

Marijuana and Music: A Speculative Exploration

Peter Webster

ABSTRACT. The extra-therapeutic uses of cannabis and other age-old psychoactive plants are currently ignored or dismissed not only by the usual suspects (moral entrepreneurs, political, religious leaders and other self-proclaimed do-gooders), but also by the great majority of the academic community. Those wishing to experiment with such substances often do so at no small risk to reputation or freedom. Thus, potentially important research has been banished from mainstream science to be accomplished only unofficially, often anonymously, and seldom given recognition when merited. As an example of such unofficial, unpublished, and underground research, the author presents a speculative exploration on the cannabis-produced altered state of consciousness and its relation to the appreciation and production of music. Hypotheses will be offered for consideration concerning the neurocognitive changes brought about by cannabis and how these may produce various useful effects. Aspects of the development of jazz music in the 20th century are presented which provide support for the hypotheses. [Article copies available for a fee from The Haworth Document Delivery Service: 1-800-342-9678. E-mail address: <getinfo@haworthpressinc.com> Website: <<http://www.HaworthPress.com>> © 2001 by The Haworth Press, Inc. All rights reserved.]

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INTRODUCTION

The ongoing public and scientific debate, and the political and law-enforcement conflicts concerning the proven and significant ther-

Peter Webster is Review Editor of the *International Journal of Drug Policy*, Quartier Les Vignes, Auvare Puget-Theniers, 06260 France (E-mail: vignes@monaco.mc).

apeutic uses of cannabis may be one of the more absurd spectacles of modern times. This debate, and indeed, the results of much recent research on marijuana, thought to be “scientific” by many, serve mainly to illustrate the pitfalls that have always confounded those who believe they can hold objective views on a controversial topic that do not fall prey to the political, moral, and religious prejudices of their times. As history plainly indicates, only a few gifted thinkers of any age seem inherently immune to such self-deception.

A major result of such prejudice has been the denial of effective medicine to no small number of those in need. But perhaps more importantly, contemporary attitudes both public and scientific have completely ignored or even actively rejected age-old uses of the natural psychoactive plant above and beyond the medicinal, uses that provide not a restoration, but rather an addition to, a valuable change, or even augmentation of normal human capacities. The suggestion that any “drug of abuse” might be used as a tool to enlarge one’s experience and understanding, however, has attained the status of religious heresy and taboo in the minds of many, even among scientists who believe themselves beyond such irrationality. On the general principle that an agent that reliably alters a phenomenon must provide useful experimental possibilities, at the very least the study of cannabis-produced altered states of consciousness should prove worthwhile for understanding aspects of human psychology and cognition. The rarity of scientists who might entertain such a principle when applied to “illicit” psychoactive drugs must arouse the suspicion that the widely-acclaimed objectivity of the modern scientific enterprise is not as exalted as purported to be.

Although research on the extra-therapeutic uses of marijuana will not soon be undertaken in the hallowed institutions now too-often helping to prolong our ignorance on the subject, informal and private experimentation, seldom published, has been taking place. The results of such research is, as a rule, very speculative and provisional, and tends to be dismissed with a sniff by accredited academics, not to mention officials and policy-makers clinging to prohibitionism as if to a life-raft in a storm. However, this is not the first instance in the history of scientific exploration in which some of the more interesting research has been driven underground.

As an example of such unofficial, unpublished, and underground research, I would present the following speculative exploration on

marijuana consciousness and its relation to the appreciation and production of music. Hypotheses will be offered for consideration concerning the neurocognitive changes brought about by cannabis and how they may produce various useful effects. Since I have lived in Europe for many years, where the use of cannabis has been decriminalized in some countries, I can without legal risk or moral disqualification admit that my personal experimentation with cannabis has provided a first line of evidence for the formulation of the following ideas. This formulation has occurred through “real time” introspection about the altered states of consciousness provided by cannabis, as well as considerable follow-up and study analyzing the cannabis state from the perspective of what is today somewhat dubiously known as “normal consciousness.”

MUSIC APPRECIATION

One of the more remarkable effects noticed in the state of consciousness brought on by cannabis is a greatly enhanced appreciation of music (Goode 1970, Tart 1971). The effect seems to be almost universal, and does not seem to fade with experience in the use of cannabis, as do certain other effects typically noticed by novice users. Curiously, such perception of enhancement does not seem to make excessive demands that the music to be appreciated be good, bad, or indifferent, although I have observed that many persons originally interested only in pop music, have suddenly found during a cannabis session that more “serious” music has quite unexpectedly become interesting in ways both surprising and profound. Conversely, some who had previously rejected pop music as crude and trivial have come to appreciate it more through cannabis consciousness.

The resulting musical empathy is also quite durable, not requiring further drug exposure for its (at least partial) preservation. The magical and inspiring quality of a given piece, revealed under the effects of cannabis, remains magical and profound long into the future, whether or not it is ever again experienced under the influence. The net effect seems to be one of “opening up” a person to something previously merely ignored or overlooked. The enhanced appreciation is thus legitimized as something essential and “real” and not merely a “drug effect,” something “artificial” that wears off with the waning of the altered conscious state. Cannabis consciousness thus seems to be a

state in which at least a few prejudices and predispositions may be temporarily suspended so that something long-ignored for whatever reason can be seen afresh, as if for the first time. And so it would seem that the marijuana experience can provide a kind of *cognitive training* that may subsequently help enlarge and enrich one's outlook in desirable and entirely voluntary ways.

PERFORMANCE AND CREATION OF MUSIC

Musicians (as well as other artists) have testified not only to enhanced appreciation of music and art in general through the use of cannabis, but additionally, some have insisted that these altered states of consciousness are useful and valuable to augment their creativity. One such musician has stated (Grinspoon & Bakalar 1993, pp. 171-72):

Over the years marijuana has served as a creative stimulant to my work as a performer and my more occasional inspirations as a composer. Almost all my choral pieces and songs have been composed partly or wholly under the influence: melodic and rhythmic ideas just pop into my head during relaxed and happy moments—'points of creative release'—and these seminal ideas are formed into whole compositions over a period of days to years.

Although research verifying such claims is hard to accomplish in any meaningful or decisive way, it should be noted that research on creativity is itself a long-neglected area, and standard psychological testing or methods of testing musical abilities seem crude tools to apply to the situation. We should therefore not be too dismissive of "anecdotal evidence" when our ability to amass "hard data" is so limited. Some of the attempts to amass such data have been laughable, although quoted time and again to dismiss claims of enhanced creativity (Bloomquist 1971). Bloomquist recounts as his primary example (p. 369) the experiment of Dr. C. Knight Aldrich of the U.S. Public Health Service, as if it were a definitive dismissal of the hypothesis of enhanced creativity. But the experiment is quite absurd, not even using natural cannabis but "parahexyl compound, a synthetic marijuana-like substance" (Aldrich 1944, pp. 431-433). Although it may also be somewhat speculative to say, it would seem that creativity would surely be boosted by an enhanced appreciation and a partial suspension of preconceptions, no matter what the stimulus.

Of course, as with so many things in life, practice makes perfect, or if not perfect, more nearly so. Thus it is with listening to music, and certainly with the making of music, a life-long process of practice, but more than a few puritanical minds will be perturbed by my suggestion, nay, *my insistence*, that the principle applies to the use of cannabis as well! “You have to learn how to use it, and patiently experience the upheavals in the mental realm,” insists Henri Michaux (Michaux 1961, p. 63). It has long been obvious to me that many of the best minds of our time suffer from a ridiculous and self-imposed handicap by ignoring or even actively rejecting a great aid to thinking and creativity: the altered states of consciousness provided by cannabis and other age-old plant substances so revered by our forbears. When intelligently used they are tools both powerful and benign, both fickle and of great utility, and above all, they require some considerable practice in order to use them in a way commensurate with their potential. Thus much of the research (on creativity, for example), which has used the substances on subjects who have not had long opportunity to practice with the resulting states of consciousness, is rendered of limited value. Not until these time-honored aids to thinking and perception become once again widely used will we begin to know their true utility. If they were universally revered by our tribal ancestors, and played an important role in the social and psychological evolution of our species as some researchers suspect (Wasson, Hofmann & Ruck 1978; Ott 1997), we may find them of even more value in a time when our technological powers have advanced maximally, but our moral sense of how to control great power for the common good has advanced little, if at all, since the Bronze Age.

ALTERED STATES OF CONSCIOUSNESS

Thanks to Prohibition, there has been insufficient serious research concerning the cognitive mechanisms and brain structures involved in the altered states of consciousness produced by marijuana and other such substances, and even research on the neurocognitive and psychological foundations of music, art and creativity has been frequently considered a study of the superfluous. Music and art for us moderns, unlike for our aboriginal ancestors, is seen as mere decoration, “entertainment,” an activity of leisure and play (indeed, music is *played*). Our scientific institutions thus seem to believe that the study of such

phenomena is of less importance than that of more “serious” undertakings. Apart from what limited scientific investigation has been accomplished, it seems that both the performance and perception of music involve the use of areas in the right hemisphere of the brain analogous to the speech comprehension and production areas of the left hemisphere, notably the famous Broca and Wernicke brain areas, and that these analogous right-brain areas might function similarly to the language centers of the left in the production and perception if not appreciation of music (Popper & Eccles 1983; Luria 1980). Indeed, music is depicted as a linear *symbolization* comprised of sequential interrelated unitary elements representing or, alternatively, evoking the perception of a durational and holonomic conception that seems an analogous phenomenon to language in many important ways.

Now another of the most noticed effects of cannabis consciousness, and one most pronounced and typical, is an alteration in short-term memory (Zimmer & Morgan 1997). Prohibitionists and others (who mistrust not only cannabis consciousness but apparently even the idea that changed consciousness is something worthy of scientific study) have seized on the short-term memory effect in their attempts to discredit cannabis and strike terror into the hearts of its users by implying that some kind of “permanent damage” must surely be happening when, in the middle of a sentence for instance, one forgets entirely what one was saying! But as all experienced cannabis users know, if at this point one simply relaxes a bit, sure enough, the memory soon is re-established, indicating that what has happened is not a *loss* of short-term memory or a damaging of the brain structures mediating it, but a different manner of retrieval. It appears that one’s stream of consciousness merely *loses track* of trains of ideas that are quite normally being registered in short-term memory, perhaps because our perceptions require far more attention than normally, i.e., our consciousness is heavily involved with other matters than mere utilitarian attention to continuity of logical or linguistic thought processes. Our experience is so interesting and attention-consuming that we *ignore*, not lose, short-term memories. Indeed, the kind of short-term memory which scientists now study may be essentially a *linguistic* one, and other types of short-term memory, as yet unrecognized, may exist. They may be concerned with a more holonomic, rather than serially organized, linguistic way of contacting recent experience. The reality of the short-term memory effect might thus be to some extent an

artifact of current cognitive models and certain methods of psychological testing, and certainly should not be taken as evidence that cannabis produces deficit or damage.

SOME FURTHER HYPOTHESES

A hypothesis for the primary cognitive effect of cannabis might thus take these factors into account. If underlying or pre-conscious thinking processes are thought of as holonomic, all-at-once, in the nature of a Gestalt or unified whole, and language, and by analogous extension music, is a secondary and sequential representation of these pre-conscious *Gestalten*, we might hypothesize that cannabis effects some desynchronization or de-linking of the pre-conscious entities with the processes which translate them into symbolizations. The process seems cyclic or repetitive, the evolution of underlying *Gestalten*, and subsequent production of symbolizations proceeding with frequent breaks of the normal continuity of the process, and on several time scales simultaneously: a sort of cyclic forgetting of the pre-conscious by the conscious. The symbolization process, of forming a linguistic expression for example, might under the influence of cannabis “run away with itself” and become decoupled from the underlying gestalt which it represents. Thus, we “tend to forget what we are talking about” or even reading or thinking about, making reading a notoriously difficult task. This effect might well explain another of the peculiarities of cannabis consciousness: The character and meaningfulness of what is scribbled down while under the influence, although perhaps seeming profound at the time, is the next day notoriously silly and obvious. The symbolization has run away with itself and is no longer grounded or anchored to the holonomic patterns it represents.

However, what happens when the effect is practiced? Might it be put to some effective use? What if the person is talented with the mode of symbolization, i.e., is a poet, or novelist, or a musician? *Must* the output be silly? Might not a talent express itself under such circumstances in ways less attached to preconceptions? Extending these ideas further, perhaps the cyclic forgetting and decoupling of ongoing symbolization might be a factor in other important uses for cannabis. Might not the relief of some types of pain provided by cannabis occur because of a constant forgetting of its insult? If this be the case,

research aimed at producing analgesic cannabinoid preparations devoid of psychic effects may be a blind alley.

If this ignoring, or losing track of the mostly linguistic aspect of short-term memory is so universal, and the theory of music making and recognition being mediated by right-hemisphere areas analogous to those language-mediating areas of the left is valid, what happens to a musician when he plays music while under the influence of cannabis? Does he likewise forget what tune he is playing? Presumably if marijuana affects the language centres of the left hemisphere, even indirectly, it must similarly affect morphologically analogous structures of the right hemisphere. If marijuana consciousness does indeed affect a musician's perceptions and performance in some such way, how might that affect his music? And if a group or class of musicians who made a practice of using cannabis were so affected, how might that affect their collective concept of music and the way their music form developed? These might seem questions for research that in such a utilitarian age as our own will never be addressed. Yet perhaps the history of music already provides some hints.

TWENTIETH-CENTURY MUSIC

The history of music in the 20th century is, in one sense, a history of a bifurcation of music into two distinct methods of music making. The long tradition of Western music has emphasized the importance of music *composition* and the notation and publication of such compositions as opposed to the subsequent *performance* of these written compositions. The role of the composer and the performer are distinctly separate, and it is the composer, especially for orchestral works, who is considered to have done the lion's share of creating. The performer may "interpret" a written work of music with changes to tempo, dynamics, and general feeling, but any excess is considered bad form. All this of course has its parallel in language in the writing and reading of books. In our collective modern view, the greatest things that have been said are those written in stone, or at least in great books, and extemporaneous speech, as moving as it may be, is again, more often like entertainment than philosophy. When a piece of music has been *composed*, and when a linguistic expression has been *written down*, we seem automatically to attach more importance to it.

In the early decades of the 20th century however, the diverse in-

fluences in America, particularly of African origin, led to a form of music in which the performer himself took over the role of the composer to a significant extent, and jazz music became a form in which *improvisation* became a central aspect of the music. Although improvisation understood in its strict sense is “neither unique nor essential to jazz” (Harrison 1980, volume 9, p. 561), the shift of emphasis from the written composition to the performance of a piece as the principal creative act reveals that improvisation may in a larger sense consist of an ongoing evolution of a piece of music. Although a given performance of a jazz piece may not differ significantly from its previous performance, and thus the solo improvisations therein being practically repeated note for note, the performance does however differ drastically from another musician’s or jazz band’s rendering *of the same tune*. Thus each musician or group performs an improvisatory act over time with a given piece so that a standard such as *Body and Soul* performed by Ben Webster is an entirely different creative act than the same tune performed by Art Pepper, and the performances express correspondingly different emotional and intellectual gestalts. By contrast, two different performances of a Beethoven symphony are likely to represent and evoke very similar artistic and creative perceptions.

The improvised jazz solo is the central aspect of a piece, and expresses something new, if not every time, than at least for a given musician or group playing a given piece. Jazz improvisation, whether realized in a solo or in an evolved way of playing a piece as a whole, expresses something relevant to the current emotional and intellectual state of the musician-as-composer, and his interaction with his audience. The improvised tune becomes a mere vehicle for the artist and its performance resembles the musical equivalent of an ancient linguistic form, *story-telling*. A performer takes an eternal theme and embellishes it for the present moment, for the benefit of his listeners, to make the universal history and mythology of the tribe manifest in the present, and informative of current interests and concerns.

Was this 20th century musical development merely a throwback to primitive forms by uneducated and underprivileged musicians who rejected Western traditions in music? Hardly. The great jazz musicians routinely know much about the traditions and technical structure of composed music to an extent that classical musicians envy. And the technical virtuosity of many jazz musicians often surpasses all normal requirements of the Western tradition (Mingus 1972):

There are many other instruments besides the trumpet which jazz musicians have made do the impossible. And they can play, for hours on end, technical, involved, difficult, educated lines that have melodic sense. They are all virtuosi. The same goes for string bass. The same goes for saxophone, although it is not used much in symphony. But anything Milhaud has done in classical music, McPherson and Bird, alone, do with ease as well as human warmth and beauty. Tommy Dorsey, for example, raised the range of the trombone two octaves. Britt Woodman raised it three. And take Jimmy Knepper. One of his solos was taken off a record of mine and written out for classical trombone in my ballet. The trombone player could barely play it. He said it was one of the most technical exercises he had ever attempted to play! And he was just playing the notes—not the embellishments or the sound that Jimmy was getting.

JAZZ AND REEFER

From the 1920s to the 1940s, the very period in which improvisation in jazz was becoming the central creative aspect of the music, jazz musicians almost universally enjoyed cannabis, and we have many personal attestations and historical documents to prove the case. One particularly rollicking book about the epoch, and the wild times and great music that resulted, is Mezz Mezzrow's *Really the Blues*, and Mezz was himself not only a great jazzman, but famous for the excellent quality marijuana of which he seemed always to have a large supply (Mezzrow & Wolfe 1946)! A reading of personal reflections about the use of marijuana by jazzmen of the time indicates that the herb was often used as a stimulus to creativity, at least for practice sessions, many such as Louis Armstrong praising its effects highly. The widespread use of cannabis by jazz musicians of the time is even revealed by the campaign of Harry Anslinger and his Bureau of Narcotics to demonize marijuana. At one point he issued a directive to all his field agents, as related in the following story from a speech by Charles Whitebread, Professor of Law, USC Law School (Whitebread 1995):

After national marijuana prohibition was passed, Commissioner Anslinger found out, or got reports, that certain people were violating the national marijuana prohibition and using marijuana

and, unfortunately for them, they fell into an identifiable occupational group. Who were flouting the marijuana prohibition? Jazz musicians. And so, in 1947, Commissioner Anslinger sent out a letter, I quote it verbatim, ‘Dear Agent So-and-so, Please prepare all cases in your jurisdiction involving musicians in violation of the marijuana laws. We will have a great national round-up arrest of all such persons on a single day. I will let you know what day.’

Is it possible to attribute some causative connection between the cognitive effects of cannabis of which we are now becoming scientifically aware and the development of creative jazz forms of the 1930s and 1940s? To return to my previous question, if high on marijuana does a performing musician “lose track” of the composition he is playing much as one might lose track of the thread of a conversation? Did cannabis consciousness thus play a role in bringing improvisation to the fore?

In fact, experienced cannabis users who are well aware of the “short-term memory effect” become quite adept at counteracting it. In all probability extensive practice with cannabis consciousness allows the user to not only counteract such effects, but use them in positive ways. A temporary and momentary “forgetting” of the limiting structures of either an ongoing conversation, or of a musical piece, when such an effect has been practiced might well be just the right influence to bring improvisation to the fore, both in music and conversation or writing. It is my view, therefore, that the cumulative and long-term practiced use of cannabis by virtuosi jazz musicians was a certain and positive factor in the evolution of the music.

My experience with music indicates that it would of course be silly to say that jazz musicians of the period were literally forgetting what tune they were playing, and through such constant forgetfulness arose a great musical innovation! But as with the practiced user of cannabis who learns to counteract the short-term memory effect and use it to advantage, I would more realistically propose that a similar thing was happening *collectively* and *incrementally* within the fairly small community of jazz musicians of the time, a community more like a family than a world-wide diversity of people and schools as it has become today. The jazz community of the time constantly practiced together, brainstormed together, performed together, and smoked marijuana together. As a cumulative effect, it is my contention that the practiced

use of cannabis provides a *cognitive training* that assists and accentuates the improvisational, creative frame of mind much as other kinds of study or training shape abilities and perfect talents. It is not that cannabis consciousness *itself* “produces” ideas that are creative, or that valuable ideas come *during* the experience or *because of* it, but that cumulatively, over time, *the kind of perception and thinking initiated by cannabis* leads one to be generally more open to alternative and perhaps *adventurous* ways of seeing things which enrich normal consciousness. Normal consciousness, as we all admit, is limited in often involuntary, invisible ways by our times, customs, prejudices, by the necessary ignorance we must cultivate to cope with modern life. Cannabis very probably contributed to, or was used as a tool to facilitate the jazz revolution in music, and might be similarly used to facilitate important advances in any other area of human interest where creativity and adventurous thinking are important. The understanding of human consciousness and the nature of altered states of consciousness come immediately to mind.

And as for literally forgetting what piece one is playing, biographies of great musicians often tell of experiences when they were required to bluff it through with some extemporaneous inventions. The great French jazz pianist Martial Solal tells of such a concert he gave in his youth, it was to qualify for an important prize and at the climax of the classical piece he was playing his mind went blank, but his forced improvisation was so good that the judges didn’t even detect his bluff! It was at that point, he says, that he decided that jazz rather than classical music was to be his future.

So perhaps jazz musicians literally did often encounter some short-term memory effects, and had often to “bluff” it. With virtuoso musicians, such bluffing is unlikely to fall into something less than proficiency, and from what experienced users of cannabis all say, the “bluffing” seems to result in an unprecedented creativity: In a sort of Zen manner, what comes out of the virtuoso when he abandons his calculated intentions and practiced routines is not nonsense but often his finest creation! If a mere plant can assist the forgetfulness which is the germ of spontaneous creativity, many of the greatest minds of our time surely *are* missing the beat by rejecting not only its use but by assisting to prevent others from doing so. They thus prove once again that even genius is capable of the narrowness thought characteristic of the uneducated.

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