

# Knowledge versus Knowing: Zande Leechcraft

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## Abstract

*Recent fieldwork among the Zande in the Central African Republic has revealed an amazing diversity in medicinal plant recipes given by residents of the same village and even members of the same family. Each individual learns throughout his or her life, through a variety of sources and experiences, more or less a unique repertoire of treatments using plants. Rather than a fixed, shared, impersonal body of knowledge, Zande leechcraft seems to consist of "knowing" medicinal plants and in an active, subjective way; "knowing" is a function of individual circumstances and social situations. Moreover, the treatment used in a given situation is not the generalized application of a universally-known medicinal recipe, but is selected from among several possible treatments according to the particular social and physical circumstances. The transience of "knowing" seems to encourage open-mindedness and skepticism, which may offer advantages in adapting to a world increasingly invaded by Western knowledge. It also calls into question the usefulness of applying indigenous Zande medicinal "knowledge" to non-Zande contexts.*

## Introduction

In this paper I describe fieldwork I recently carried out on Zande leechcraft, which left me with the impression that it would be difficult to characterize Zande medicinal "knowledge" as a coherent body of systematic knowledge in the Western scientific tradition. I hope to show, however, that this apparent "ignorance" is actually a very useful form of "knowing," one that suits Zande society well and even offers several advantages. Yet this conclusion, in turn, calls into question the usefulness or applicability of Zande "indigenous knowledge" in non-local contexts.

I have been carrying out research among the Zande of the easternmost province of the Central African Republic since the early 1980s. The Zande, whose beliefs in witchcraft, oracles and magic were made famous by E.E. Evans-Pritchard (1937), inhabit the Nile-Congo (Zaire) watershed, where the three modern-day nations of Congo (Zaire), the Sudan, and the Central African Republic meet, in the center of the African continent, a tropical land on the northern edge of the rain forest, where gallery forests reach deeply into gently rolling savanna.

My latest stay was for six months in 1995 in a single village, Kitessa, of about 300 inhabitants, 45 kilometers from the nearest town, Zemio. I chose this village specifically because two out of the three times I had passed through it in previous years I arrived in the midst of a witchcraft trial. Kitessa is a very vibrant village where traditional beliefs and practices are alive

and well, in spite of the efforts of catechists and pastors sent by Catholic and Protestant missionaries, a fledgling health center usually devoid of medicine and materials, and a primary school that somehow manages to send a handful of seventh-graders off to the high school in Zemio each year.

My goal for this six-month stay was to study how the Zande identify and use plants, especially for medicinal purposes. Among the Zande, "medicinal" treatment through plants (Evans-Pritchard's leechcraft) parallels "social" treatment. Or, to use Evans-Pritchard's terminology (1937), a sensitive treatment and a mystical treatment are carried out simultaneously, especially for serious or lengthy illnesses. Discussions of witchcraft, magic, and oracles abound before, during and after illness episodes, even while "medicinal" treatments based on plants are being carried out.

Since Evans-Pritchard had written that "Every illness has its medicines which are supposed to cure it" (1937:482), and since other researchers seemed to have found for other groups that "the So-and-so people use such-and-such a plant for such-and-such an illness," I expected to find a consensus among the villagers concerning the plants they know and use to treat illness. My "results" would be a lengthy inventory of plant names and medicinal recipes the plants are used in, representative of the village or even of the region. But, as this paper shows, it was an impossible dream.

I spent my days scouring the bush for plants, usually alone, but as often as possible in the company

of villagers on their way to or from fields or out on other errands. Sometimes, if lucky, I met up with folks out collecting medicines. Whenever possible, I asked the names and uses of plants on the spot. Usually, however, I brought large branches or entire plants back to the village, where I made rounds asking for the name and medicinal uses of each plant. I asked whomever I came upon: neighbors, women pounding manioc, men sharpening tools, folks resting after a day's work, sometimes alone, sometimes in groups. I sought out the so-called experts, and I often questioned children who, like adults, are quite knowledgeable and can name dozens of plants.

### Botanical Knowledge

Botanical "knowledge," then, was the first aspect of this study. In general, plants were identified immediately (after being smelled, touched, and otherwise scrutinized). Sometimes two or three names were given for the same plant, usually from folks who were born or had lived in other areas of Zandeland. In fact, it was striking how the names of plants changed over distances as small as 40 kilometers. Striking because the Zande language, in general, is very uniform all across Zandeland. For most of the common plants there was immediate, village-wide consensus for the name. For a few plants, however, only a handful of men and women, usually elderly, could offer names.

In a few cases, no one was able to give me names for the specimens brought in or for plants encountered in the bush. At first, I thought that this was related to whether or not the plant was used medicinally or in some other way. But I found that many of these "nameless plants" did indeed have medicinal uses, and were sometimes referred to as "the plant used to treat such or such an illness." For example, *ngua uya* is used to treat a condition called *uya*, swollen, itchy legs, probably caused by parasites.

It is interesting to point out that the few plants not immediately identified by specialists at the Musée d'Histoire Naturelle in Paris, France, were usually among those for which the Zande had no names (even though the plants are quite common). I was and remain struck by the fact that the same plants that the Zande have the most trouble identifying are also ones that are problematic for Western botanists.<sup>2</sup>

Some very particular medicinal plants are notorious

for not having names. One specialist did not know the name of the plant she used to cure "her" illness. She had learned from her mother how to recognize the plant and how to use it in treating patients, but does not refer to it by name.

I would also like to mention here a very special category of plants -- bulbs. They are never referred to by name. Medicinal bulbs are also special in that they number among the few domesticated medicinal plants, and are often transplanted near the house to be handy when needed. They are also, by and large, used for what Evans-Pritchard (1937) calls "mystical" illnesses, especially attacks of sorcery.

### Medicinal Knowledge

From botanical knowledge, I moved to medicinal knowledge. With the plant still in hand, or pointing it out in the bush, I asked what illnesses it was used on. I took down hundreds of medicinal recipes in this way. I developed a system of shorthand, since the parts of the plant or tree used, and the ways to prepare and to apply medicines, were relatively limited. As time went on, and I became more familiar with the plants and with the villagers, instead of carrying the actual plant with me, I worked with a list of plant names, asking, one after another, which illnesses each plant was used to treat.

Parallel to collecting medicinal recipes starting with the plants, I also, at different times and places, started with the illness. I made rounds of the village with a list of illnesses, and asked for recipes used to treat each one. Much of this work was carried out by a Zande assistant who lived in the village and worked as a health agent.

Finally, during my entire stay, I was on the lookout for people in the act of preparing or applying medicine, and noted the treatment they were actually using. The most common of these cases involved children. Also, if I came across someone who was ill, I asked how they were being treated.

Thus, from these three types of questioning (asking what illnesses a given plant was used to treat, asking what plants are used to treat a given illness, and observing actual treatments being carried out in real situations), we collected a total of 2,100 recipes involving approximately 300 plants, for more than 200

illnesses, from a total of 67 informants (male and female, old and young). This is not the place to describe my findings in detail, but I would like to present three main observations.

First, I found an amazing diversity in medicinal plant recipes given by residents of the same village, not to mention members of the same family. Everyone knows dozens of plants and medicinal recipes for them, but no two persons have the same repertoire. Though there was a fair amount of overlap, sisters, brothers, mothers and daughters, and husbands and wives usually had several recipes the other didn't know, even though they were brought up or lived most of their lives side by side.

Second, I found a great variety in recipes offered by the same individual depending on whether I asked: 1) "What illness is this plant used for?" or; 2) "What plant do you use for this illness?" or; 3) whether I observed him or her in a real situation. In other words, different questions asked in different contexts gave different answers about the same plants and illnesses, and direct observation yielded yet different recipes. Thus, the method and forms of questioning were of crucial importance.

Third, there does not seem to be an overall, village-wide repertoire. Only about two dozen plants were consistently cited for treating particular illnesses, but even then, the recipes often involved different parts of the plants, and/or different methods of preparation, and/or different doses. Apart from this "core" of medicinal recipes, which is generally shared by all in the village, the repertoires varied greatly, and no single repertoire could be taken as representative.

For reasons that I will not go into here, I do not feel that the variation I encountered was merely a result of different styles of questioning. In other words, the variability was perhaps confounded, but not created, by the different contexts in which the information was gathered.

By talking with people of the village, I learned that they acquired much if not most "medicinal knowledge" by chance. They happened to be at a homestead when someone was being treated; they met someone in the bush digging up a root to be used to treat a particular illness; or they overheard someone talking. One teenager was listening in as his sister-in-law gave me

some recipes. A few weeks later, I asked him if he knew of any uses for a particular plant, and he repeated the one he had overheard that day. It had become part of his "repertoire." Two sisters close in age who grew up together, and continued to live near one another, and saw each other constantly, though they indeed shared many recipes, also had many that the other did not know, and which they only found out about when we all talked about recipes together.

People learn treatments for illnesses as the need for them arises. If one treatment does not work, they seek others. They consult family members, neighbors, "experts," and the village health worker. They thus build individual repertoires, which they use according to actual circumstances. New mothers, especially, are anxious to learn treatments to enhance their children's well-being and to cure common infant illnesses. Relatives of a person suffering from a chronic illness will know several possible treatments for that illness.

I would like to look briefly at the possibility of specialized knowledge. Knowledge of plants and their use is common knowledge, and people are free to treat themselves according to their own pharmacopoeia. But, as I have already stated for the bulbs, there are specialists who have gained a reputation for being especially successful in treating certain illnesses. Most specialists, however, treat just one illness and remain ignorant of how other specialists perform cures.

A few of the illnesses treated by specialists were: an adult liver ailment; an abdominal ailment common in babies, which involved massaging the belly with specifically prepared leaves known only by the specialist to draw out the *kingoro* or "millipede" responsible for the illness; and illnesses due to having accidentally eaten a tabooed food.

In a nutshell, then, medicinal "knowledge" among the Zande of Kitessa is more a function of individual circumstances and social situations than a fixed, shared body of knowledge. There is no single, representative repertoire, but a multitude of repertoires. A treatment depends on the particularities of a given situation and will not be the objective application of generalized "knowledge." This characteristic of medicinal knowledge fits well with what Evans-Pritchard (1937) has described as "piece-meal knowledge": knowledge never tested against reality or against itself, but tied to particular situations.

Zande leechcraft also follows the Zande penchant for borrowing (a penchant which most likely has nothing to do with modernity). The Zande have always been open to new ideas, having borrowed material objects, practices and beliefs, including such practices as fundamental as circumcision rituals, which came and went earlier this century. The Zande openly acknowledge that many of their medicines are borrowed.

The Zande treat others' "knowledge" as they treat their own: tied to particular situations, true in given contexts, and useful under certain circumstances. The few Western medicines that have found their way to Kitessa are included in local repertoires. They are probably, however, just as "transient" as local medicinal practices.

Zande open-mindedness, their constant search for new solutions, and their readiness to adopt new treatments have probably been advantageous in adapting to new situations. They have participated, for better or for worse, in schemes of government, of non-government organizations (NGOs), and of missionary groups, and have gradually been "bending before the wind" of Western influence.

I hope to have shown that, except for a core of a few dozen plants, there is no one universal, commonly accepted "body of medicinal knowledge," but that each individual learns throughout his or her life, through a variety of sources and experiences, a more or less unique repertoire of treatments using plants. Furthermore, this individual repertoire of medicinal recipes is constantly changing, depending on the circumstances in which they are called upon, and their frequency of success. Treatment is not automatically applied from an abstract body of knowledge, but is decided on as a function of and to suit particular situations, social as well as physical symptoms.

### **Knowledge versus Knowing**

Reputable scholars and intellectuals have long proposed distinctive types of knowledge, starting with Aristotle. Gilbert Ryle (1949) proposed contrasting "know that" and "know how." Clifford Geertz talks about "local knowledge" (1983); others oppose theoretical and practical knowledge, or even oppose "knowledge" and "action," "practice" or "habit." I do not wish to open the Pandora's box of just what

"knowledge" consists of, especially in the "scientific" West, but have mentioned a few of these distinctions in passing in order to arrive at one I find helpful in presenting my Zande materials, one that is based on syntax rather than on semantics.

In the introduction to a volume he edited on knowledge and ignorance in development, Mark Hobart (1993) underlines the significance of the use of the verb form, "knowing," rather than the nominal form, "knowledge." He says the contributors to the volume stress:

the importance of treating knowing as a practical, situated activity, constituted by a past, but changing, history of practices. Such knowing requires evaluation by some measure like appropriateness to particular circumstances, rather than by its being true as such. . . . The act of nominalizing converts processes of knowing into a commodity, 'knowledge,' which becomes a thing in itself (Hobart 1993:17, 21).

Knowledge, then, in a nominal, substantive form becomes an abstract construct. Knowing, on the other hand, is an action, involves "knowers," occurs temporally, and cannot be predicated as being true or false. The situation I experienced among the Zande fits the latter schema.<sup>3</sup>

The Zande verb *ino* can best be translated into English as "to know." The transitive use of *ino* with first-order entities (Lyons 1977) (persons, objects, and things which can be expressed in nominal form--nouns) parallels that of the English "to know," as "to be acquainted with": to know someone's name, to know a certain individual, to know a street (French *connaître*, Spanish *conocer*).<sup>4</sup> A second transitive use of the verb *ino*, again as in English, involves "knowing" third order entities, or propositions: to know that something has occurred, where someone is, why something has happened -- in other words, propositions (French *savoir*, Spanish *saber*). Most important, the Zande verb *ino*, like the English verb "to know," requires an agent; the noun "knowledge" does not. Moreover, I have never heard a "passive" use of the verb, as in "It is known that . . ." In other words, knowing is active, and requires a living subject.

The Zande word which comes the closest to expressing the idea of "knowledge" is *ini pai*. *Pai* is

one of those untranslatable concepts, but could be described as particular happenings, problems, matters, affairs, cases, involving particular people and events. *Ini-pai* could thus be more correctly translated as "knowing matters, affairs, problems, things that have happened," or even "understanding complicated matters." "Wisdom" or "savvy" would perhaps be better glosses than "knowledge."

The active use of the Zande verb *ino* is very eloquent, and implies that "knowing" in Zande is changing, situational, ephemeral. This "ephemerality" of "knowing" came up time and again during my stay in Kitessa, causing me endless frustration during my investigations of Zande leechcraft.

### Conclusion

I can offer few comments regarding methodology and "grounds for indigenous knowledge." The fact that different questioning and observation techniques yield different responses should be kept in mind when seeking to discover "indigenous knowledge." How valid is it to compile lists of this so-called "knowledge," such as a list made from a single informant as being representative of the entire village or even ethnic group? What are the grounds for acting on any knowledge "obtained" by such questioning? Or from so-called "experts," who are perhaps experts only in given social situations?

Finally, though I admit that there does seem to be a core of a few dozen plants that seem to be more or less universally used to treat certain illnesses (albeit in different doses and preparations), and some or all of these may prove to be useful in Western biomedicine, I would like to close with the following question. Since Zande "knowledge" is ephemeral, circumstantial, local, practical, particular, situational, and reflects social rather than scientific realities, what would be the grounds for applying it elsewhere?

### Notes

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2. I brought back more than 350 specimens, which will be permanently housed at the Missouri Botanical Gardens, Saint Louis.

3. This concept of knowledge was expressed in an intriguing metaphor by Richard Rorty who pointed out that "a presupposition in much Western epistemology is that the human mind is like a mirror which reflects reality, and problems of accurate knowledge boil down to repairing the mirror" (1980, cited in Hobart 1993).

4. I use first, second and third order entities as described by Lyons (1977).

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