## ZIMBABWEAN SHONA'S MEDICINAL KNOWLEDGE SYSTEM

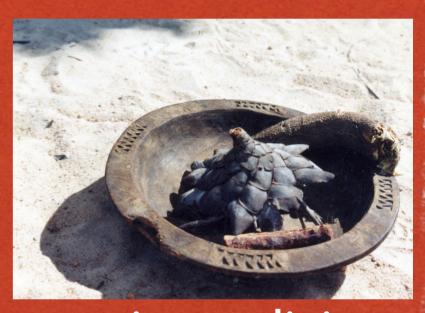
"Magico-religious and empirical knowledge converge in the practice of medicine" (Johns 1990: 274)



garden of muti



chitapota/herbalist



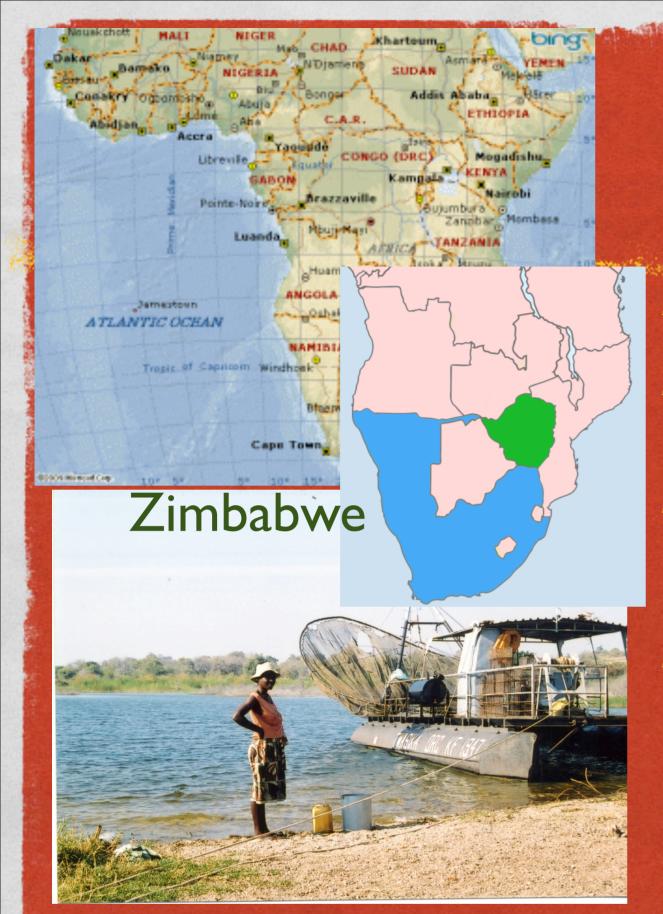
magic-medicine

THESIS: MAGICO-RELIGIOUS has to be considered equal to empirical knowledge in the origins of medicine.

ARGUMENT #1: EVOLUTIONARY ORIGINS OF MEDICINE (JOHNS 1990)

Insects controlling parasites with plants >

- > Animals controlling parasites with plants>>
- >>Humans watching animals control parasites with plants
- = Some evolved a prophylaxis
- = And agricultural societies creating "incidental cultivation" of medicinal plants



## **CULTURE-HEALTH-ECOLOGY**

- Bantu linguistic traditions
- 2/3rds of Zimbabweans reside in communal rural areas
- Specialized ecosystems veld, granite hills, semitropical highland, marshes and wetlands on the Zambezi River Escarpment, Victoria Falls.
- Medicinal Flora and Fauna: any parts of plant roots, leaves, bark, stems, fruits, grasses, aloes, seeds, thorns, climbers... As well as, symbiotic insect-plant growths, as well as any part of an animal and its' excretions (Chavanduka 1997: 3).

Zimbabwe, has a mixed agrarian, animal-husbandry complex with hunter-gatherers and raiders. Insects definitely an issue. flora and fauna and - excreta (not old coprolytes humans, but fresh stuff from animals - can yield what baboon is eating for vhuka-vhuka. -animal behaviorists)



A. Rational interpretation of perceptions of plants - Science

B. Perceptual salience of plants in a culture

(Logan and Dixon 1994)

evolutionary origins of medicine///and acknowledging there must be some cultural relativism. he says one approach is to acknowledge::: so a goal would be to ::: relativize the perception of medicinal substances.... this is radically different from assuming that societies with magic or religion preceded scientific societies. with Malinowski -m,s, r all at

"interactions between perceptions and the rational interpretation of these perceptions are essential for learning, comprehension and utilization of knowledge" (johns 274)

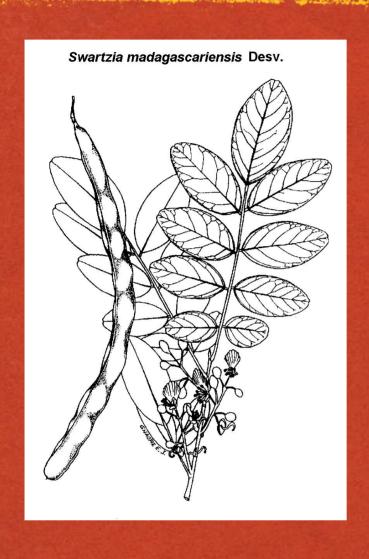
Malinowski, Bronislaw 1948 "Magic, science & religion" In Magic Science and Religion and other Essays. Doubleday Anchor Books.

No people without magic, science or religion. Reviews Tyler and Frazer. The former thought animism the first type of religion, but did not consider primitive religions to have science. The latter wrote The Golden Bough as a codex of magic - almost equal to science and religion since rites or spells are used to control nature. Frazer also considered totemism through an

early sociological concept of faith. Malinowski sites Durkheim who thought the religious was identical with the social. M. thought magic was to dominate nature but came after science. When the prior two fail, religion is an appeal to greater power, spirits, gods, and to lift folk above. He then differentiates between magic and science: Science - born of experience/reason and corrected by observation/ "open to all"/common good

Magic - born of tradition/ lives in impersonal mystic power/transferred by occult, hereditary initiation or exclusive filiation.

## WHO OWNS KNOWLEDGE OF THE AFRICAN SNAKE BEAN?



- "Case Study: UZ vs Laussane University for the Medicinal Plant, Swartzia Madagascariensis" (Mushita 2001)
- "pure active principles" isolated
- mollusciside treats Schistosomiasis (snail fever)

Scientists watching agrarian people controlling parasites with plants >

AFRICAN SNAKE BEAN ALSO...

In 2006, scientists in Burkina Faso prove this plant also has anti-malarial properties and publish results in the *Journal of Traditional African Medicine* 

## COMMON MEDICINAL USES OF ZIMBABWEAN PLANTS

- Madagascar periwinkle//low blood sugar/ diabetes mellitus (Aident Simajiki)
- Banana leaf juice//take the juice of the heart and drink for heartburn or attack
- Fig/Mounde Tree// take the milky extraction of the bark and use on burns or wounds (Kenneth Makiadzani)
- Guava tree//for whooping cough, take leaves and boil for 5 minutes (Aident Simajiki)
- Castor Plant Seeds//ash use in porridge for hydration and flapping fontanelle (Amai Subudu)
- Dagga (marijuana) Leaves// in the ears for aches (Aident Simajicki)

knowledge distributed commonly. rather than secreted: kuchengetera.

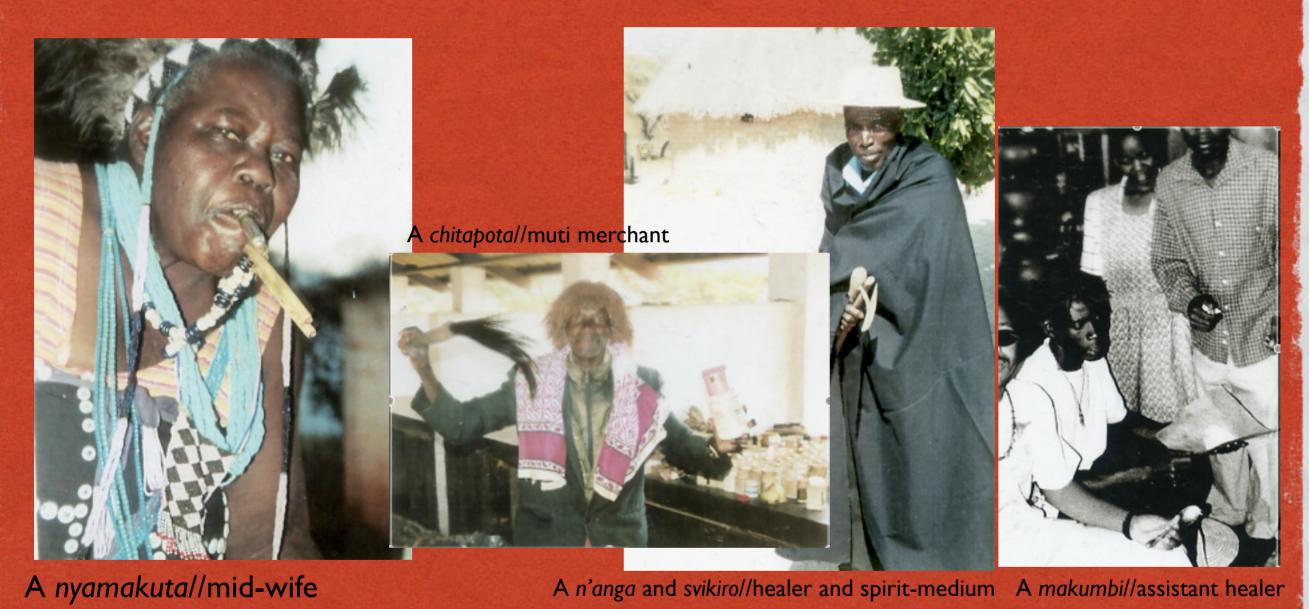
# **IK SYSTEM** Indigenous knowledge is closed, non-systematic and holistic rather than analytical, without an overall conceptual framework, and advances on the basis of new experiences, not on the basis of a deductive logic (Agrawal 2000: 11)

- Johns... is talking about a "Non-transferable territorial knowledge/ evolves in relation to the local milieu"
- IK not an old, common knowledge... but has a very concrete, "successor science" to science. experience is empirical based on the senses. but since it also relies upon a sense of "spirits" its' interpretation is not always "rational" or we do not always know how it makes its deductions.

## SHONA HEALERS - NYAMAKUTA, N'ANGA, CHITAPOTA, SVIKIRO, MAKUMBI

Control of the second second

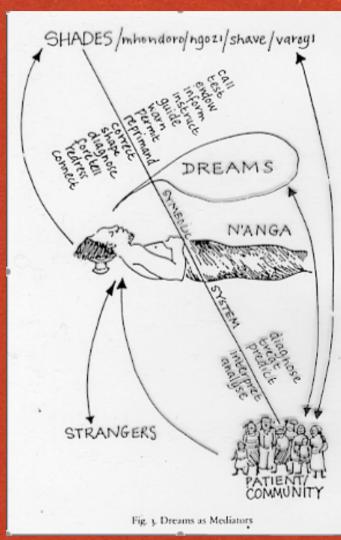
MUCHEREKESE//"MALILA BARK TASTES LIKE QUININE"



Gradient of magico-religious to empirical... this has happened historically, as the witchdoctors persecuted by Colonial gov't and Witchcraft Suppression Act – their ways of knowing considered "witchcraft".

Customary authorities// recognized advisors in community, to the customary law, to chiefs, oral traditions about them being the sorcerer Merlin to King Author.\
NOT ABOUT the PROPERTIES of MEDICINE, but about the RELATIONS the PRACTITIONERS HAVE WITH the community and their patients.

## MAGICO-RELIGIOUS AND EMPIRICAL KNOWLEDGE



Reynolds. P. 1996.

[Traditional Healers and Childhood in Zimbabwe]

- family spirit-healing apprenticeships//practice
- embodied possession/transmission of healing knowledge
- "gift" concept of medicine ancestors and varidzi resango (untamed spirits of the forest),
- and initation concept of healing: from illness and the njuzu (mermaid spirit)
- intrusion model of illness
- infusions, powders w/ porridge, skin tatoos

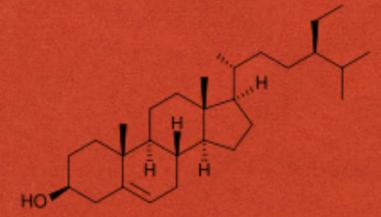
Two-thirds of Zimbabweans rely on a traditional healer, a *n'anga*, and subsequently his or her traditional medicinal knowledge, for some aspect of their health needs in their lifetime (Chavanduka 1997). In addition to this, Chavanduka (1997) documented that traditional healers serve vital roles as community leaders and in facilitating traditional institutions such as marriage, courtships, childbirth, the appointment of elders to a council and regulating crop cultivation. Traditional medicinal knowledge in Zimbabwe largely moves through family apprenticeships consisting of an elder grandparent, aunt or uncle, in combination with an assistant, the *makumbi*, usually a child (Reynolds 1996). This ritualized inheritance of Shona traditional medicinal knowledge extends to most Bantu cosmologies shows Turner (1992) and Reynolds (1996). Therefore, even though the Republic of Zimbabwe combines persons from a variety of linguistic and cultural backgrounds from Africa, wide variation is not expected in the contemporary rituals associated with traditional medicinal knowledge. The customs of TMK have even persisted today after colonial and missionary legacies left an image of traditional medicinal knowledge hard to alter. TMK practices were trivialized as "superstition" and the *n'angas* called "witch-doctors" (National Archives; Gelfand 1988: 1-19). Despite the efforts of missionaries and colonists to debase traditional healers reputation, it had been bolstered two decades ago due to their active role in the Second Liberatio

**WARNING:** ZIMBABWE NATIONAL TRADITIONAL HEALERS ASSOCIATION PRESIDENT

"There is an inherent danger that traditional medicine will be defined simply in terms of its technical herbal expertise, that this experience will in turn be recognized only for its empirical pharmacology, without reference to the symbolic and ritual matrix within which it is used—still less to the social matrix in which those rituals and symbols have meaning at any particular time and place" (Chavanduka, 1997: 267).

## AFRICAN POTATO//HYPOXIS HEMERACALLIDAE

Chemotaxonomic data of the Hypoxis family



Pentene-diphenyl-diglucoside compound



- Betasitsterols and Phytosterols (immunity-boosting and prostate-cancer inhibiting)
- Hypoxis varieties USTPO #4,652,636 (Drewes, et. al)

HEalth FETISH for this plant in 2000. Muti merchants sold in streets as a "gutchu" - cure all. and people thought it could cure even HIV/AIDS. problem was that people selling it did not have the right one - even though it had been published previously in Van Wijk et al. for its' immunity boosting properties, the family of this potato - the hypoxis varieties - have a compound called rooperal::: dicatechol showing anticytokine activity, patented in the US by Roecar Holdings. Dutch-South African scientists. So... it can be used by first -world for lifestyle diseases... but as an immunity-booster it is not widely accessible to South African communities facing very high HIV/AIDS rates.



- innovation as "hope for advantage" (Kirch 1994;24, 35)
- Conclusion: Need to understand the political advantages behind the evolution/ innovation of medicine.

the innovation that drives social evolution anyway is considered to emerge with a "hope for advantage" apart from intensification as a "burdensome... necessity" (Kirch 1994; 24, 35). But if innovation is gained simply by more reward - the carrot and stick approach - our explanations of innovation need a more subject-centered approach.

Johns also (274) importance of motivation for understanding evolution of specific systems of medicine.

### **RESOURCES**

- VAN WYK, B.E.; OUDTSHORN, B.V.; GERICKE, N..(eds.) 1997 Medicinal Plants of South Africa, Briza Publications.
- REYNOLDS, P. 1996 Traditional Healers and Childhood in Zimbabwe. Athens: Ohio University Press.
- MUSHITA, A.T. 2001 "Case Study: UZ vs Laussane University for the Medicinal Plant, Swartzia Madagascariensis", National Workshop on Intellectual Property Rights for Biotechnology. Harare, Zimbabwe. Biotechnology Trust of Zimbabwe. Sept. 4-5.
- CHAVANDUKA, G.L. 1997 *Traditional Medicine in Modern Zimbabwe*. Harare: University of Zimbabwe Publications.
- ARGAWAL, A. 2000 "Indigenous and Scientific Knowledge: Some Critical Comments," Indigenous Knowledge and Development Monitor, 3(3): 1-11.
- OUATTRARA,Y, SANONB, S, TRAOREE, Y, MAHIOUD, V, AZASE, N. L. SAWADOGAOA, L. 2006. "Antimalaral Activity of Swartzia madagascariensis desv. (Legumonisae), Combretum Glutinosim (Combratacae) and Tinospora Baismieras. (Menispermacae), Burkino Faso Medicinal Plants" *Afr. J. Traditional, Complementary and Alternative Medicine 3 (1): 75 81*
- FROMMER. C,. (2003) The Cultural Right to Reproduce Traditional Medicinal Knowledge in Zimbabwe. Masters Thesis.
   Redpath Library, Montréal, CANADA.