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## Consciousness altering drugs – man’s search for unreality

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### Abstract

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Marx described religion as the “opium of the masses” and of course drugs to alter consciousness and hence our perceptions of reality have long been associated with religion. Indeed one wonders whether drugs and religion are fundamental to man, man having been defined both as “an animal who wonders about his origin” and as a “drug using animal.”

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## Consciousness Altering Drugs:- Man's Search For Unreality.

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Marx described religion as the “opium of the masses” and of course drugs to alter consciousness and hence our perceptions of reality have long been associated with religion. Indeed one wonders whether drugs and religion are fundamental to man, man having been defined both as “an animal who wonders about his origin” and as a “drug using animal.”

Alcohol must have been one of the first drugs to be discovered. Certainly it was known to all the ancient Mediterranean cultures. One legend says that the Persians discovered wine when a princess tried to store grapes in a grain bin and drank the fermented juice left in the bottom after the grapes had been removed.

In a primitive agricultural economy most resources have to be devoted to food production and any diversion of grain for alcohol production has to be very strictly controlled. Alcohol consumption under these conditions is not an individual vice or an everyday occurrence, but is reserved for special occasions to celebrate events such as harvest, birth, death, winter solstice or marriage. On these occasions the individuals indulge in the group experience of intoxication and the temporary lowering of social conventions allows the acting out of repressed behaviour, often in a ritualised form. This acts as a psychic safety valve, relieving tensions within the group and reinforcing its cohesiveness. This is obviously biologically advantageous to the group.

Horton, in a study of primitive cultures, found that group drunkardness increased in response to two types of stress:- threats to the stability of the culture by the encroachment of western “civilisation”, and anxiety engendered by threats to food supplies. The latter can lead to a positive feedback situation where an increasing proportion of the food supply is diverted to alcohol production, thus aggravating the original situation.

Even when the economy of the community becomes advanced enough to make it an everyday occurrence, group alcohol consumption to enhance

cohesiveness still occurs. The Greeks had their Bacchanalian revels and the Romans had Saturnalia. In our culture the whisky bottle comes out to celebrate family events and the new year. Businessmen cement agreements with alcohol, and so on ad nauseam. A peculiarly Scottish group experience pickled in alcohol is the football match.

The religious use of alcohol is worthy of a dissertation in itself. The group experiences described above all have a religious substrate. Not only is alcohol used to establish de facto communion with one's fellow men, but also a symbolic communion with one's god.

When alcohol is available on a day to day basis many people use it, as I have suggested above, to blunt the crude reality of life in which they are immersed. To illustrate this point I cannot do better than to quote from Aldous Huxley's novel “Point Counterpoint,”:- “The working day was over; the bar began to fill up with men in quest of spiritual relaxation. Beer flowed, spirits were measured out in little noggins, preciously. In stout, in bitter, in whisky they bought the equivalent of foreign travel and mystical ecstasy, of poetry and a weekend with within the group and reinforcing its cohesiveness. This is obviously biologically advantageous to the group.

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Catholics and some anglicans believe that wine becomes the blood of their god when the appropriate incantations are muttered over it. This has an interesting parallel in the pre-columbian Latin American cultures. At least 24 different hallucinogen cacti and mushrooms have been identified as having been used by the Aztecs and all of them were called by the generic term "teonanocatl" meaning "gods flesh". The best known of these in the west is probably Peyotl which has been identified as the cactus *Lophora Williamsi*. When dried it forms the mescal buttons that are the sacrament of the "native American church" today. The main active ingredient is of course mescaline. The fungus *Psilocybe mexicana* is the source of psilocykin and was also used by the Aztecs. Another natural hallucinogen they used was the seeds of *Rivea corymbosa*, the pretty blue variety of morning glory. Each seed contains about a microgram of lysergic acid ethylamide. They were used to make a drink which according to the writings of a Jesuit Father in 1615 "provokes lavisousness...the priests would drink of this plant when they wished to deal with the devil and to have answers to their doubts, they became mad and a thousand devils danced before their eyes." Not unnaturally, the church tried to suppress such a direct line to the almighty, without much success.

Other plants used by the Aztecs included tobacco which they called *pizietl*. It was used both in sorcery and as a drug. They were also familiar with the

properties of the various species of *datura* which they called *tolatazini*. Further north *Datura Stramonium* is known as Jimson weed, or Locoweed, and is well known for its property of causing stampedes in cattle who browse on it. During the War of Independence, a platoon of English soldiers used Jimson weed roots as a substitute for potatoes in an Irish stew; as a result they were delirious for 3 days. The active components of Jimson weed are atropine like compounds which are of course hallucinogenic. The common deadly nightshade in this country can produce poisoning presenting as florid hallucinations, from its atropine content. The Jimson weed has also attracted the attention of geneticists as triploidy often occurs in it.

It seems that the use of hallucinogens among the Aztecs was not an everyday experience. The mescal buttons might be taken by the whole congregation in a religious ceremony to produce a transcendental experience uniting the people with each other and their gods. The more potent *Ololuitiqui* was apparently reserved for the priests when they wished to divine the future.

To move from the west to the east, cannabis does not seem to have been used as a sacramental drug to the same extent as alcohol and the Mexican drugs. Rather it has been used as a recreational drug in much the same way as the "soma" used in Aldous Huxley's utopia. Soma was used by Huxley's characters to escape from reality, and indeed a modern American psychiatrist, Dr Sheldon Chilst, has described it as a "poisoner of reality." The Hindus rather more poetically have called it such names as "the soother of sin" and "the poor man's heaven," both names suggesting they used it to avoid facing painful reality.

Cannabis is of course the same plant that produces hemp, although the climatic conditions best for hemp production are not those best for resin production. Hemp is favoured by wet weather, while hot weather causes the leaves to secrete the resin so beloved of the youth of today, presumably as a protective measure.

Hemp was of course one of the raw materials of shipbuilding and hence was of great strategic importance to Britain until the middle of the 19th century. At one time all the British supply came from the Dutch East Indies, and when this was cut off in the early 17th century, the North American colonies started to grow it, and by 1630 it was an important

item in their economy. It seems that the colonies were not unaware of the pharmacological properties of the plant and it has even been suggested that George Washington liked to have a quiet puff at a pipefull.

With the decline in sail the need for ropes decreased, and as cotton developed so the use of hemp for weaving declined, and the colonists returned to other crops. However, in WWII hemp was again a strategic material, and the Dutch East Indies were then part of the South-East Asia co-prosperity sphere. Thus the US government again encouraged its growth in particular in the mid-west. As a result, after the war it spread prolifically as a weed. Ironically, it is often found on the so-called government land that the government pays the farmers to lie fallow and so keep food prices high. There it grows, and its there for the taking. However, its potency is not high.

It is only during the last century that cannabis has become widely used in the west. Better documented than its alleged use by the early Americans is the "club de Haschinistes." Flourishing in Paris during the decadence of the second empire, it catered to the tastes of the literary gentlemen of the time. However, until recently it has, in the main, been the solace of the poor and deprived in us as it has been for generations in the East and Africa.

Since the early fifties its use has spread widely throughout western society, being in particular the symbol of rebellion of the so-called "Youth Revolution."

It has not always been used by young men who wish to rebel from the mores of their society. Hashish, which is of course cannabis resin, is supposed to be the origin of the word assassin. Jebel Tarik, the muslim warrior had a particularly ingenious method of training assassins. He would render selected young men semiconscious with a large dose of hashish and transport them to a large valley equipped with houris and all the other appearances of a muslim paradise. After a few days they would again be rendered semiconscious and removed from the paradise. They would then be told that this few days of heaven was merely a foretaste of what would be theirs for all eternity if they were to die in the line of duty. Thus fortified they would be sent on their missions.

Certain African tribes used to send their warriors into battle under the influence of cannabis, and this they may have learned from the Moors whom they fought against. Modern armies may also suppress

their collective fears of imminent death by pharmacological means. In WWI the French used wine, the British rum and the Germans schnapps. Today, the Mozambique freedom fighters and American bomber pilots go into battle with reality altered if not dimmed by cannabis.

Cannabis has long been used as a medical drug. In 2737 BC, the Chinese emperor Shen Nung described its use for a variety of problems from malaria to "female weakness". It was only deleted from the B.P.C. in 1954, having been used for a number of applications from corn plasters to tranquilisers. Indeed there is nothing to stop you prescribing it today if you wish, although the oral preparations taste absolutely revolting. Recent interest in its pharmacology may produce useful new synthetics.

Opium is also a natural product with a long and chequered history. It is popularly assumed to have been smoked in the east since antiquity. In fact in China it was eaten rather than smoked and its use was never widespread. However, its smoking did become widespread after the American tobacco companies and the British East India Company started to open up China in the late 18th century. Narcotics, as William Burroughs has remarked, are the perfect consumer commodity; once the customer has got hooked the price can be raised as high as you like. It is not so much that reality with the drug is so pleasant, although this must be a factor as anyone who has had a narcotic pre-med will know, as that reality without it is so unpleasant.

It is perhaps poetic justice that the opium boot is now on the other foot, the young and virile Chinese culture undermining the decadent American empire by subverting its youth with drugs. Over the last 4 years there has been a swing away from cannabis towards heroin use by the American troops in Vietnam. Up to 25% of the troops below the rank of sergeant abuse heroin regularly. Mainly it is smoked, not injected as this is more convenient in a combat situation and it may obviate the unpleasant process of habituation. While cannabis enables one to selectively perceive more acutely certain aspects of reality, heroin, or opium is a depressant of perception of reality. As such, its use by troops would seem to be not conducive to survival.

Opium was widely used in Britain, especially after the industrial revolution. The intelligentsia used it to quieten reality and the working class to quieten their children. Various proprietary compounds were

produced which had this latter as their sole purpose.

One such was "Gregory's powder." In Compton MacKenzie's novel, *Sinister Street*, published in 1913, a child is threatened with Gregory's powder unless it behaved itself, showing that we are not so far removed in time from such barbarities as we might like to think.

Many other natural products have received attention from man in his attempts to escape from the painful realities of life. In the west snorting cocaine has recently undergone a resurgence in popularity, despite its price. Its main effect is to provide a quick orgasmic sensation when sniffed, similar in some ways to the pleasant "hit" obtained by some addicts when heroin is injected. It is absorbed through any mucosal surface, and it has thus been put to some novel uses.

A plant that has received scant recent attention is the "sweet flat," *Acorus calamus*. It has a long pencil like root, growing the world over in marshy soil. The Chinese called it Chang Pu and used it as a hangover cure and an anti-fatigue agent. Larger doses - about ten inches of root - are hallucinogenic. Like Jimson weed and belladonna its active component is an atropine like agent, which is interesting in view of the classical Greeks' use of it as an ingredient for an eyewash.

The use of mushrooms to alter the perception of reality has not been confined to central America. The Koryak tribesmen of central Siberia made use of the fly agaric mushroom *Amanita muscaria*; as the name implies its active ingredients include muscarine. They would harvest and dry the mushroom, and prepare an infusion of it in their beer. This process may remove the hepatotoxic components. The psychoactive components are excreted by the kidneys and recycled by the economically minded tribesmen, a situation analogous to the early days of penicillin. They would use small doses for recreational purposes and larger doses to communicate with their gods.

About 5000 years ago the north of India was invaded by tribes of aryan ethnic origin. They may also have had contacts with the Siberian tribes and almost certainly some of them reached Israel. The tribes who reached India spoke Vedic, an archaic form of Sanskrit. With them they brought their scriptures in the form of vedas or psalms. One of the gods described was Soma (see Huxley's *Brave New World*). This god would manifest himself in a plant

or its juice, and would reveal himself to those who ate or drank of the plant. The interesting thing is that some scholars have identified soma with one of the *amanita* mushrooms.

The Vikings also used *amanita*, mainly before going into battle. Of course, they may have had contacts with Siberia.

Some men use pharmacological means to give themselves the feeling that there is more to life than is dreamt of by the natural philosophies. Pharmacologically the same effect can be achieved with perfect legality with alcohol, and with tranquilisers and hypnotics. Animal products have not figured so prominently as vegetable products in the quest for unreality. Toads figure in witches brews and indeed toad skin and salivary glands contain various pharmacologically active substances including bufotenine which is also found in *amanita* mushrooms in the cohoba snuff used by South American indians to obtain pleasant release from reality during siesta time.

It has been suggested that the rise in interest in black magic that cumulated in the Mansonite murders in California may include the mistaken idea that human pineal and adrenal glands contain hallucinogens. Incidentally, Alistair Crowley, the great beast, and doyen of 20th century witches and warlocks used mescaline back in the 20s long before Huxley wrote "The Doors of Perception."

Colin Wilson, the ex angry young man and existentialist "philosopher" makes an interesting observation in his recent book on witchcraft and the occult. The fig tree, known in the east as the Bo tree, contains various tryptophan derivatives, some of which may cross the blood-brain barrier and have central effects. Would you believe that the Buddha had his enlightenment under a Bo tree? Also bananas and their skins contain similar compounds which may explain the effect allegedly obtained by smoking banana skins.

The biggest boost to mankind's quest for unreality came in 1828 when Wokler synthesised urea externally and started organic chemistry on its juggernaut path. If I tried to categorise all the synthetic compounds with which man has battered his central nervous system we would be here until midnight. I will therefore deal with only one or two of the more interesting compounds making the passing comment that the commonest synthetic drugs misused must be barbiturates - "mothers little

helper” as the stones sing with a great deal of truth. If the suburban housewife doesn’t like her existence the pleasant numbness of barbiturates provides an acceptable substitute.

Lysergic acid diethylamide is the best known of the synthetic hallucinogens. It was synthesised by Hoffman in 1938 but he discovered its hallucinogenic effects only on April 16th 1943. It has been suggested by one of Tim Leary’s confreres that on the discovery of nuclear energy, Fermis atomic pile in Chicago being run for the first time in December 1942, the almighty decided to make LSD psychoactive so that by taking it the human race could rediscover its place in nature and refrain from throwing nuclear weapons around. This is typical of the dreary drivel talked by the Learyites.

What effect does LSD in fact have? The best account I have come across is in the Canadian report on the non-medical use of drugs, an excellent book I unreservedly recommend.

The authors describe six types of experience; the psychotic adverse reaction characterised by terror, fearful hallucinations and ideas of reference. The non psychotic adverse reaction, characterised by fear, unpleasant illusions and disorder of affect and mood, differing from the psychotic reaction only in intensity. The psychodynamic and psychedelic experience is characterised by the emergence into the ego of suppressed material often with the release of powerful emotions. The cognitive psychedelic experience when one has the impression of enhanced intellect and insight into the nature of things. The aetheric psychedelic experience is associated with changes in sensory perception. Synaesthesia may occur with music being “seen” and “felt”, precepts of all kinds are charged with preternatural vitality, and beautiful and significant visions may be seen. The sixth type of experience is the transcendental experience of the “great white light”, of feeling at one with the universe that is the goal of most intellectual LSD takers, including Leary. There is a world of difference between the teeny bopper who drops acid to see the pretty lights and someone of the intellectual calibre of Huxley who takes it, as he believes, to gain an insight into the deeper workings of the universe. I suspect that this may be a rationalism of what is a form of escapism from the true unpleasantness of human existence that he caught so well in his earlier novels. Leary and his collaborator Alpert published a book called “The Psychedelic Experience” which

guides the tripper through the various stages of such until he sees the “great white light.” This book is based on the Tibetan “Book of the Dead” which is a set of instructions read by priests to the dying to guide them through death and the afterlife to their next reincarnation.

Many drugs are hallucinogens, but not all have the same effects. Some are especially good at producing visual hallucinations, often associated with delirium, and this includes many of the anticholinergic drugs. These include such agents as dirvan, methylpiperidyl benzilate (LBJ) and serenyl. Serenyl in particular is interesting; it was developed and marketed by Parke-Davis as an anaesthetic before its abuse liability was realised. It has been suggested that its mode of action is to block thalamocortical projection fibres, and the cortex, thereby deprived of its sensory input invents its own. Its approved name is phencyclidine and hence it is popularly known as PCP. Parke-Davis withdrew it for human use and developed from it tetramine which is quite a useful anaesthetic, although interestingly enough it has as a major side effect the production of unpleasant dreams and disturbed behaviour as well as, in one reported case, possibly inducing a long term psychosis. Serenyl is still on the market in the US as an animal tranquiliser, and hence can get onto the black market.

Some agents, particularly the substituted amphetamines such as STP, MDA and MDMA appear to be particularly good at producing adverse psychotic states.

It is interesting to speculate on the prospects of tailoring molecules to produce a particular reality altering effect. Imagine the religious revival that would result if the host were impregnated with a drug that induced a brief mystical state of ecstasy and revelation. But remember the Aztecs were doing this 1000 years ago, and the Native American Church is doing it today.

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Ladies and gentlemen, if I have in the course of this dissertation raised the slightest flicker of interest in any of you in the nature of our existence, I will be well content.