

THE BECKLEY FOUNDATION

TRIALOGUE III

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CONSCIOUSNESS AND PSYCHEDELICS BY AMANDA FEILDING

What consciousness is, is still an elusive mystery, but one knows one can alter its quality and its quantity. The state of mind of *more* consciousness – expanded, enhanced, intensified - has been described by mystics and poets, athletes and lovers, scientists and intellectuals.

What neuro-physiological changes underlie the experience of *enhanced* consciousness? What cascade of changing chemicals brings it about?

As consciousness is such a difficult thing to pin down at the higher level of description, to try to understand the physiological basis gives a certain satisfaction. I suggest that by looking at the irrigation system of the brain and concentrating on the changes in both the global and local blood supply, much can be explained.

The psychedelics (or hallucinogens) are powerful psychoactive substances that alter perception, mood and a host of other cognitive functions. They are therefore, valuable research tools in the quest to understand better the workings of the human mind.

In 1965, I came across the hypothesis put forward by a Dutch scientist - Bart Huges -that underlying the changes in the levels of consciousness, there is a corresponding change in the distribution of the blood to the brain. It was the same year that I first experienced the altered state of consciousness brought about by LSD. The theory made a lot of sense to me. I spent many years experimenting altering my consciousness and giving myself cognitive tests, observing and analysing my behaviour. My experiences led me to believe that it is possible to intensify one's level of consciousness – tune up the machine to a more sensitive level – widen the network of associations - lift the viewpoint – loosen the mind.

It was Max Born who emphasised that a 'loosening of thinking' is absolutely key to man survival, as "it provides us with a solid basis for rejecting the dogmas that can otherwise threaten our very existence". As many have observed, the loosening of associations that accompanies enhanced states of consciousness, is almost essential for any truly creative activity and achievement. For these reasons one could look at psychedelics as potentially useful tools, which can be used to increase man's knowledge of himself and the outside world.

Indeed, man has an intimate relationship with altered states. It lies at the root of many of the activities that make us human – that separate us from our ape cousins – shamanism and spirituality, art and music and language – it increases connections– increases the interrelation of associated stimuli, synesthesia, the mind becomes more complex as *more* of the brain is ignited.

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Of course it is now a possibility to observe these changes with *in vivo* brain imaging in humans who change their mode of consciousness, either by meditation or by ingesting psychoactive substances, or indeed by a number of other techniques. The neurotransmitter serotonin is intimately involved in the action of LSD, but so far, researchers have not focused on the underlying changes in blood supply. In 1999, I approached Franz Vollenweider of Zurich University and asked him if he could investigate changes in cerebral blood supply in subjects taking psilocybin. His group has begun to look into this possibility, as have other research groups with whom I am working.

One of the useful attributes of a psychedelic such as LSD is that responses are very dose related. It is also non-toxic. It could easily become a very valuable adjunct in the treatment of many psychological disorders, as it was in the 1950s and 60s. It brings light to things that were hidden. It breaks down barriers, enabling the searcher to reach the nitty-gritty much more quickly than without it. It brings blood and energy to those parts of the brain which are normally closed off and repressed from function. It breaks open doors and allows attention to ooze into secret cellars. Psychologically, it can be a freeing and loosening experience; spiritually, it can be inspiring; cognitively and perceptually, it can be enhancing; socially, it can be stimulating.

True, as any reasonable sceptic will quickly point out, it can also be a terrifying and unpleasant experience, but once again much can be controlled by the dose, and also the 'set and setting' in which the drug is taken. Both the big dose and the small dose therapies have had their admirers, and different approaches to altering consciousness suit different people in different ways at different stages of their lives.

I think that with its ancient and noble lineage, the use of psychoactive substances should be included by society as one of the techniques man has of manipulating his consciousness for his (and also societies) greater good. However, they are powerful and therefore potentially dangerous substances, and need care and guidance in their use. The present legal system, which classifies them as Class-A drugs, in the same category as heroin and crack cocaine, does not make that process easy. Let us hope that those in charge of our laws will soon realise that there is a human instinct to manipulate consciousness, either by presently legal means such as alcohol, caffeine or tobacco, or by illegal means. And it is best that we, as a society, learn to use those substances, which are least toxic and addictive. Thereby, the damage done to the individual by their wish to explore their own minds can be minimised.

At the moment, policy makers do not consider the potential *benefits* of altering consciousness by the use of psychedelics, (or indeed any other drug). Yet there are several obvious practical advantages of such practices. Psychedelics are a valuable neuroscientific research tool which can help us gain a better understanding of the workings of the mind. They have potential therapeutic uses in different clinical situations, ranging from the treatment of drug and drink dependence, and other compulsive behaviours, to anxiety and depression in both the living and the dying. In terminally ill patients, LSD has been shown to enhance their ability to enjoy everyday life, improve mood, lessen anxiety and reduce the amount of pain relieving medication required. We need to rekindle research begun before psychedelics were banned.

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If one is to take note of the self-report of those who use psychedelics, or who have done so in the distant past, the suggestion of benefits is widespread. Indeed, there are millions of people who claim positive effects and are prepared to break the law in order to experience them. Descriptions of expanding and enhancing experience, perception, creativity and spirituality; becoming more compassionate, loving and understanding; being lifted above the petty and illuminating the bigger picture, are all common. Maybe by improving mood, one can also improve the immune system; by escalating the cerebral circulatory system, one can wash out the psyche.

Recently, I was with an experienced yogi when she went into an MEG machine. She had a mystical experience of being filled with light, while being monitored. Even before analysis of the data, one could see a great rise in alpha brain waves and increase in heart rate from 60 to nearly 90 beats per minute. We can learn a lot about altered states by comparing them to the baseline, observing the interlacing network of factors that change (from molecules and membranes to blood flow and brain waves); comparing and contrasting different states of consciousness, those arrived at by meditation or the taking of hallucinogens to those achieved by running the marathon or practicing breath control.

Whereas a decrease of blood flow in the brain is an early indicator of Alzheimer's disease, may not a flooding of blood conversely accompany intensity, ecstasy and creativity? We must further research the exciting relationship between the mysteries of consciousness and these ancient and seminal psychoactive substances, which so reliably transform our fields of awareness, our perception of self, and our relationship with the external world, enabling us to experience ourselves as part of a conscious universe.

I set up the Beckley Foundation as a charitable trust firstly to investigate consciousness and its altered states, and secondly to analyse the efficacy of the laws that control the use of psychoactive substances.

Amanda Feilding
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