallucinogens did not develop further within traditional cultures.

Earlier, it was stated that alcohol was consumed in ceremonies involving communal eating between man and the gods. If emphasis is placed on drinking, this can be called communal drinking between man and the gods. From this communal drinking between man and the gods came communal drinking among people. However, the appearance of communal drinking among people does not imply that everything changed immediately. The two forms of drinking coexisted for many years. There are two formats in communal drinking among people. One is communal drinking in a vertical relationship, the other in a horizontal relationship. Ceremonial drinking occasions in the Japanese context where an alcoholic beverage is poured into one large cup and passed from one person to another falls into the former category. The order in which each person partakes of the alcohol constitutes a confirmation of the relative positions of the participants. On the other hand, unrestrained revelry is an example of the latter. Each individual has his own cup and drinks at will. However, participants will refrain from pouring for themselves. This is because the purpose of the revelry is to strengthen relationships within the group and not merely to become inebriated.

In ceremonies involving alcohol, communal drinking between man and the gods, communal drinking among people in a vertical context, and communal drinking among people in a horizontal context occur in succession and, together, form a complete social experience. That is to say, communal drinking among people in the vertical and horizontal senses occurs

within a context of communal drinking between man and the gods, particularly in village ceremonies.

5. COMMUNAL DRINKING AMONG PEOPLE

However, a form of drinking alcohol that had no relationship to communal drinking with the gods later appeared, i.e., communal drinking divorced from any relationship with deity. One of the first to emerge was communal drinking between a lord and his vassals, which had as its purpose strengthening of the lord/vassal relationship. The ceremony of offerings and serving of alcohol in the Zhou Dynasty is a typical example of this form of drinking. Shortly thereafter, communal drinking began among people purely for enjoyment. Various occasions were used to stage drinking parties where participants were all considered equal. Even among the ordinary people, festivals commemorating weddings and holidays became occasions for drinking alcohol. Again, strengthening social solidarity provided the rationale for these occasions.

Originally, groups that gathered together were those that shared a common descent (kinship groups). This changed to groups that shared a common locale (local groups), and finally to those who shared more loosely defined associations (association groups). Depending on the culture, different groups predominated in forming the core for drinking parties. For example, compared to the situation in Japan, in China and Korea it was far more common to have drinking occasions in which the group was based on kinship. Drinking parties during village festivities could be considered to involve local groups. However, drinking occasions based on association groups have increased overall relative to those based on kinship and location. Particularly in the modern age, drinking occasions based on association groups have become far more common.

In fact, the communal drinking format between lord/vassal explained earlier represents drinking based on association. This format continues in the modern parties organized by Japanese companies, where a formal party is followed by unrestrained revelry. In such unrestrained revelry, vertical relationships are discarded in an attempt to increase horizontal unity of the organization. However, there is a recent trend among young Japanese people to avoid participation in the drinking that follows the formal party. These people feel obligated to attend the formal party, but they prefer to be liberated from the situation as soon as possible and to proceed to a drinking situation with only close associates or to return home alone. This attitude reflects a weakened sense of belonging to the corporation among young Japanese. This is because young people are beginning to shift their emphasis from social relationships involving the corporation, in which they have no choice, to social relationships in which the choice is their own. It is perhaps natural that they feel a greater affinity with people who share similar interests, but when this tendency escalates, even social relationships based on choice can become burdensome. Consequently, there are some young people nowadays who shun social contact entirely and prefer simply being alone. These people apparently prefer a lifestyle that does not involve forming close relationships with others. Their priority is to avoid entering into the realms of others, not allow others to enter into their own realm, and avoid hurting others or being hurt themselves. Do such people drink alcoholic beverages when alone? Most probably they do not, but pass the time in non-subjective activities such as computer games. It would seem that human relationships are changing significantly in present-day Japan, as are styles of drinking.

6. FROM "CEREMONIAL" TO "EVERYDAY" DRINKING

The largest change in the way alcohol is consumed is in the change from "ceremonial" drinking to "everyday" drinking. Almost all gatherings for the purpose of drinking mentioned earlier were ceremonial gatherings. The venue, date, and purpose of these gatherings were clearly determined in advance and alcohol was freshly produced specifically for them. The further back one goes in time, the rarer were such occasions. However, progress in the production of alcohol offered not only increased opportunities for ceremonial drinking but also allowed for everyday drinking. Although originally, only those in the higher social strata were the beneficiaries of this change, gradually the benefits spread to ordinary people.

The invention of the still in particular brought the price of alcoholic beverages down, allowing ordinary people to consume them. The high alcohol content also allowed people to become inebriated more easily. This was during the industrial revolution in England and it may be that for people suffering from hard labor and dire living conditions, inebriation was the only means for flight from reality. This easily led to the emergence of alcoholism.

In ceremonial drinking, however voluminous the amount consumed, alcoholism was rare. The total inebriation that characterizes festivals in certain villages in Central and South America is well known, but in fact very few alcoholics are to be found in such villages. This is because the occasions for drinking are infrequent. Alcoholism is caused by everyday drinking, and this is the reason why there were no, or very few, alcoholics in the so-called Third World.

According to Kunio Yanagida, one form of the Japanese custom of drinking by oneself probably began during the Edo period with servants of merchant households having a quick drink at a traditional pub. Their merchant-class masters had frequent opportunity to attend ceremonial gatherings where drinking was possible, but the servants did not. However, servants knew the taste of alcohol from having drunk it at ceremonial gatherings in their home villages. Pubs catering to these servants appeared in the city of Edo (modern Tokyo), and there they could have a quick drink on the way back from their places of work. The other form of drinking by oneself was when the master would treat his servants to drinks. In these situations, the master poured for the servant, who drank alone; there was no reciprocal pouring. This was originally a sort of ceremony upon first meeting, but it later developed into a type of reward for some special task performed. This custom of a benevolent master serving drinks as a reward to his workers was transformed in the modern era into the custom of a housewife, out of kindness, pouring drinks for her husband who returns home from a long day at the office. Thus, the custom of drinking before dinner evolved and the custom of drinking alone at home took root in Japanese culture [YANAGIDA 1964 (1939): 107-108]. As long as the husband's drink before dinner was the result of his wife's kindness, there was little likelihood that the husband could become an alcoholic.

7. RELIGIOUS ABSTINENCE

As civilization reached a certain stage, the concept of abstinence was born. This surfaced first in religion. The push for abstinence is clearest in Islam. The Middle East where Islam began is the region that first produced wine and beer, and it continued to be both a major producing

and consuming region. Around the time of the birth of Islam, wine was imported into Mecca and consumed by the ordinary people living in urban areas. Islam appeared as a force opposed to the status quo, and it became established based on its contradiction of common practices of the time, i.e. strong opposition to the consumption of alcohol and pork. This contradictory nature of Islam was based on a binary moral consciousness that dichotomized good and evil in terms of desert and city, nomadic life and urban life, pork eating and non-pork eating, drinker and non-drinker, and so forth. Phenomena considered evil were incorporated into Islamic doctrine in various ways, with the contention for example that alcoholic beverages caused a believer to lose his faith in God. As Islam spread its influence through holy wars, observing taboos became the primary sign of conversion. By refraining from consuming alcohol and pork, a person became a believer of Islam. For this reason, abstinence was absolute.

When Christianity first developed, it was steeped in asceticism. Sexual continence was particularly characteristic of the religion. However, abstinence from alcohol was not intrinsic to it, since wine was incorporated into its rituals. Although there were inhibitions related to excessive drinking, alcohol continued to be consumed among the Christians.

The appearance of the Protestant movement changed these circumstances significantly. Protestantism that eradicated the intervention of the church or clergy and taught direct contact with God opposed the old order of Christianity. In contrast to the old order that approved of drinking, abstinence appeared as a characteristic of the Protestant movement, and this ban was gradually incorporated into doctrine. For Protestantism, a religion that extolled labor, alcohol was an enemy of honest work and thus drinking was considered immoral. In Protestantism, morality had to be achieved as a direct, personal act of faith in God. Abstinence became a strict discipline, an expression of the believer's will to show his love for God.

The origin of Hinduism is Brahmanism, a creation of the Indo-Aryans who invaded India. It is believed that Brahmanism transformed itself from folk worship into a major religion around 500 BC. Brahmans, the priests of the religion, partook of soma and *Cannabis sativa* but did not engage in drinking alcohol. Through this, the Brahmans differentiated themselves from the ordinary people who drank a sort of beer, such as sura, and wine imported from the west.

Buddhism was born from Brahmanism. Buddhism in its early years was an austere religion. Monks were prohibited from consuming alcohol. Although Buddhism disappeared from India, the religion spread to East Asia and Southeast Asia where it became deeply entrenched. Monks were exhorted against drinking, but this did not apply to the ordinary people. For this reason, in areas where Buddhism was strong, there was no push for abstinence.

From around the year 1000 AD when Islam reached India, Brahmanism transformed into Hinduism, bringing with it a more clearly defined caste system which strongly opposed Islam. Abstinence on the part of the Brahmans and drinking among the lower castes became a clearer distinction at this point. Alcohol was more strictly excluded from religious rituals and ceremonies. The prohibition against alcohol in Hinduism is reflected clearly in the life of Mahatma Gandhi, who was austere to the point of being an ascetic. When he became a political leader, politicians influenced by him began to think that an independent India must become a "pure" non-drinking nation, to distinguish itself from drinking European colonial powers. After independence, there were states that passed temperance laws. Temperance thus became a national ethic in India.

8. REGIONS WITHOUT ALCOHOLIC BEVERAGES

While there are regions in the world that do not consume alcohol due to religious prohibitions, there are also other regions that have never developed alcoholic beverages. These are regions without indigenous alcohol production. In the past, North America and Oceania were representative of such regions. Why is it that these regions did not develop alcoholic beverages? That North America was a region without alcoholic beverages is somewhat strange in light of the fact that Eastern Siberia and Central America developed drinking cultures. In between these two bodies of land, only North America did not have, or develop, alcoholic beverages. Moreover, in North America native peoples were familiar with the process of obtaining syrup from trees, such as maple syrup [HAYWARD 1896: 42]. Just a little processing of this syrup would have resulted in an alcoholic drink like those produced in Eastern Siberia. Moreover, berries suitable for pressing and fermentation were abundant. Despite the ingredients being there, why was it that alcoholic beverages were not produced?

The answer to this question lies in understanding the uniquely North American methods of achieving trance states. As explained earlier, there were numerous methods of entering into a trance. In North America, tobacco existed as a hallucinogen. This product later became important in rituals, but initially it was used exclusively as a hallucinogen to bring on a trance. In certain limited areas such as California, *Datura* was also used. In addition to such drugs, there was the steam bath. Men would gather in a semi-buried house in which an intense fire burned, and there they entered into a trance from the heat and lack of oxygen. Other methods used to enter into a trance involved taking heated stones into a tent and pouring small quantities of water on them to create steam. Ascetic practices were another method of inducing trance in North America. Typical is the example of rituals to the Sun God conducted by Native Americans living on the Plains. In this ritual, the skin of the breast was torn with hooks that made blood spurt out, causing the participant to faint. In other examples, not only the breast but also the back and arms were cut and wooden nails with ropes were inserted horizontally into the wound. The heavy skull of a buffalo was hung from this rope. Alternatively, the rope would be tied to the totem of the Sun God and the participant would dance until the skin tore and blood poured out. Asceticism that led to the participant's fainting produced a trance state in which revelations from the gods were obtained [YOSHIDA 1995: 19-44, 252-256].

Inducing trance through asceticism was deeply embedded in the Native American culture. Men who were able to withstand the asceticism were highly honored. In this manner, the means of inducing a trance for the North American Indians became focused on tobacco and ascetic practices (the bath explained earlier can also be considered a type of asceticism), thus obviating the need for alcohol. For these reasons, North America remained a region free of alcohol despite its relative proximity to alcohol producing cultures.

Oceania, on the other hand, was geographically isolated from all other alcohol producing regions. The people of the Papua region and the Australian aborigines had no knowledge of alcohol, and such knowledge was never introduced from other regions. However, the aborigines would chew the leaves of the pituri (*pitcheri*: *Duboisia* spp. of the Solanaceae) that has hallucinatory properties [HORTON 1994: 874; SHERRATT 1995: 15]. The people of Papua

practiced possession-type shamanism and achieved spirit possession simply through concentration or diffusion of the consciousness. Later, betel chewing was introduced. Although this does not have hallucinatory characteristics, it does have stimulating properties. What was most stimulating for the people of this region, however, were their tribal wars.

About 4000 years ago, Austronesian peoples migrated into this region from the west. These people also had no knowledge of alcohol. Kava (*Piper methysticum*) drinking that evolved from betel chewing in New Guinea spread throughout the Pacific region [YOSHIDA]. Kava has no hallucinatory properties, neither is it a stimulant. Indeed, the drug has tranquilizing properties. However, as can be seen in the use of kava in Polynesian ritual, it creates a solemn world distinct from the everyday. On the other hand, betel chewing was widespread in Melanesia and, as in the case of New Guinea, tribal warfare was what most stimulated the people. Although kava chewing was also seen in Micronesia, the people received more stimulation from contemplating long distance voyages and extramarital sex.

Alcoholic beverages were never developed in these regions and, with the exception of Micronesia, was historically never introduced from the outside. In these regions, there was always something else that took the place of alcoholic beverages.

9. ALTERNATIVES TO ABSTINENCE

Alternatives to alcohol consumption are found in regions where alcohol is prohibited, just as in regions without alcohol. In the world of Islam, *Cannabis sativa* is commonly used. In Yemen and Africa, Arabian khat (qat: *Catha edulis*), a form of stimulant, is used. The leaves of this plant are chewed, for example, when intoning the Koran. Kola is a stimulant originally used for chewing in West Africa. Use of this plant continued after the introduction of Islam. Tea and coffee are also used as everyday drinks.

Although soma has disappeared from India, *Cannabis sativa* is still used. Moreover, in some regions opium is used in its liquid form. As long as opium is taken orally in the form of tincture, drug addiction does not commonly occur. However, when smoked, the amount of opium that reaches the bloodstream increases exponentially and can result in serious drug addiction.

Perhaps religious and political rallies stimulate people who abstain from drinking alcohol, but aggression towards opposing religious or political groups may be considered somewhat more dangerous than alcohol addiction.

10. THE FUTURE OF ALCOHOLIC BEVERAGES

Why do human beings need to consume alcohol? As the years go by, the volume of alcohol consumed is increasing, but this cannot be attributed only to the pursuit of pleasure.

The modern age has been called the age of science, that is, the age where reason holds sway. Rational thought and action are called for at all times. In theory at least, all matters are to be handled rationally and logically. However, this ideal cannot be said to be completely realizable for human beings. Humankind also requires the sensitive, emotional, and illusory world of chaos that is at the other extreme. Man would seem to be a creature that exists within

the balance between these two extremes.

In the history of humankind, progress into the world of rationality after long years of chaos was extremely rapid. Is it that man is confused by the very speed of this progress? Humankind exists, at its fundamental level, as an animal or biological organism. Man cannot escape from this reality. If man does not exist only in the realm of rationality and the cerebral cortex, then it follows that the world of chaos is not merely the world of an outdated past but rather one of the worlds that supports present human existence. If this is the case, humankind is crying out for a world of chaos amidst a world that is all too rational.

Another issue also comes to mind. We say we live in a world of rationality, but is there no preordained structure to our senses and awareness? It is said that 98% of all human actions and reactions are automatic [NIHEI 1990: 85]. That suggests that most of the time we act without thought. Similarly, even when thought guides our actions, have we not fallen unawares into stereotyped thinking? Without question, automatic action and stereotyped thinking smooth the daily progress through real life, and yet I believe that at times humankind firmly structured in this way requires the world of chaos to survive. Alcohol consumption, or perhaps something that takes the place of alcohol, are an invitation into the world of chaos. This is why in both regions without alcoholic beverages, and regions which abstain from alcohol, we find equivalents to alcohol consumption.

However, the world of chaos always threatens to destroy the order of the rational world. In fact, it may be that the world of chaos is powerful precisely because it internalizes such a threat. For this reason, institutions are found everywhere in society to ensure that the world of chaos impinges on the status quo only to the extent that order is not completely destroyed.

In the United States, hallucinogens were allowed expression only in the field of art. Psychedelic art was thus born. In many countries, the use of opium is permitted only in medical applications. The use of *Cannabis sativa* is prohibited in many countries regardless of the intended use. Acceptance of these narcotics is correlated to the strength of a particular society's system for asserting social control. Japan is a country with strong controls and, with the exception of medical applications, the use of all narcotics is prohibited. The only socially accepted narcotics that originated as hallucinogens are alcohol and tobacco.

There are other methods, besides the consumption of alcohol, to relieve the stress that accumulates in our overly rational world. Sport, for example, creates controlled stimulation by the society and is a safe stress reliever from the point of view of the status quo. For this reason, sport-related organizations and people are typical examples of forces endeavoring to maintain the status quo.

Religion in the process of formation is often anti-social. If that were not true, people could not be "saved" by the religion. However, once established within a society, religion becomes organized and bureaucratic. In the process of coming to terms with society, the religion's power to offer salvation that initially attracted people becomes diluted. For this reason, new religions spring up all the time. Viewed from the results, perhaps the greater the persecution a religion experiences, the greater the salvation that is offered to its adherents.

The United States has taken the step of designating tobacco as a narcotic. This would never have happened in any country other than the United States, where Puritanism is a potent force. The rationale for the designation is that tobacco is, by scientific standards, hazardous to human

health. This conclusion is based on the results of epidemiological research that shows that the harmful effect of tobacco smoke affects not only smokers but also non-smokers. Because of the social priority placed on protecting women and children, who have been heretofore relatively powerless in society, the call for prohibition on smoking becomes stronger. Smoking's benefits are limited to personal relaxation or personal enjoyment, and compared to the damage it causes such benefits are seen to be small. Smoking tobacco is a custom that began only after the 15th century and even were tobacco plantations and the relatively small tobacco companies to disappear in the face of a ban on tobacco, the impact on society would be negligible. There is every possibility that tobacco will disappear. However, whether tobacco has no redeeming factors is unclear from a scientific perspective. Research into tobacco and cancer to date has not progressed beyond that of epidemiology, and there has not yet been enough research to identify a one-to-one correspondence. The anti-smoking movement was based on scientific faith rather than the accumulation of data. Moreover, the intrinsic rule of science which maintains that "conclusions are always tentative" has been ignored. There is always the possibility that a conclusion maintaining that tobacco is beneficial for humankind may be reached in the future.

What about a ban on the use of automobiles that continues to negatively impact human health and the earth far more than smoking? The automobile industry is one of the core industries today. Such an industry cannot be abolished. Economic principles, rather than concern about any possible health risks, are at work. Such bans are not merely based on scientific rationales. However, whether or not the automobile industry will continue to be a core industry is unknown. It would seem to me likely that the proposition will prove true, that what flourishes will eventually die out.

As long as alcohol consumption does not bring harm to society, drinking will be a matter of free choice. However, when phenomena that are detrimental to society such as alcoholism become rampant, regulations moderating its consumption may appear. To be sure, everyday drinking brings with it the danger of alcoholism. Or, there may prove to be other health disorders triggered by such drinking. On the other hand, there are medical and sociological theories concerning the benefits of drinking. There is even a theory that red wine is in fact a health benefit. If a similar theory were to appear with respect to Japanese *saké*, the product would become more accepted by society. Furthermore, the economic importance of the liquor tax within the fiscal structure of nations and the economic benefits of the alcoholic beverages and related industries are difficult to ignore. On top of this is the long-standing relationship between humankind and alcohol consumption.

Today, consumption of beer is increasing exponentially. One reason for this is likely that the beer industry is expanding in a way typical of modern manufacturing-based industries, but the fact that the alcoholic content of beer is low cannot be ignored. Beer, with its weak inebriating effect, is eminently suitable as an everyday drink. The emergence of canned beer has strengthened its image as a soft drink and has brought about its even greater acceptance.

We can safely conclude that alcoholic beverages are not likely to disappear in the future. That legal restrictions do not work has been demonstrated by the failure of prohibition in the United States. However, if people cannot exert self-control, regulations to moderate alcohol consumption may ultimately appear.

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