“Traditional African Medicine” as Living Cultural Heritage : Conditions and Politics of Knowledge Transfer

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"Traditional African Medicine" as Living Cultural Heritage: Conditions and Politics of Knowledge Transfer

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1. Introduction

For thousands of years, diverse communities on the African continent have provided health care through their traditional medicines, practices, and practitioners. External influences from other parts of the world have not only enriched and complemented the existing repertoire[1)] but also brought new challenges. With the introduction of colonialism, for example, Western culture and health care, the medical landscape in Africa has changed fundamentally. While some voices point to the improved health situation on the continent since the introduction of Western medicine, others stress that these external influences go along with a setback for and devaluation of traditional African medicine (TAM). Several authors underscore the negative impact of colonialism on indigenous medicine (Feierman and Janzen 1992; Konadu 2008; Abdullahi 2011).

During colonization, as well as in post-independent times, traditional healers were repressed or persecuted. This pushed healing practices underground in some parts of sub-Saharan Africa (Feierman 1985). The Ghanaian historian and political scientist Adu-Gyamfi and Anderson state that "Shaped by the perceptions of biological, intellectual and historic superiority, Europeans set out either purposely or ignorantly to denigrate indigenous African systems including traditional medicine." The reasons they mention were "a lack of proper understanding of the indigenous philosophy which was further aggravated by some level of racial superiority" (Adu-Gyamfi and Anderson 2019: 90). Some scholars see colonialism, neo-colonialism, capitalism, imperialism, and other forms of dominations and exploitations as "major stumbling-blocks in the actualization" of the development of indigenous African medicine (cf. Abdullahi 2011: 116).

Nevertheless, TAM continues to meet a wide range of healthcare needs in both rural and urban communities of Africa (Bamidele et al. 2009). Approximately 80% of the population in sub-Saharan Africa, particularly in rural areas, depend directly on traditional medicine[2)] for their primary health care requirements (Tabuti et al. 2003; WHO 2014; and others). Traditional healers, with various specializations, are usually much more easily available and accessible than medical doctors. In addition, lay people treat themselves and their families with home remedies, usually medicinal plants. This is important because existing public health services are insufficient to treat all those who fall ill.

Synthetic drugs are often not obtainable in rural areas due to high costs, poorly developed transport routes, inadequate storage possibilities, and poverty. In addition, local herbal medicine continues to enjoy broad acceptance among the local population (cf. Tabuti 2003).

Since the 1970s, TAM has been undergoing "rehabilitation" on a national and international level, when the World Health Organization assessed the role of traditional medicine for primary health care as essential (WHO 1983). The organization encouraged and supported African member states to promote traditional medicinal practices and integrate them into their health systems (WHO 2002; 2014). Within the framework of this agenda, the *examination* and *documentation* of TAM is rated as important. Apart from these efforts by the WHO, in the past three decades, the traditional, complementary, and alternative medicine sector has been receiving increasing policy support from multilateral and non-government organizations, civil society groups, and other self-regulated associations[3)] (cf. Payyappallimana 2010: 66).

In the meantime, many African countries have undertaken corresponding activities.[4)] Currently, post-colonial African governments have widely accepted traditional medicine through the institution of national administration or accreditation bodies for TAM, associations of traditional healers, training programs for healers, and research activities (Adu-Gyamfi and Anderson 2019: 95). This is considered important to reduce national dependence on expensive imported drugs (Janzen and Green 2008).

However, the development of adequate integration models is proving difficult for many reasons, and the intent to preserve and document traditional medicinal knowledge raises questions and ambivalences that manifest on different levels. One significant example is the danger of biopiracy: the traditional medicinal plant use in the global south is generating growing interest among international pharmaceutical companies and can lead to exploitation and expropriation of indigenous knowledge and natural resources, as national and international conventional patent laws continue to be insufficient to protect traditional knowledge and biodiversity (WHO 2008).[5)] This points to a tension between the claim to traditional medicine knowledge as a *local* versus *global* cultural heritage.

Furthermore, TAM faces fundamental existential problems: a continuous loss of its natural, intellectual, and cultural bases. Rapid population growth has led to an increasing demand for land resources, which, in turn, results in a decline in natural habitats. In addition, the growing commercial use of medicinal herbs, even in cities, is threatening biodiversity, as many raw materials for herbal medicines are still gathered only in the wild. Thus, a prerequisite for the preservation of TAM is to protect the natural environment as well as its cultural and intellectual resources (WHO 2014).

The history of African cultures and their knowledge of plants as a source of remedies have been transmitted from generation to generation via an oral tradition (cf. Soelberg et al. 2015). This knowledge is gradually disappearing (cf. Luoga et al. 2000; Tugume et al. 2016). The Ugandan Botanist Patience Tugume stresses the need to capture it before it is lost. She observed that "Younger people, who are exposed to modern education, are not interested in learning and practicing ethnomedicinal wisdom that would perpetuate indigenous knowledge as part of their living cultural heritage" (Tugume

et al. 2016: 20). As implied by this statement, traditional medicine is considered to be of great importance not only as a potential resource for *primary health care* but also as *cultural heritage*.[6)]

Although the preservation of traditional medicine is a common, overarching goal from both perspectives, the specifications of this objective, the underlying premises, and the required approaches and measures may differ fundamentally. The intent to investigate and document traditional medicinal knowledge raises many questions and ambivalences that manifest at different levels.[7)] It requires selection processes that are driven by specific power constellations: economic, political, and ideological interests, and predominant (occidental) epistemologies. These affect not only the *contents* but also the *reputation* and *dissemination* of knowledge and healing practices.

From a public health perspective, represented by post-independent administrators, scientists, and national and international health organizations, justifiably, a high priority is given to the sustainable, effective, and safe use of medicinal plants. Attempts to integrate TAM into the formal health systems usually leads to an increasing "medicalization" of traditional healing practices (cf. Bodeker et al. 2007; Bruchhausen 2018). This means an orientation toward uniform, international quality standards, including evidence-based procedures and the advantage of professionalization of medicinal care according to biomedical standards. In this context, most current conservation efforts have neglected or ignored cultural aspects, mainly the ritual and symbolic side of TAM (cf. Bruchhausen 2018).[8)]

Such a one-sided focus de-contextualizes, fragments, and erodes the local medicinal heritage, especially relating to non-material or metaphysical aspects (cf. Payyappallimana 2010). In doing so, it also alienates traditional practitioners from their medicines and weakens and marginalizes their position (cf. Langwick 2011). It impedes the traditional mechanisms of knowledge production and transmission and restricts further development. "Initiatives to develop traditional medicine might actually be moving away from traditional medicine" (Langwick 2011, citing a traditional healer: 289).

Additionally, the fragmentation and secularization of medicinal heritage may ignore the local expectations and needs of holistic health care. Finally, this often goes along with the expropriation and exploitation of indigenous intellectual property. Indigenous therapeutic knowledge is "de-contextualized by processes of scientific research," to "re-contextualize medicinal plants within international biomedical agendas, laboratories and national healthcare services" (Langwick 2011: 288).[9)]

In this chapter, I will try to give a brief impression on how African indigenous medicinal heritage and the processes of knowledge transfer are entwined within a web of cultural, spiritual, social, and natural (inter-)relatedness.

2. Need for Cultural (Re-)contextualization

From a cultural heritage point of view, one must consider that traditional African healing methods are not limited to the use of herbal, mineral, or animal medicines, but include cultural interpretations and ritual practices that are deeply rooted in the respective

religious belief systems and follow their modes of operation. With respect to research and conservation strategies, this points to the need for cultural contextualization of local medicinal knowledge.[10] Medicinal plants are not only a material resource for medicine, but as the Swiss medical anthropologist Elisabeth Hsu points out, they are also "cultural artifacts" (Hsu and Harris 2010: 83). They are part of a biological and living cultural heritage and are embedded in a dynamic network of cultural meanings and social practices. Despite widespread scientific and public interest in medicinal plants, these aspects have been widely under-studied and under-theorized (cf. Hsu and Harris 2010). Rather than merely focusing on how a particular (chemical compound of a) botanical species is used therapeutically, it is important to consider that plants and the knowledge and practices surrounding them are integral aspects of social and cosmological orders.

Thus, traditional medicine as part of a constantly evolving "living cultural heritage" requires the inclusion of social science's focus on social institutions, meanings, and practices surrounding plant use (cf. Hsu and Harris 2010). This means integrating *material*, *cultural,* and *spiritual* dimensions and involving the respective "religious" belief systems in which the use of medicinal plants is embedded. In other words, these belief systems or *local realities* can be seen as the epistemological basis for the interpretation of experiences, observations, and decision-making related to illness, healing, and remedies.

In many African societies, the local value and functions of traditional medicine go far beyond their physiological and objectified healing potentials to include social, moral, and spiritual aspects. The Ghanaian historians and political scientists Samuel Adu-Gyamfi and Eugenia Anderson assign to the indigenous medicinal knowledge system "a major role in the protection of societies" (2019: 96). As the authors point out, its benefits cannot just be seen in its capability to cure diseases but its "intent to holistically preserve the society through its social interactions, religious sacredness, and a conservation of the environment. Its absence in African societies could cause an imbalance in a well-ordered healing system among the people" (Adu-Gyamfi and Anderson 2019: 96). The intention to sustainably develop conservation approaches for African medicinal cultural heritage means to open up for different epistemologies and ontologies and to diversify strategies.

3. Local Concepts of Illness and Medication

TAM is based on local religious belief systems[11] and corresponding cosmologies. The Tanzanian philosopher Raymond Sambuli Mosha describes the latter as holistic.

> Humanity and all other beings […] relate as one entity in order to enhance and preserve the harmony already inherent in them. The entire universe is humanity's intimate partner in life. […] Stones, and mountains, rivers and lakes, clouds and rain, are all alive in their intrinsic meanings and in their active partnership to people and everything else.
> (Mosha 1999: 213)

By adhering to his moral, ethical, social, and religious obligations, man must

contribute to the maintenance of this cosmic balance because "the well-being of the visible world and that of the trans-cosmic one […] depends to a great extent on the level of individual and communal moral living" (Mosha 1999: 212).

In a traditional local perception, illness can be caused, for example, by climatic influences, fatigue, or bad food. However, it can also be an expression or a consequence of an imbalance, which is not limited to physiological processes, but can result from violations of social norms, religious obligations or taboos, and disregard for the ancestors or from social tensions. This points to a spirito- and socio-somatic concept as an explanatory pattern within traditional African etiology. In this sense, illness also offers a projection surface on which conflicts within the group can be verbalized and processed. The Ghanaian sociologist Patric Adubofour Twumasi notes that "a breach of social relations threatens the very survival of the traditional society because of the mutual interdependence…; health and illness are means of detecting threats to social unity and for re-establishing harmony of social relationships essential to their life" (Twumasi 1975: 37).

Health implies a "balance of all social forces: kinship ties, relations with the ancestral spirits, deities, and the environment" (Adu-Gyamfi and Anderson 2019: 85). "Medical" interventions are not limited to the individual body but refer to the extended community. The Baoulé of Ivory Coast use the word *ahiré* (translated as "medicine") for more than just the restoration of physical health. *Ahiré* can avert various undesirable conditions, including psychological, social, and economic problems—or bring about diverse desires. A love spell, for example, is also called an *ahiré*.

In this setting, the therapeutic properties of plants are conceptualized comprehensively. In the healing process, they are seen as active subjects, not as inanimate objects (Iwu 1993: 310). Healing effects arise from the interplay of organic effects and the spiritual forces contained in the plant. Their vital forces can be mobilized and used by knowledgeable persons (cf. Iwu 1993).[12)]

Diseases that are attributed to social and spiritual factors, taboo-breaks, or witchcraft are untreatable with conventional medicine, and "simple herbal therapy" by a lay person may not be effective. In this case, a spiritual specialist must be consulted to make the necessary diagnoses and take ritual precautions by involving the advice of ancestors and spirits. The choice of therapy depends not only on the availability of medicinal options but also on the imagined cause.[13)]

In sum, some of the "traditional" treatments do not meet the expectations of the patients and healers through their physiological effect, but through an attributed effect on a magico-religious level, adapted to local etiologies. The boundaries between what might be conceptualized as "medicine" and "religion" among "Western" scholars, cannot be clearly drawn here. In contrast to orthodox medicine, TAM strongly includes social, religious, and spiritual aspects. It emphasizes not just the individual body but the well-being and health of the entire society.

4. Local Significance of "Knowledge" and Why It Must Be Acquired

In the indigenous cosmological framework described above, "knowledge" has a transcendent aspect because it is seen as an integral part of the divine principle. The Senegalese philosopher Alassane Ndaw describes it as follows: "African epistemology ignores the separation of the order of knowing and the order of being. Knowledge is a being and not just an instrument at the service of man. (...) for the African, knowledge is a cosmic reality since it has the same substance as the cosmos" (Ndaw 1997: 34).[14)]

The appropriation or incorporation of knowledge is part of the lifelong spiritual transformation of an individual from an immature, unenlightened person to a knowing and wise one (Zahan 1970). The status of a knowing (and therefore morally mature) person is of great importance to the individual. The incorporation of knowledge marks the transition to a higher status.[15)] It is a prerequisite for entry into the ancestral realm (cf. Ndaw 1999).

However, this importance of wisdom and knowledge does not come into play only after death. It also confers prestige and a higher social status to the living individual. The high reputation, respect, and obedience shown to the elderly in the village communities is largely due to their experience, wisdom, knowledge, and the associated status of a spiritually advanced and mature person. They are given the ability to make wise decisions, which also confers on them political power. Therefore, the need for constant acquisition of knowledge has ethical, spiritual, social, and political implications. Knowledge determines the position of an individual within a social and cosmological order.

This explains why the importance of knowledge is accompanied by a certain value of the secret. As Ndaw states, "One of the dimensions of African spirituality is internalization. The value accorded to what is unspoken, to the secret, to the invisible, is immense" (Ndaw 1997: 46, translation by the author). The Tanzanian philosopher and scholar of religious studies Ikechukwu Anthony Kanu conceptualizes secrecy in African traditional societies at two levels: On a social level, secrecy gives "a particular group of people identity and thus differentiates them form others" (Kanu 2018: 51). Additionally, there is a mystery level. "This kind of secrecy is associated with kings, sacred specialists, shrines, masquerades, etc. This sense of mystery gives these realities their sacred personalities" (Kanu 2018: 51).

Mosha assumes that in indigenous African societies, both the content of local knowledge and the way it is produced and transmitted are inextricably interwoven with spiritual, moral, and social aspects (Mosha 1999: 214). I will illustrate this using a concrete research example.

5. Transfer of Medicinal Plant Knowledge in a Baoulé Village (Ivory Coast)

In the following, I will reflect on the cultural conditions of medicinal plant knowledge transfer in a rural *Baoulé* village[16)] in the southern part of Ivory Coast. I will draw attention to an indigenous spiritual "intellectual property rights" system, which is highly

ritualized and regulates and limits access to medicinal knowledge, thereby co-organizing the social and transcendental order within the community.

My research focused on processes of intergenerational knowledge transfer in the popular sector, that is, the household level, but I have also worked with traditional healers and employees of local state health centers. In the indigenous therapeutic system, there are different spheres of production, management, and transmission of medicinal knowledge[17]: a) *common* or *basic knowledge* shared by most of the village population, b) *particular lay knowledge*, and c) *specialized healers' knowledge*.

a) Common or Basic Knowledge

Many young people or even children know a handful of medicinal plants with which they can treat themselves for minor injuries or discomfort (e.g., treatment of small wounds, colds, headaches, insect bites). They learn about these "simple medicines" from their parents, grandparents, or older siblings through instruction or observation (Photo 1).

b) Particular Lay Knowledge

This lies largely in the hands of village elders. Each one has a set of expertise in recognizing and curing particular diseases or health problems (e.g., snake bites, malaria, diabetes[18], skin disease). This particular knowledge is passed on orally from generation to generation under certain conditions and in a strictly ritualized manner.[19]

In the Baoulé communities, as in many African regions (cf. Konadu 2007; Langwick 2007, 2011), the spirits and gods are considered the original keepers of medicinal plant knowledge, which they pass on to ancestors and healers and, in rare cases, to lay people, for example in dreams, if the person proves to be morally irreproachable.[20] However, it is only through the knowledge of correct preparation and application that they become valuable medicines. The healing effect unfolds only in the interactions and interrelationships between plants, (ancestral) spirits or deities, healing persons, and patients.

Photo 1 Medicinal plant market, Toumodi (Photograph by Jacqueline Grigo in 2017)

The treatment of a sick person follows a complex formula that must be strictly respected for healing. This formula includes not only requirements for (sustainable) plant collection, preparation, application, and dosage of the remedies, but also determines taboos and required offerings and recitations. For example, it may be necessary to sacrifice an egg to a plant before harvesting it. It also includes the price that must be charged for the treatment and how plant knowledge may be passed on.

These formulas are not conveyed as mere enumeration of information but in the form of narratives, involving the mythical or spiritual protagonists that occur in the original event of knowledge revelation. Konadu, who inquired about a comparable phenomenon among the Akan of Ghana, described these formulas as protocols or "oral narrative archives,[21] that "have a 'language,' which functions as a repository and transmitter of culture and the experiences of past generations, and serves as a nexus between the life of the 'language' and the life of its speakers. These archives also facilitate the reception, retention, and retrieval of cultural knowledge" (Konadu 2007: 20). He refers to them as a kind of "oral and spiritual archives […] that present traditional knowledge for centuries" (Konadu 2007: 160).

Compliance with the instructions held in the formulas is believed to be monitored by (ancestral) spirits. In case of disregard, the practitioner's plant-healing power is withdrawn. These findings may confirm Gessler and Prince's assumption that medicinal knowledge and therapeutic transformations in TAM "are not so much located *within* entities as *between them*—they emerge from encounters and their traces, rather than reside in things" (Geissler and Prince 2009: 1).[22]

Although there is a stock of common knowledge, in general, medicinal plant knowledge is not a common domain. It is secret and, therefore, exclusive. It can only be transferred to another person in a prescribed, ritualized process, usually from an old person to a younger relative, who has proven to be "loyal, obedient, morally correct" (interview: Marcelin K.).

The latter must "remunerate" the revelation of secret with a symbolic "fee"—traditionally by means of a cola nut or a ball of cotton—a sign of appreciation toward the elder, that simultaneously protects the secret from public access. This "fee" is also described as sacrifice to the spirits (who originally gave the knowledge to the human world) that reactivates and reinforces this relationship. It ensures spiritual authorization and sustains healing power for the new user. After "payment" has been made, the complete formula is transferred meticulously. Transaction is validated with a "click of the finger"—that is, the initiate's finger is pulled until a joint makes a clicking sound.

The passing down of medicinal plant knowledge can be seen as "an extension of relationships" (Geissler and Prince 2009) among humans, and between humans and the non-human world. Rather than being an object of individual property, plant knowledge entails a "set of obligations" (cf. Langwick 2011; 2017: 33).

In this social system, ancestral spirits represent an effective supervisory authority, which is legitimized by the religious belief system. As such, they also ensure the sustainable use of natural heritage. In addition, they grant the elders' status and privileges that support the traditional hierarchical (reontocratic) social structure.

c) Specialized Healers' Knowledge

Traditional healers in the region are reported to have acquired their *specialized healers' knowledge*[23] from perennial apprenticeship with experienced practitioners, but to a large extent, they have learned their skills from spirits, ancestors, and other non-human beings in dreams and visions.[24]

However, in many cases, especially with more complex patient problems, indigenous healers do not draw on their individual, intellectual knowledge depository, but instead make direct contact with spirits or ancestors to identify the causes and receive appropriate treatment instructions. They assume that every person and every disease situation is individual; therefore, there are no universally valid treatment methods for health disorders. The healing situation is highly personalized and situational. "The embodied nature of this therapeutic knowledge [therefore] confounds attempts to duplicate medicines and practices across time, place, and patients" (Langwick 2011: 281). This has an impact on present debates about intellectual property (cf. Langwick 2011: 271) and illustrates the challenges in imagining adequate heritage conservation strategies. As Langwick puts it, "African therapeutics generate innovation through engagement, not single authorship. Such epistemic practice and the ontological realities that inhere in theme do not (always) sit easily with those of modern science or law" (Langwick 2017: 33) (Photos 2a and 2b).

(2a)

(2b)

Photos 2a and 2b Traditional healer preparing a protective medicine for safe travel. (Photograph by Jacqueline Grigo in 1999)

6. Challenges and Changing Modalities of Local Knowledge Transfer

All three spheres of medicinal knowledge mentioned above face challenges in the continuation of cultural heritage through intergenerational knowledge transfer. As any local knowledge, African medicinal plant knowledge is not static. Through its orality, it is dynamic and adaptable to changing circumstances, but is also fragile. It is influenced by socio-cultural, demographic, environmental, technological, and economic transformations, as well as by other medical systems. Such influences affect not only the stock and content of knowledge, its recognition, and distribution, but also the *modalities* and *mechanisms* of knowledge transfer. Although the transmission of *common* or *basic* indigenous plant knowledge seems simple and uncomplicated, it is endangered, as the younger people, often migrating to cities, are generally not interested in learning about it. Furthermore, many of the commonly used plant species in the village are gradually disappearing due to excessive use, monocultural land management, invasive neophytes, and climatic change. Consequently, plant medicines are forgotten after a while.

In addition, the *particular lay knowledge* of medicinal plants has gained economic value for the villagers in recent decades and is increasingly being commercialized, with a negative impact on intergenerational knowledge transfer. The "keeping secret" of knowledge and the obligation to "take something" for a treatment is part of traditional practices. In the past, what was requested for a treatment was a ritual gift—a symbolic act to balance give and take, and to harmonize people with their (living, animated) natural environment. Currently, the price demands for treatments in the village are relatively high, sometimes up to half of a month's wages. The elderly men who have become unable to work are fed by their families and receive what is necessary for survival. However, access to "luxury goods" is difficult.

The influence of the Western world has created new needs for consumer goods (e.g., mobile phones, radio, or Néscafe). These can only be acquired through money. As people continue to fall sick and need medicinal treatment, the plant knowledge has turned into a highly welcome constant source of income, a kind of old-age pension.[25] Consequently, the elderly often guard their secrets until they die.[26] This commercialization of treatments blocks the transfer of medicinal lay knowledge within the families and village communities and results in a continuous loss of this living cultural heritage that also affects the primary healthcare capacities in the villages.

Although in the perception of some traditional healers, the plant knowledge *in and of itself* is not regarded as a decreasing resource, as it is believed to be part of the divine principle and "to be borne" in the relationship with the spirits and ancestors ("it is always there"), most healers in the region regard their specialized healing heritage as endangered, or at least as challenged in some respects. They recognize the lack of successors, erosion of ritual skills and techniques on how to connect to the spirit world (the ultimate source of knowledge), increasing suspicion and distrust toward their practices with the introduction of "modern education," and the loss of natural resources and competition from representatives of other medical systems.

7. Discussion

In this chapter, I have tried to clarify that the importance of traditional medicine for local African communities goes beyond primary health care in a physiological understanding. Traditional medicinal knowledge and skills and the processes of knowledge transfer, as forms of heritage practice, are interwoven within a complex, *mutually supportive* web of social, cultural, and spiritual factors. In this setting, the religious belief system is essential for the preservation of medical knowledge (Photos 3 and 4).

The *exclusive focus* on medicalization, and the associated cultural decontextualization of traditional medicinal knowledge and practice, which is generally expressed in current (inter-)national research and conservation strategies, may ignore local expectations of holistic healthcare and disregard a large part of the concerns and social functions addressed by TAM. This exclusive approach also undermines the traditional mechanisms of knowledge transfer and disempowers traditional healers.[27)]

Traditional medicine as a living cultural heritage considerably supports the cultural identity of local communities.[28)] Its psychosomatic and socially integrative dimensions are adapted to the needs of patients by integrating relevant local explanatory models. The comprehensive approach places disease in a larger context than the more mechanistic

Photo 3 *Goli Glin* mask dancer, representing a buffalo-headed bush spirit. (Photograph by Jacqueline Grigo in 1999)

Photo 4 *Kpwan ple* mask dancer. The Goli is a series of dances performed at special occasions to protect the village from evil influences and exert a positive influence on the non-human world. (Photograph by Jacqueline Grigo in 1999)

etiology of the biomedical system. Diagnosis and treatments include a patient's mental state, social and natural environment, or spiritual needs. In doing so, they contribute to cohesion and the maintenance of social and transcendental order within communities.

Although they might overlap in some areas,[29] the biomedical public health approach and TAM not only work in different ontological frames but also focus on different therapeutic scopes. Current social science debates revolve around the question of whether and how the two different medical paradigms can be integrated,[30] avoiding one-sidedly subordinating traditional medicine knowledge and practices to the orthodox, scientific paradigm and to considering it merely as a pool of isolated information to be exploited (e.g., Langwick 2007, 2011; Konadu 2007; Thornton 2017; Obrist and Van Eeuwijk 2020). The two medical systems continue to have a strongly asymmetrical relationship, which can be interpreted as an ontological and epistemological continuation of cultural imperialism. Integration would require bringing scientists, healers, and their medicines into the same frame (Langwick 2011: 266), which seems to be difficult, as both medical systems might be "irreconcilable at their very core" (Konadu 2007: 177). Instead of the misleading concept of integration,[31] Konadu suggests "cooperation" as more feasible "if both systems acknowledge and accept their areas of expertise and limitations, perspectives and cultural foundations from which they operate" (Konadu 2007: 177). Similarly, some scholars have suggested that TAM and cosmopolitan medicine should be allowed to operate independently (Konadu 2008; Oyelakin 2009; cited in Abdullahi 2011: 119). The Canadian sociologist and anthropologist Julie Laplante advocates that we should "bring 'indigenous medicine' into conversation with biomedical ways of making medicine 'work,' not as exotica or requiring translation through the RCT (randomized controlled trial) filter, but as contemporary practices that challenge and feed into current ways of knowing in science and research" (Laplante 2015: 136). The views described are all attempts, with different emphases, to overcome the current hierarchies of knowledge production.

8. Conclusion

As part of living cultural heritage, TAM is understood as a *process*, rather than a *product* of cultural practice (cf. Arnoldi in this volume). It is closely tied to people and their oral traditions and, therefore, in a constant state of transformation. Moreover, medicinal knowledge is "not trapped in plants, minds, or communities, but rather, healing knowledge lives in the dynamic relations between them" (Langwick 2017: 35, citing a healer). This means that TAM is simultaneously highly processual and relational. To preserve this heritage cannot (only) mean perpetuate a status quo by simply collecting and "documenting" the corresponding practices, knowledge, and (plant) materials. To preserve TAM means to ensure its vitality and viability by enabling "the continuation of the processes surrounding its production" (Introduction by Iida, this volume). Safeguarding strategies therefore require a more differentiated approach that needs to be sensitive to local conditions of knowledge production and transmission. Starting from the different spheres of medicinal knowledge, I suggest considering some points that seem to

be important in my view.

Where *communal* or *basic* knowledge is involved, it might be secured to the communities by documentation and representation. This can be beneficial by increasing the pool of *common domain* knowledge on plants and supporting the capacities of medicinal self-care in the villages. The establishment of *adequate*[32] educational programs and medicinal plant gardens (as suggested by a villager) could prove useful. However, one must consider that this knowledge is particularly vulnerable to external exploitation. The question here is, under which conditions can this knowledge be "uncovered" and made accessible without it being expropriated by external stakeholders?

For the continuation and development of *particular lay* and *specialized* medicinal knowledge, conditions must be maintained that support existing heritage practices, so that this knowledge can continue to be implemented and enacted within the web of social and spiritual relationships through which it is constituted and on which it reacts.

While lay practitioners pass on *existing* healing knowledge, in the case of medicinal specialists, it is not only the knowledge but also the *techniques of knowledge production* that are part of the heritage practice. "Innovation," in a local-traditional sense, is emerging from relationships and is based on the ability to establish contact and negotiation with the (ancestral) spirits, that is, on a *ritual skill* that is or can be inherited only within its corresponding ontological frame.

Either way, important prerequisites are the availability of natural resources (intact environment and biodiversity) and ongoing intergenerational contact, that is, continuously raising awareness of the value of this knowledge. Kwasi Konadu emphasizes that Africa "must come to see its culture […] as its most precious and endangered natural resource or recourse, and as the basis from which socio-political and economic self-sufficing will emerge and be sustained" (Konadu 2007: 180).[33]

In recent decades, initiatives have emerged, where traditional healer organizations have developed their knowledge, combining traditional herbal knowledge and spiritual approaches with scientific (research) methods. The PROMETRA Buyijja Forest School in Uganda is an example where traditional healers are trained and research is conducted.[34] Where cooperation with traditional practitioners or their integration into the health sector is sought, it will be necessary to treat them not merely as "informants" or "data mines" (cf. Konadu 2007) but as "collaborators." This also means respecting and acknowledging their traditional methods of knowledge production and transmission, for example, guaranteeing the freedom to "keep secrets," where necessary, as secrecy is, paradoxically, one of the prerequisites for indigenous knowledge production and transfer: Secrecy is seen as an obligation toward non-human worlds that keeps that relationship intact and enables communication and knowledge acquisition.

Further "secrecy is the only way that healers can maintain their work as specialized" (Langwick 2011: 284, citing a healer from the Ugandan Healer Association PROMETRA). By marking a boundary between the "profane" and the "sacred," the secret secures the healer's distinctive status in society and thus shapes his or her relationship to patients in a special way. Part of the therapeutic "success" lies in this unique relationship. The secret empowers the healers, not only vis-à-vis the community,

but also vis-à-vis external access. From a healer's point of view, the secret may protect their knowledge from being expropriated by science, the state, or multinational corporations (cf. Langwick 2017).[35)]

To meet TAM on an equal footing, taking indigenous healers seriously as cooperation partners means, ultimately, to open up to their specific ontologies and epistemologies and appreciate them as locally valid realities in their own right. According to the historian Caroline Arni "the question is not 'how' reality is given, but what exists as 'the real' in a specific place at a specific time, whereby 'existing' is a question of how humans relate to other humans and non-humans through actions" (Arni 2019: 206).

Consequently, current cooperation projects then "must not write ancestors and other entities critical to healers' transformation of plants into medicines out of the project's guidelines. Rather, the challenge is to figure out how to write them in" (Langwick 2011: 289). In scientific assessments of "efficacy" of (indigenous) treatment methods, epistemological differences are not considered, and the different therapeutic goals are ignored. A more differentiated perspective on the concept of "efficacy," which considers diverse therapeutic aims, is required here. Hsu (1996) suggests evaluating treatment practices from different perspectives, distinguishing the "therapeutic result" (from the healer's perspective), the "therapeutic quality" (from the patient's perspective), the "therapeutic efficacy" (external perspective of a biomedical scientist), and the "therapeutic success" (external perspective of a social scientist). Each of these aspects of efficacy has different "endpoints" in the evaluation of a treatment outcome[36)] (cf. Hsu 1996) and requires different measurement methods, as they are based on different criteria.[37)] Langwick poses the essential question in this context: "Are scientists to be the mediators of truth and the authenticators of culture? Or are they to be collaborators, cooperating with healers in the name of different goals?" (Langwick 2011: 269).

If one approaches TAM with the intention of guaranteeing primary healthcare or preserving cultural heritage, a radical inclusion and engagement of local actors on an equal footing seems necessary. This requires recognition of the general incompleteness of knowledge (Nyamnjoh 2019: 1), to accept the plurality of "ways of knowing," and to open up to the possibility and existence of multiple "realities."

Notes

1) Adu-Gyamfi and Anderson state that "From the influence from Greek and Roman healing through to Persian and Arabic influence then to Christian faith healing and biomedicine, African traditional medicine has undergone changes to arrive at what it is today. Indeed, one can argue that health care in Africa has improved due to the interplay of diverse forces which have influenced it over the years" (2019: 89).
2) The World Health Organization (WHO) defines Traditional Medicine as follows: "Traditional medicine is the total knowledge, skills and practices based on the theories, beliefs, and indigenous cultural experiences, whether explicable or not, used in the maintenance of health, diagnosing, preventing, or eliminating physical, mental or social diseases. Such knowledge may rely exclusively on past experience and observations handed down from generation to

generation, verbally or in writing" (World Health Organization 2002). In many contexts dealing with non-academic healing phenomena, the term *Traditional, Complementary and Alternative Medicine* (TCAM) is used. This is to clarify that it is not only about antiquated knowledge stocks, but also about a variety of shifting practices that are characterized by innovation, renewal, and mutual global influence. I will use the two terms interchangeably.

3) This applies not only to the African continent, but worldwide (cf. Payyappallimana 2010).
4) "In the past twenty years, the WHO regional office for Africa spearheaded the implementation of a regional strategy endorsed by African heads of State in Lusaka, Zambia to promote the role of TCAM in health systems in the African region. The gains experienced since the adoption of the regional plan include policy formation in 36 countries and research promotion, including the establishment of TCAM research centers in some countries like Nigeria, Ghana, and South Africa. The regional plan has also promoted the inclusion of TCAM courses into the curricula of healthcare training institutions in countries across the continent. For instance, such plan has seen the inclusion of TCAM courses in some South African and Ghanaian universities. It has also promoted the training of TCAM practitioners and the local production and cultivation of medicinal plants, as well as the establishment of intellectual property rights for traditional medicine knowledge in few nations" (James et al. 2018).
5) Rather, they promote inequality by favoring the corporations of the Global North. Western pharmaceutical and cosmetics companies secure exclusive exploitation rights that bring them billions in profits. While the majority of biodiversity is native to the countries of the South, 97% of all organic patents are in the hands of companies based in industrialized countries (cf. Frein and Meyer 2008).
6) The "heritagization" of TAM can thus be an interesting issue. As a consequence of globalization processes, for example, the Chinese government intentionally utilizes the UNESCO Intangible Cultural Heritage scheme as a means to advertise Traditional Chinese Medicine worldwide. This is how they have used World Heritage sites for the purpose of tourist branding (Luo et al. 2020). However, in an African context, or more specifically in Ivory Coast, Traditional Medicine is promoted and commercialized on a regional and national level, but, to my knowledge, it is not yet of significant importance for international tourism.
7) Which aspects of a medical system are regarded as useful, effective, and relevant? What exactly does "effective" mean—with regard to which therapeutic claim? Who decides this and who benefits from what?
8) As the US-Ghanaian historian Kwasi Konadu suspects: "It was easier for Europeans to accept the potency in African herbs than for them to wholly accept African healing therapies including spiritual healing." This, he continues, "slowed down the progress of African medicine, focusing and tagging most African healing expressions as backward and driven by superstition and belief in witchcraft" (Konadu 2007: 46).
9) It can be rated as a further effect of colonialism that the state health organizations, when promoting traditional medicine, refer mainly to herbal medicine. This can be unresistingly integrated into occidental epistemologies and scientific forms of efficacy-proof and legitimization strategies (Abdullahi 2011). The statements above point to a third problem of TAM: a lack of recognition and a general refusal to fully understand its inherent logics and ways of functioning.

10) Local knowledge and skills are local in the sense that they are acquired and used by people in relation to local goals, situations, and problems. It is knowledge "that has been generated by communities […] in order to cope with their natural and social environment in a sustainable manner" (Murdoch and Clark 1994). "Local," however, is not to be understood strictly topographically as its location, but rather as a shifting space for routinized interpretations and practices within a certain setting of interactions with relevant entities. Local knowledge is thus created under the influence of certain social and natural conditions and within local cultural and religious systems of meaning and beliefs and interacts with these reciprocally.
11) Before Christianity and Islam spread to the African continent, sub-Saharan African communities developed their own religious ideas and practices, which formed the basis of their social and cultural life and still play an important role in contemporary everyday life. However, it is not possible to speak of "the traditional African religion," as it occurs in very different local forms, which are closely related to the numerous ethnic and linguistic groups. Thus, there is not one traditional African religion, but innumerable manifestations. Nevertheless, many similarities and certain basic characteristics can be observed (Ray 2005: 83). As oral traditions, they are of course—more than canonized religions—in constant change, influenced by missionary, colonial and later post-colonial influences. Some recurring characteristics of traditional African religions consist of 1) Orality/oral tradition and importance of myths; 2) Both monotheistic and polytheistic principles. There is the idea of a supreme god who created the world and preserves it (Mbiti 1975). This (mythological) God generally is far from the everyday life (Ray 2005: 84). In contrast, the lower gods, spirits, and ancestral spirits, are constantly involved in the daily affairs of people and form the center of ritual life. They are immanent and their relationship to humans is reciprocal. They can be sources of both protection and harm. Shrines, priests, cult groups, rituals and offerings are necessary to facilitate interaction with them, to make them feel positive or to seek their advice (cf. Ray 2005: 85); 3) Worship of ancestors who do not leave the world completely after their death, but remain connected to the family and act, among other things, as moral guardians. Just as living family members must be respected, so the ancestral family members must be respected too, to ensure order and harmony (Ray 2005: 85); 4) Rites of passage and initiation (not discussed further here); 5) Widespread (and also anchored in urban society) notions of magic and "witchcraft," as well as high value of divination. These also found their way into adapted Christian and Muslim religious traditions (cf. Signer 2004); and 6) Conception of an animated nature.
12) The plants are even alleged to unfold their effect, if they do not come into direct contact with the patient, as in the case of as the charms, amulets, or protections in front of the door (Okpako 1991).
13) In "modern" (non-traditional) or urban settings "local wishes to keep the experience of ill health related to the experience of an invisible world of helpful and hostile beings" remain in place (see, e.g., Bruchhausen 2018: 50). This results in new groups of ritual practices that have replaced the former traditional communities and clan settings (cf. Bruchhausen 2018: 50) According to Janzen and Green, prophet-founders play the role of ancestor-mediators, while others assume the diagnostic role of diviners (cf. 2008: 11). Traditional healers in urban contexts are constantly adapting their practices to changing conditions. During the colonial period, terms like "literate healers" appeared (Osseo-Asare and Dove 2016: 69). These healers

took certain practices of European physicians as their model (cf. Adu-Gyamfi and Anderson 2019: 93). This type of "modernized" traditional healers later got organized into traditional healer associations "who sought to conserve traditional medicinal knowledge and fashion it after the well accepted western biomedicine and its physicians" (Adu-Gyamfi and Anderson 2019: 93). These various new charismatic or faith healing practices, although highly interesting and relevant in contemporary Africa, are not at the center of this contribution.

14) "L'épistémologie africaine ignore la séparation de l'ordre du connaître et de l'ordre de l'être. La connaissance est un être et non pas seulement un instrument au service de l'homme. (…) pour l'Africain, la connaissance est une réalité cosmique puisqu'elle de la même substance que le cosmos" (Ndaw 1997: 34).
15) In some cases, accompanied by an initiation rite where the individual is initiated into new exclusive knowledge.
16) The village consists of three neighborhoods. One is inhabited by Christians (Catholics, Protestants, and Dejma—a Pentecostal community), one by Muslims, and one by those who refer to themselves as "animists," who can be classified as belonging to TAM. The Christian inhabitants have also adopted or retained many of the characteristics of the traditional African religions, which is reflected in their religious ideas and practices.
17) Konadu similarly observed different spheres of knowledge in the indigenous medical knowledge among the Akan in Ghana. He distinguishes between *core-basic* knowledge, *specialized* and *in-depth* knowledge, and *peripheral* knowledge (Konadu 2007: 159).
18) Diabetes is diagnosed by observing how ants behave toward the patient's urine on the ground.
19) Local knowledge is not necessarily evenly and fairly distributed as popular knowledge. In every community, there is both general and specialized local knowledge (cf. Antweiler 1995). Each society has different, culturally defined ways of disseminating knowledge. No matter how important this may be for solving problems, it is far from being passed on arbitrarily in a society (cf. Honerla and Schröder 1995).
20) On a rare occasion, I have been told by a villager, "spirits or ancestors will also transform into human form and give the knowledge of a certain medicine to a person" (interview: N'guessan K.). It is also believed that some people (especially hunters) understand the language of animals and sometimes get medicine from them. An informant told me that his grandfather had received a remedy against snake venom from a snake. It is assumed that all plants have their natural healing powers, which were given by *Nyamien*, the supreme God.
21) In the same context, he mentions not only "oral narrative archives," but also proverbs, gold weights, and *adinkra* symbols (on textile cloth) with the same functions (cf. Konadu 2007).
22) "In essence, healing does not simply depend on the medicine employed but a totality of healing experience between the healer, patient and supernatural forces" (Adu-Gyamfi and Anderson 2019: 78).
23) This sphere of knowledge corresponds, according to Konadu (2007: 20), "to specialized and in-depth knowledge that is associated with the specialists, who function ultimately to maintain the coherency and expand the development of the community as it principally relates to holistic health and healing."
24) Usually, they were called to this profession by an ancestor, who had also been a healer, or by a spirit and are inevitably obliged to devote their life to it.

25) Many African societies have a strong collectivist orientation. The cultural ideal provides for material equality among the members of a society. At the socio-economic level, this results in a constant effort to level out inequality. The society is thus simultaneously hierarchical and egalitarian (cf. Signer 2004). It is hierarchical, through the traditional hierarchical social structure, which, for example, gives older people or superiors a higher position and decision-making power that must not be questioned. It is egalitarian in the sense that material imbalances within the community must be immediately neutralized, everything acquired must be distributed. In these societies it is therefore hardly possible to accumulate economic capital (Kabou 1991; Signer 2004). Those who are materially better off provoke the envy of the disadvantaged (primarily family members) and run the risk of being "bewitched," that is, psychologically, physically, or socially destroyed (cf. Signer 2004). The idea that someone can make another person ill or even kill him or her by the power of his or her negative thoughts exists, according to David Signer, almost throughout sub-Saharan Africa. It has often been observed that "witches" are motivated primarily by envy (cf. Signer 2004). According to Signer, it is therefore impossible or at least dangerous for the individual to accumulate economic capital. Thus, it is obvious that resources must be accumulated in a culturally justified variety of capital in order to secure access to luxury goods in the long term—for example, in the form of knowledge of medicinal plants. For the "hoarding" of knowledge, in contrast to the "hoarding" of money, is culturally (more) accepted. With regard to the case study: The above statements apply only to villagers who call themselves Christians or animists. The Muslim inhabitants have a different way of dealing with knowledge. For the Djula inhabitants of the village, knowledge about medicinal plants is not secret knowledge, and they do not require anything for treatments and showing medicinal plants. I have been told: "the Koran forbids to take anything for it. Allah put the plants on the earth so that people can cure their diseases. They are there for everyone" (interview: Kadidja).
26) Furthermore, many of the younger people migrate to the cities and lose the possibility of or an interest in learning about herbal medicines.
27) Hedberg and Straugård had already observed in the late 1980s, that "any [integrative] attempt to separate the 'empirical' from the 'spiritual' for the purposes of approaching and incorporating only the 'empirical' into the modern health care system is bound to result not in the promotion of [indigenous] medicine, but, on the contrary, in rendering it as mechanical and segmented as modern medicine may have become of late" (Hedberg and Straugård 1989: 29, cited in Bishaw 1991: 199).
28) TAM and its web of cultural meanings and corresponding practices reinforce social unity and cohesion and maintain the moral values of the community. Through the ritualized healing activities and acts of knowledge transmission (as captured in the oral formulas), social relationships with the ancestors and the community are reactivated. The passing down of knowledge can be seen as an extension of relationships. In addition to concrete practical instructions, the formula contains narrative references to a mythological past, creating a sense of continuity and belonging and promoting cultural identity.
29) Quoting Opoku and Edusei, Konadu stresses that many scholars fail to either recognize or accept that there has been a demystified "scientific" process to indigenous medicine in addition to the vast knowledge of medicines, acquired through close observation of nature and animals'

application of those medicines, and practical experience accrued over centuries" (Opoku 1978: 150; Edusei 1985: 162, cited in Konadu 2007: 19).

30) Okello and Musisi state that "no African nation is categorized as having an integrative system, and only three countries, Ghana, Nigeria, and South Africa, have an inclusive one" (Okello and Musisi 2015: 259, cited in Payyappallimana 2010: 94). "The majority of other countries in Africa have tolerant systems. In this category, the national health care system is based entirely on western medicine, and the law tolerates only some traditional practices. These laws are often ignored, and in practice traditional medicine is accepted and tolerated throughout Africa" (Okello and Musisi 2015: 259, cited in Payyappallimana 2010: 94).

31) From Konadu's point of view, when speaking out in favor of integration, it would rather be more meaningful to integrate the exported, biomedical system "which is removed from the majority of the people, and only accessible to a few financially well-off, urbanized individuals" into the indigenous one "that is embedded in the thought and pragmatic structure of society" than vice versa (Konadu 2007: 175).

32) In this context, Adu-Gyamfi and Anderson point to "the need for Africans to go back to our roots of indigenous knowledge conservation while advancing the scientific aspects of it" (Adu-Gyamfi and Anderson 2019: 96). As an example, they mention "a clan of women called *Ngiepan* in Uganda [that] has preserved traditional medicinal plants through songs, story-telling and dances" (Adu-Gyamfi and Anderson 2019: 96).

33) The Senegalese economist and cultural theorist Felwine Sarr shares this view and expands it to include the dimension of peace "...today we know—through the people who study cultural anthropology—that cultural genocide [in Rwanda] preceded physical Genocide and that religious and spiritual culture is the place where social bonds are also forged. […] Communities are fundamentally resilient when they have preserved strong cultures, when they have preserved ways to connect, to build a strong community, and when the religious is their foundation" (Sarr 2020: 11).

34) The project aims to "improve healthcare for rural populations and protect forests. The objective is to reduce poverty and improve the living conditions of people living in the Buwama district of Uganda by strengthening traditional healthcare and expanding the use of ecological methods of cultivation. Those seeking to train as natural healers attend weekly courses on how to recognize common diseases and treat them with herbal medicines. By the end of the three-year course, they will be able to recognize hundreds of medicinal plants and be familiar with their effects and how they are processed and used. This also sensitizes them to the importance and protection of forests as they depend on their natural resources" (PROMETRA website: https://prometra.org/research-and-education/uganda-forest-training-school/)

35) Langwick has observed how the ways healers "defend their secrets have come to challenge the political work that traditional medicine is being asked to do in national and international development initiatives, which cast it as a raw material—a resource for medical science, economic growth, and health development. These defenses point to the deeper transformation required" (2017: 33).

36) For example, "therapeutic efficacy" is a measure of the effect of a treatment for example, the reduction of parasite density in the body, while "therapeutic quality" measures the effect on the perceived illness, that is, the alleviation of symptoms, and the "therapeutic result" could be the

perceived harmonization of relations within the household or with the non-human world.

37) Langwick argues in this context "that the nature of scientific proof is not self-evident, but rather emerges in the details of research methodologies and the structure of research institutions […]. As a result, the conditions that allow some things to be proven and not others change over time (2011: 288).

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