5 AFRICAN PLANTS

5.1 Southern Africa: The Forgotten Cradle of Psychoactive Healing Plants

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Abstract

This paper summarizes and contextualises the history of psychoactive plant research in South Africa as well as the recent advances made in the field. Hypothesized mechanisms by which African psychoactive plants heal the mind are highlighted. Key areas requiring further research include: the indigenous cultural understandings of mental illness and psychoactive plants, the role of psychoactive plants in the spiritual practices of southern African traditional healers, the influence of various psychoactive plant species used in traditional formulas, the use of African psychoactive plants in treating drug addiction and the folklore and mythology relating to indigenous psychoactive plants.

A Historical Perspective on Global and Southern African Psychoactive Plant Research

Psychoactive or psychotropic substances can be defined as chemical substances that are used for the modification of the emotional, intellectual and behavioral function of humans (Werry and Aman, 1993). They affect the mind-mental processes as well as the other activities of the nervous system. Psychoactive substances can be classified according to their action (e.g. stimulants) or by their therapeutic use (e.g. antipsychotics) (Ibid.). Plants manufacture an array of psychoactive chemicals that exert a multitude of psychoactive effects ranging from those acting as sedatives, euphoriants, stimulants, sopoforics (inducing sleep), through to hallucinogens, antidepressants and memory enhancers (Sobiecki 2002). Throughout history, humans have co-evolved and experimented with medicinal plants, administering them in numerous ways through for example: eating, steaming, bathing, applying through oils, incisions or enemas, injecting and smoking amongst others. In so doing, these traditional societies came to recognize those plants with psychoactive properties, incorporating them into all aspects of life from hunting, sorcery through to healing psychospiritual illness and curing disease. Thus, the actions of psychoactive plants have been important in sustaining the health and well-being of humankind — though the rich diversity of their uses has receded with the turn of the modern day consumer culture.

Psychoactive plants have had a long history of study in Europe and the Americas, yet the paradox is that Southern Africa, with its rich psychoactive flora and cultures has largely been neglected in the academic research of psychoactive plants — that is, until very recently (Sobiecki, 2014a). Numerous reasons for this lack of attention to Africa's psychoactive flora have been proposed, including: researcher bias concerning substance use (Winkelman & Dobkin de Rios, 1989), a lack of attention by researchers to the region's psychoactive flora (De Smet, 1996), the overlooking of more subtle psychoactive effects of traditional plants medicines (Sobiecki, 2008) and the loss of indigenous knowledge concerning psychoactive plant use due to acculturation. Other factors such as cultural prejudice and the failure to effectively interpret African traditional medicine concepts have been highlighted as influencing the study of traditional medicine in South Africa (Sobiecki, 2014a), and which is included in this chapter.

An interesting example of such cultural factors influencing the study of psychoactive substances in South Africa, is the political history of the region and the immediate and continued conflict experienced from the time of the arrival and meeting between the European colonialists and the indigenous people of southern Africa. Colonial beliefs constructed

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and framed African traditional healing practices and traditional medicine as primitive, unsophisticated and satanic, (Croucamp, 2001:1), which would have negative repercussions for the study of Southern African ethnomedicine practices (Sobiecki, 2014a:4). After having attacked and subjugated the indigenous South African people, the apartheid system would cause a social rift between white and non white people that would have obvious consequences not only in terms of social separation but also in terms of research. Thus, together with the factor of the global stigma on psychoactive substance use, there also existed a racist element in South African society that would predictably polarize race relations and traditional and western medicine practices, and that would skew and bias research being generated, then from mostly white western scholars. This is indicated by the fact that the majority of ethnobotanical studies from South Africa in the last three decades have focused on medicinal plants (16%) and food plants (20%), with only a few (7%) relating to the category "Magic, ritual and customs" (Liengme 1983). It is this last category that appears to be rich in plant species with reported psychoactive uses and effects (Sobiecki, 2008, 2012), and which deserves much more thorough attention and research.

For these reasons, the erroneous belief grew over time that Africa was poor in psychoactive and particularly visionary plants, and this belief lay dormant and unchallenged until a recent revival in study of these plants by some researchers (Sobiecki, 2014b). This renewed interest in psychoactive plant use in southern Africa has come from a few anthropological studies and a great impetus in phyto-pharmacological work being done on screening southern African plants for psychotropic activity, with promising new findings and research directions resulting (Sobiecki, 2014b). The anthropologically focused studies from southern Africa include: a re-appraisal of the San Bushmen's' use of psychoactive plants (Mitchell and Hudson, 2004), the role of psychoactive plants in dreaming in Xhosa traditional medicine practices (Hirst, 2005), and preliminary inventories of psychoactive plant use (van Wyk & Gericke, 2000; Sobiecki, 2002). Sobiecki (2002) documented over 300 species of plants that are reported as having psychoactive uses in traditional southern African healing practices, for example, from treating conditions such as insomnia to convulsive conditions such as epilepsy. Other reviews have indicated the significant role that psychoactive plants have in the traditional spiritual practices of the indigenous people of southern Africa; namely in Southern Bantu traditional divination (Sobiecki, 2008) and the healing initiation process of Southern Bantu speaking diviners (Sobiecki, 2012). The phytopharmacological research has identified plants with efficacy for treating epilepsy, for example, *Searsia dentata* (Thunb.) F.A. Barkley, and in depth chemical investigations are being done on plants such *Boophane disticha* (L.f.) Herb (Sobiecki, 2014a), for future application in medicine. A review on the history and potential future direction of psychoactive plant research in southern Africa has been presented (Sobiecki, 2014b).

However, despite these endeavors, the anthropological and ethnobotanical studies focusing on psychoactive plant use from southern Africa are still rare, and therefore, it can be said that psychoactive plant use appears to be a neglected area of ethnobotany in southern Africa. Research initiatives are urgently needed to catch up with the rest of the world in terms of applied ethnobotany and neuroscience related research, for example, on the role of psychoactive plants in treating drug addictions and treating mental illness such as depression and stress disorders, which is burgeoning in the USA and Europe, see e.g., The Multi disciplinary Association for Psychedelic Research—MAPS and the Beckley Foundation.

The Role of Psychoactive Plants in South African Traditional Medicine

Around 1998 I became curious as to whether the indigenous South African traditional healers were using visionary (psychedelic) plants as part of their spiritual healing practices. This initiated me on a 15 year fieldwork journey into the mostly black African locations and central Johannesburg to investigate this problem question. What I slowly discovered with interviewing traditional healers, was that the indigenous South African people hold

great value in using psychoactive plants for promoting health and well-being, and I began to understand their cultural and therapeutic significance. I was taught by a number of southern African traditional healers that there are two broad categories of psychoactive plants; those with subtle actions that slowly open dreams, intuition and sensitivity such as *ubulawu*, and then the stronger acting visionary or "hallucinogenic" plants that are used specifically for divination in Southern African traditional medicine (Sobiecki, 2008, 2012). It became apparent that a rich diversity of psychoactive plants are being used by thousands of indigenous Southern African people daily to open dreaming, and to treat various nervous system conditions such as insomnia, headaches, epilepsy and mental illness/disease, as well as in traditional spiritual healing practices such as prayer and divination, with the purpose to connect with ones deceased ancestors through the deeper self.

One of the more commonly known and widely used of the psychoactive plant medicines in South Africa is *ubulawu*. The following paragraph on preparation and administration methods is derived from Sobiecki (2012).

"The term *ubulawu* (Xhosa) refers to the use of specific roots, stems and sometimes barks of subtle acting psychoactive plants that are ground and made into a cold water infusion that is churned with a forked stick to produce foam. This foam production is typical of *ubulawu* preparations. *Ubulawu* preparations, used in the initiation of Southern Bantu diviners, are typically drunk as an infusion until the initiate's stomach is full and he or she is ready to vomit. Vomiting is then induced usually in the morning on an empty stomach. The vomiting of this compound is referred to as *ukugabha* (Xhosa) or *phalaza* (Zulu). These mixtures are typically used for good luck, by kneeling on the ground while churning the infusion and talking and praying to ones ancestral family. It is also customary that the foam produced from whisking the preparation is used to wash the body, normally late in the evening. Both vomiting and washing with the foam are used "to remove ritual impurity" (Hirst, 2005). The *ubulawu* foam is also eaten by initiates on an empty stomach in the morning or evening to enhance dreaming. Differences in administration of *ubulawu* exist depending on the cultural group in question."

In addition to the use of *ubulawu* in removing ritual impurity, the main reported use of these medicines is to open the initiates or patients mind to ones ancestral spirits. My late mentor, Mrs. Letty Maponya, taught me that the main importance of using *ubulawu* is to clean the body (the lungs and stomach of mucus) so as to produce clearer thinking and relaxation and in this way the mind is more receptive to spiritual connection. Numerous mechanisms have been identified and proposed by which this may occur (Sobiecki, 2012). As a summary, the mechanism of vomiting has a physiological affect on cleaning the stomach and lungs of mucus that has an effect of increasing clarity of thought and dreams (in the same way that *vamana* emesis therapy is used in Ayurvedic (Indian medicine) (Sobiecki, 2012), while the process of diaphragmatic breathing with the vomiting process also promotes the activity of the parasympathetic nervous system that relaxes the person (Lambrecht, 2014). Furthermore, I hypothesize that many of the *ubulawu* plants also contain subtle acting psychoactive chemicals that have either intuition and sensitivity enhancing properties or relaxing and grounding effects on the mind, depending on what is needed. In this way, plants with similar effects are used together in *ubulawu* formulas to gain a desired effect (what is called phytochemical synergy), most often to initially open the initiates mind and thereafter to ground the mind once the lessons are learnt. This indicates the use of a sophisticated technology of phytochemical synergy by southern African traditional healers to facilitate a psycho-spiritual healing process.

Through the drinking of the *ubulawu* infusion prior to vomiting and eating of the foam at night, the psychoactive chemicals in the plants enter the body system, thereby having psychoactive effects on the nervous system. In summary, both the process of vomiting with the *ubulawu* medicines together with the psychoactive chemicals in the medicines encourage relaxation, enhanced awareness and dreaming that is used to encourage a psycho-spiritual healing and transformation process for healer initiates. The process of churning

the medicines is also a meditation support as it encourages focused attention and repetitive rhythmic action that facilitates mindfulness.

Numerous species are combined and used as *ubulawu* "lucky medicines" and such culturally defined terms are often apt metaphorical indicators of the biological and psychological effects of the plants, and in the case of *ubulawu*, "lucky" referring to the positive feelings of clarity of thought, dreams, mood upliftment and increased energy. In this way vernacular plant names and traditional medicine concepts should not be overlooked or prejudiced as superstitious or "primitive", which I have argued, often occurs in western academic research (Sobiecki, 2014a), but can be seen as mnemonic devices as they can, in addition to directly indicating plant actions, also hold cultural information such as myths around plant uses that can allude to or indicate medicinal plant actions if translated and understood correctly for what they symbolize.

With regards psychoactive plant actions and mechanisms, another interesting means by which, I propose *ubulawu* medicine preparations heal, is through promoting a cathartic process, similar to that of using ayahuasca, that results in a psycho-spiritual cleansing process of toxic emotions, past trauma or difficult life events, except in the case of *ubulawu* is without the overt visionary component. This emotive and cathartic process of using both ayahuasca and *ubulawu* may involve and promote neural plasticity events that could partly account for how these medicines work in positively effecting behavioral change and healing.

While conducting the research on psychoactive plants and undergoing South African traditional medicine training, I became aware of, and what I hypothesize as, a cross cultural sequence of using psychoactive plants as a means of treating and healing psycho-spiritual illness in traditional medicine systems from around the world. Jauregui *et al.* (2011) outlines that South American *curandero* healers use four categories of psychoactive plants as part of their initiation namely those for: **1)** purification and cleansing species; **2)** sensitivity and intuition; **3)** strengthening; and **4)** protection and defense. I have noticed a very similar sequence of plant use in the initiation of Southern African indigenous traditional healers, which is being investigated further. I hypothesize the sequential use of healing initiation plants by Southern African traditional healers and South American *curandero* healers holds important keys to the healing of consciousness, and is one of the areas we will be exploring through the Khanyisa Healing Garden project occurring in South Africa outlined in the Future Research Perspectives section.

Summary

Research findings reveal that there is widespread reliance on psychoactive plant medicines by the indigenous people of southern Africa to communicate with their ancestral spirits through dreams and heightened intuition, and to treat psycho-spiritual illness and nervous system disease. Much is still to be learnt from the traditional healers of Southern African regarding their worldview and their botanical, diagnostic, methodological and healing knowledge regarding the use of psychoactive plants in treating mental illness and other nervous system conditions. A great deal of this healing knowledge is being lost at an alarming rate with the dying of South African traditional elders and healers who are not passing on their healing wisdom to the younger generation, who have lost interest in traditional values. Thus, it is critical that this indigenous knowledge is documented and preserved for future application in medicine and healing before it is lost entirely. Aspects identified as requiring further study include: the indigenous cultural understandings of mental illness and psychoactive plants, the role of psychoactive plants in the spiritual practices of southern African traditional healers, the influence of various psychoactive plant species used in traditional formulas, the use of African psychoactive plants in treating drug addiction and the folklore and mythology relating to indigenous psychoactive plants.

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