Móró, L., & Noreika, V. (2011). Sacramental and spiritual use of hallucinogenic drugs. Behavioral and Brain Sciences, 34(6), 319-320. doi: 10.1017/S0140525X11000768

Commentary on Müller & Schumann: Drugs as instruments – A new framework for nonaddictive psychoactive drug use

Sacramental and spiritual use of hallucinogenic drugs

Levente Móró[a] and Valdas Noreika[a, b]

[a]Centre for Cognitive Neuroscience, Department of Psychology, University of Turku, Finland;
leve@utu.fi - http://users.utu.fi/~leve
[b]Oxford Centre for Human Brain Activity, Department of Psychiatry, University of Oxford, United Kingdom.
valnor@utu.fi - http://www.psy.utu.fi/henkilot/valdasnoreika.htm

Abstract: Arguably, the religious use of hallucinogenic drugs stems from a human search of metaphysical insight, rather than from a direct need for cognitive, emotional, social, physical, or sexual improvement. Therefore, the sacramental and spiritual intake of hallucinogenic drugs goes so much beyond other biopsychosocial functions that it deserves its own category in the drug instrumentalization list.

Müller & Schumann (M&S) deserve to be hailed for their bravery for addressing the socially sensitive issue of nonaddictive psychoactive drug consumption from a scholarly perspective. In discussing drug instrumentalization, M&S list an eight-item classification of the proximate mechanisms of psychoactive drug use. From these items, our commentary concerns the category labeled as "sensory curiosity – expanded perception horizon" (sect. 4.2.6), which includes hallucinogenic, entactogenic, dissociative anesthetic drugs, and cannabis. Although hallucinogenic drugs are generally associated with changes in perception and cognition, we challenge the idea that these drugs would be consumed primarily for their sensory perception changing properties. Within hallucinogenic drugs, we leave aside dissociatives and deliriants and focus on the third subclass: the so-called psychedelics. From a neuropharmacological point of view, this subclass includes serotonergic psychoactive phenethylamines and tryptamines, such as mescaline, psilocybin, LSD, and DMT. However, by using the term "psychedelic" in its original meaning (i.e., "mind-manifesting"), other drugs with different neuropharmacological mechanisms but similar use purposes, such as *Salvia divinorum*, could also be included here. In this commentary, we argue that in the particular case of sacramental and spiritual drug intake, the purpose of psychedelic drug use goes so much beyond sensory perception that it deserves its own category in the drug instrumentalization list.

Unlike the other listed drug instruments, hallucinogens are able to induce unique kinds of subjective experiences with a rich phenomenology, which, from the experiencer's point of view, may have much deeper functions than merely gaining insight by restructuring prior knowledge. These experiences include increased apperception, dissolution of ego boundaries, feelings of unity and insight, presence of or encounters with nonhuman entities or beings, and, generally, perceiving all of these as independent from one's own mind. In culturally predefined contexts, the purpose of these hallucinatory experiences is not merely to increase self-understanding and self-discovery, but to address ultimate questions that shape or shake the fundamental worldview. We argue that for humans, gaining such metaphysical insight can be a major motivating factor in seeking these extraordinary hallucinatory experiences. In religious or spiritual sets and settings, psychedelic drugs that are used for sacramental purposes could be more properly termed as "entheogens," translatable into "becoming divine within" (Ruck et al. 1979).

In support of our view, a vast amount of archeological evidence and historical documentation suggests that hallucinogenic psychoactive drugs have been used for ritual and ceremonial purposes around the world and across the ages (Roberts 2001). Traces of ritualistic hallucinogen use were found in many belief systems in ancient cults and cultures: The sacred *Soma* drink is mentioned in the Indian Vedas, *Teonanácatl* (literally, "divine mushroom"), morning glory seeds were consumed in Meso-American cultures, the ancient Greek Eleusinian mysteries used the enigmatic *Kykeon* drink, Siberian shamans inebriated with the fly agaric mushroom (*Amanita muscaria*), and so on (Schultes & Hofmann 1979). There are also numerous examples of contemporary sacramental drug use, such as the Native American Church using *peyote* cacti legally and several *ayahuasca*-based religious groups spreading out from South America. It is even hypothesized that the common root of many ancient religions could be found in Paleolithic supernatural and animistic beliefs that were perhaps based on hallucinogen-induced thoughts and visions of shamanic practices (La Barre 1979).

Arguably, the use of psychedelics would be indeed difficult to link with direct physical, emotional, social, or sexual advantages leading to evolutionary benefits. Rather, these drugs are generally associated with the perceptual, cognitive, stress-coping, and self-medication dimensions that may only indirectly advance survival and/or reproduction. Nevertheless, several hypotheses exist in the literature on how exceptional human experiences – hallucinogenic alterations of mind in particular, but other altered states of consciousness as well – may increase

the fitness of the individual. Findings in cultural anthropology support the idea of psychedelics being used as “problem-solving devices” (Baker 1994), or as “psychointegrator plants” (Winkelman 1995). Resembling the Threat Simulation Theory (Revonsuo 2000), which argues for a virtual training function of dreaming, a similar “training situation” hypothesis could be suggested to hold also for psychedelics: Deliberately provoked hallucinogenic experiences may increase self-knowledge by rehearsing and developing coping strategies that might be utilized later in life. Along with these theories and hypotheses for the instrumentalization of hallucinatory phenomena and hallucinogenic drugs, M&S seem to offer only cognitive explanations, such as “coincident activation of previously unrelated representations that are then interlinked” (sect. 4.2.6, para.2). Instead, we argue that cognitive and psychosocial explanations for hallucinatory phenomena are likely to cloud more appealing causes, which seem to be deeply embedded in human culture: sacramental (when a psychedelic drug itself is treated as a part of a religious rite) and spiritual (when psychedelic experiences, rather than a drug itself, form or lead to transcendent experiences) purposes.

Besides admittedly serving sociocultural functions as well, the ritual and ceremonial use of hallucinogenic drugs seems to originate from a separate “higher” need for mystical experiences full of significance and importance. This view is supported by concepts in humanistic psychology, such as Maslow’s theory of human motivation with the later added transpersonal level in the hierarchy, relating to self-transcendence and peak experiences (Maslow 1969). As the above examples show, hallucinogenic drugs are used as specific drug instruments for a very particular form of human enhancement: experience of transcendence. Hence, hallucinogenic drug instruments may be used for purposes that exceed biological, psychological, or social explanations, and the very human-specific thrive for these forms of use deserves to be addressed in its own drug instrumentalization category. While discussing medical issues, the benefit of adding a fourth spiritual level into the biopsychosocial model of human functioning has been recently suggested (Bishop 2009). In our opinion, an extended multilevel biopsychosocio-spiritual framework could explain more comprehensively also the functions of nonaddictive psychoactive drug use.

References

Baker, J. R. (1994) Consciousness alteration as a problem-solving device: The psychedelic pathway. In: *Yearbook for ethnomedicine and the study of consciousness*, ed. C. Rätsch & J. Baker, pp. 51–89. VWB.

Bishop, J. P. (2009) Biopsychosociospiritual medicine and other political schemes. *Christian Bioethics* 15(3):254–76. doi: 10.1093/cb/cbp017.

La Barre, W. (1979) Shamanic origins of religion and medicine. *Journal of Psychedelic Drugs* 11(1–2):7–11.

Maslow, A. H. (1969) The farther reaches of human nature. *Journal of Transpersonal Psychology* 1(1):1–9.

Revonsuo, A. (2000) The reinterpretation of dreams: An evolutionary hypothesis of the function of dreaming. *Behavioral and Brain Sciences* 23(6):877–901.

Roberts, T. B., ed. (2001) *Psychoactive sacramentals: Essays on entheogens and religion*. Council on Spiritual Practices.

Ruck, C. A., Bigwood, J., Staples, D., Ott, J. & Wasson, R. G. (1979) Entheogens. *Journal of Psychedelic Drugs* 11(1–2):145–46.

Schultes, R. E. & Hofmann, A. (1979) *Plants of the gods: Origins of hallucinogenic use*. McGraw-Hill.

Winkelman, M. (1995) Psychointegrator plants: Their roles in human culture, consciousness and health. In: *Yearbook of cross-cultural medicine and psychotherapy*, ed. M. Winkelman & W. Andritsky, pp. 9–53. VWB.