How to wear a Forest. The Intangible Cultural Heritage of healing biospheres in Camaldoli (IT), Lapland (FI), Chaparri (PE) and Mayantuyacu (PE)

Adine Gavazzi, Giovanni Perotti, Tania Re

ABSTRACT

The World Natural Heritage of forests includes almost a third of the whole UNE-SCO properties, including primary territories, Reserves of biodiversity and specific conservation areas, with four Intangible Heritage of the Amazon. Forests, however, represent since millennia complex landscapes, cogenerated by woods and animal communities. Humans evolved in such a dynamic system, expressing natural and cultural solutions for food, medicines, products and means of organization. A living value in itself, a forest is ancestrally observed as an organizational model of interconnection of different plants and living beings, shaping a complex habitat and unique food chains. The biospheres of a forest, embedding an Ethnosphere and its consequent Noosphere, are here proposed as an Immaterial Heritage. The wood organization complexity is read as Intangible Heritage in the knowledge it entails for the generation of wellness throughout the history of the planet. The research compares ethnomedical evidences between Forest coding in the Camaldolese woods of Italy, Nordic pharmacopeia in Finland, Ashaninka Ethnomedicine at Mayantuyacu in the Peruvian Amazon and Muchik ancestral healing in northern Peru.

Keywords

Forest cultures, Intangible Heritage, Healing landscape, Anthropology of Health.

Introduction

«The soul is composed of the external world» Wallace Stevens

Heritage Forests comprise fully one fifth of all WHS properties. Grouped into Primary territories, Reserves of Biodiversity and Conservation areas, numerous cultural expressions of forest peoples are recognized as well¹. Forests, however, represent much more than just a set of biological resources. For millennia the forest landscapes have comprised a living entity for human communities, coevolving with their natural and cultural needs for food, medicines, products organizational models.

Almost a living value in themselves, ancestral forests serve as an organizational model of interconnection of diverse plants and living creatures. They shape a complex habitat, and unique food chains. The biosphere of a forest encompasses and informs the ethnosphere and noosphere of its inhabitants; the result may be classified as an Intangible Cultural Heritage.

In this view, taxonomic separations between living reigns are substituted by the concept of interdependency of an ecosystem fed by different living – natural and cultural – sources. The organization of a forest may be read as intangible heritage in the knowledge it entails for the generation of wellness throughout the history of the planet (Kohn 2013). In some cases, such as European forests, the relation with human cultures has generated a domestication process where the woods need human intervention to prosper and vice versa. The presence of ancestral forests on the planet has however determined a type of wellness related cultures in different contexts and times. The research on the dialogue between humans and bio reserves has identified the notion of landscape as the result of an interaction, where shapes of wellness reveal the immaterial value of a material cultural heritage of a natural site with healing properties.

The idea of anthropological health as ethomedicine starts with the evidence that half of the world population does not use western biomedicine and prefers to relate to traditional or indigenous medicine for their healthcare (Re 2015); many of these are related to forests. The Forest as context is usually organized between different layers: the geomorphologic traits and its climate, the biosphere, the ethnosphere and the noosphere, embedded together in a unique system where water, plants, animals, medicines, memo-

¹ As of the 2018 census, 209 of 1092 World Heritage Sites are Natural Heritage Sites and 12 of 407 Intangible Cultural Heritages are forest related cultures (UNESCO 2018).

ries and spaces generate the complex dynamism of the landscape of healing. In this context the ceremonial architecture, as well as the rest of the landscape reveal a cosmologic approach to the harmonization of both individuals and communities, where the memory of sacred sites plays a crucial role.

Healing Forests to wear

What then is a forest, if not the ancestral environment and habitat of indigenous culture? What stands behind the apparent lack of order of the biosphere, suggesting human eyes catch but a fragment of its complex and systematical behavior? Should researchers refer to it as living biotic network, or as the plural main character of active communities? Since a habitat is literally the dwelling of the environment, then a forest may be worn². Single species and human cultures would arguably abandon a traditional custom to strive towards their own rules, when a forest provides a collective beneficial network for complete ecosystems (Marder 2013). When considering a living biotic entity, traditional forest cultures tend to consider themselves as part of a conscious and collective living system: in this sense western boundaries of self-perception and of objects separated among themselves are dissolved into a perpetual morphing of consciousness.

This research identifies and compares different contexts where the ability to "wear" a forest becomes a cultural identifier, regardless of geographical, historical or conceptual boundaries.

Key elements in the classifications are not just biologic groups – such as the successful forestscaping projects³- but geocultural areas, where forest identities coevolved since ancestral times. Here stands a real divide, between technical reforestation processes and the living geographies of healing.

This set of projects around the theme of the Anthropology of Health demonstrates the effect of sharing common goals involving four actors: academic institutions with field projects, private organizations with social responsibility, indigenous communities protecting their identity and public authorities implementing regulations. Their balanced action on the four legs of natural, cultural, economic and social sustainability becomes a model that specifically applies the SDG Goals of the Agenda 2030, as expressed by the "Geneva Milestone" document.

² Inhabiting a forest means wearing its environment. This view comes both from the observation of the familiarity of the indigenous way of dwelling in forests and from the etymology of the word "habitat". From the latin *habitus*, familiarity, habit, but also dress: everything we wear, or are used to bring with us (Cortellazzo and Zolli, 1999).

³ See the work of Sharma with Afforestt inspired by Akira Myawaki (2007) as successful example of technical reforestation with native plants to counteact ecosystem propagation through climate change.

The field experience of this Chair researches in anthropology of health observes that over half of the world population does not use western biomedicine and prefers to relate to traditional or indigenous forest based solutions for their healthcare. The maintainance of this heritage depends directly form to the conservation of the forests originally generating the medical plant and fungi knowledge. Four models are here presented. The first project Scriptorium Fontis Avellanae in Italy is classifying all the natural, ethnomedical and historical values of the Camandolese woods as WIH candidate for a forest based culture. The second project *Nordic Ethnomedicine* in Finland classifies fungi and birch based healing traditions of the Sami culture in connection to its cosmovision. The third project AshaninkaEthnomedicine at Mayantuyacu in Peru, is defining digital relief of an ashaninka cultural landscape combined with the local pharmacopeia and ceremonial activities, in order to determine the combination of causes activating the healing processes. The fourth project, Muchikethnomedicine in the northern coast of Peru, is connecting the biologic heritage of the restored landscape of the dry forests with archeological evidence of sacred sites and the vernacular use of medicinal plants by the living tradition of the *muchik* healers. As models of sustainable development for research all four projects specifically apply SDG 3, 4, 8 and 15 for Agenda 2030 as well as implementing the Geneva Milestone Document.

The Scriptorium of Camaldoli, Central Appennines, Italy

In Camaldoli the Chair examines an intangible asset that holds an ethical value as basic identity. Evidence surfaced when examining the almost millennial management of the white fir forests by the Camaldolese monks of the FonteAvellana and Camaldoli monasteries, located in the highest part of the Central Apennines between the Marches, Tuscany and Umbria. The work aims to recognize the Forest Heritage from the High Apennines as Cultural Heritage. The environmental Proptection is already a fact, since a large portions of these forests are included in the National Park Foreste-Casentinesi (Arezzo) and in the protected area of the Monte Catria. On the contrary, the research evaluates the uninterrupted human management of a conspicuous part of the central Apennine since the nineth to the nineteenth century, until the confiscation of ecclesiastical goods by the administration of the Savoy 150 years ago. Before that, the relationship between man and the environment has produced the complexity of the heritage summarized in the so-called Camaldolese Forestry Code, for which the forest is not only a good to be kept, but to be shared. In time, a progressive relationship of vital reciprocity was developed, that allowed the monks to guard the forest which in turn guarded the monks. This extraordinary ability to listen and respond to the territory created a profound environmental ethical system. This environmental ethic stand point attracts the contemporary ethnographic and anthropologic research. The environmental sustainability

researched with growing urgency does not arise form an emergency scenario, but it is conceived as a cosmic link embedded in human nature. As an ethical value it becomes the foundation of an Immaterial Heritage.

Beyond the well-narrated documentation, the Camaldolese Forest Project tries to reconstruct the invisible parts of its management. The shape of this particular forest is a cultural construction. It is a mental map, a landscaped environmental design kept alive by the holders exactly as buildings of sacred places, the management of which maintanins invisible as well as visible thresholds. The shape of the forest is "acted" more than lived by those who inhabit it. It is not possible to "see" space as the populations that inhabit it see it if they do not enter their cosmology, that is, in their conceptual meanings. As detected by Cecla (La Cecla 2004), the perceived space of a settled culture is not detectable with a photo or a relief. In a way the space inhabited by the emotional sphere is a sacred environment (Perotti 2016).

The mental map of a forest managed in the ancient way of the Camaldolese Forest Code entails two basic notions: place and orientation. The place is the foundation gesture of the physical landscape. The orientation means more than asking "where am I". It means defining "who am I compared to whom". In this case what is the human space of a forest. Wallace Stevens⁴suggests that "There are men of a valley who are that valley": The holders of the immaterial asset called the Camaldolese Forestry Code, embody themselves the Forestry Code.

The intangible value is not an abstract notion, however: it relates to social, cultural and cultural survival. This specific territorial management is clearly derived from a spiritual heritage and a careful application of the Judeo-Christian Scripture of Romualdine origins. The set of rules comes from the monk of Ravenna Romualdo in 1027, inspirer of the Camaldolese Congregation of the Order of San Benedetto (Caby 2005; Romano 2010). The origins are rooted in the byzantine culture, but in Camaldoli they are immediately declined in an existential relationship, involving the local population into a vital reciprocity that developed social welfare and natural sustainability. A "separate code", specific for forest management, a "law" or an obligation, have not been promulgated, but this management was, and continues to be, an integral part of the life of populations, monks and the territory. A specific way of listening to the environment is well expressed by the first Costitutiones by Rodolfo I ° (1080), where all the ethical tension of the forest inhabitants – peasants and monks – strives towards living in harmony with the environment directly identifying with the trees. Respect for a place and its sacredness, should not be traced back

⁴ Wallace Stevens in the Harmonium collection (Stevens 1923) indicates that the invisible elements defining the uniqueness of a site are expressed by the visible elements of is culture: the sounds of voices or musical instruments or the shape and of dresses become the aesthetic expression of natural endemisms.

to a "primitiveness" but to a mental condition that refers to the universal concept of "local mind".

Local communities participate to this project, which aims to revitalize the culture of the entire Apennines through institutions like the Universitádegliuominioriginari of Perugia, associations and consortiums of the historical owners and inhabitants of the villages adjacent to the conventual areas of Camaldoli and FonteAvellana. The three-year project aims to reconstruct the relationship between mountains and plains, as Salvatore Frigerio notes:"it is the good management of the mountain to create the well-being of the plain"⁵. The monks, heirs of a medical and ethical heritage, through the Collegium "Scriptorium FontisAvallanae" supported by the UNESCO Chair of Genoa have collaborated to the creation of a document, the Carta di FonteAvellana (Romano et al 2016), to be considered the main reference of the emerging Cartadell'Appennino.

The visions of Lapland forests, Finland

The healing power of European forests is ancestrally documented in different cases (Pentikäinen 1989). One of these, in a different environmental region, comes from the Sami traditions of Kuusamo and Rovaniemi in Lapland, Finland. The natural phenomenon of the aurora borealis, according to the Sami cosmology, is a fox running on the heights of the Arctic and illuminanting the sky with the sparkles that arise from the contact between its tail and the thick blanket of snow. "Revontulet", the Finnish word for the aurora borealis, derives from this myth: literally means in fact "the fires of the fox". The Finnish people during the winter cold, still observe these Northern Lights after the sauna for healing purposes of bringing light back to bodies⁶. The sauna healing area is used in winter with juniper⁷ instead of summer birch. The green branches of juniper are used by tapping the body to promote circulation during the sauna activity, which ends with an immersion in snow or frozen lakes.

During the winter the soup of Chaga, made with a fungus⁸ of Finnish medicine and considered for thousands of years throughout Eurasia "the king of herbs" thanks to its therapeutic propertie, is added to the ritual. In Asia it is used to maintain a natural health balance and to restore Qi. Its therapeutic results are well documented in ethnomedicine. The fungus grows in Finnish forests, in Siberian Russia but is also found in Canada. Several fungus components – anosterol, betulin⁹, lupeol, inoditiol – demonstrate sig-

⁵ Salvatore Frigerio (personal communication).

⁶ In a country of 5 million inhabitants, 2 million saunas indicate this 10.000 healing practice as part of the Finnish tradition, first as sweat lodge, then transformed into a modern structure (Valtakari 2006).

⁷ JuniperusCommunis.

⁸ InonotusObliquus.

⁹ Betulinic acids shows inhibiting proprieties of cancer cells (Kang, 2015).

nificant healing properties¹⁰. Chaga has an immunostimulatory and immunomodulatory action and can be used with topical application for the healing of wounds and skin lesions. It is often recommended in the treatment of lupus erythematosus, psoriasis and applied locally to relieve the pain of skin lesions caused by shingles. In the cold winters of the North, Chaga can be taken in the form of soup but also tea or liquor in addition to alcohol or vod-ka (in the regions of Russia). The first chaga-based product was produced in 1958 and is still on sale today in Russian pharmacies.

Northern forests offer specific small fruits and berries. For Christmas, leipäjuusto is prepared, a cooked cheese typical of northern Finland, with camemori jam, a small Arctic blackberry that contains a level of vitamin C up to four times higher than that contained in citrus fruits. The process of vision is deeply rooted in the regional health practices (Dunn, 1973). The hallucinogenic mushroom Amanita muscaria¹¹ in the Siberian regions is present in images of prehistoric rock engravings of several archaeological sites in central and northern Asia, including those of the Pegtymelriver in Siberia. Its use as an intoxicant among diverse populations through the centuries is well documented. It is also seen in the territories of north-western Siberia including the Dvina and Kotuj rivers, including the Taymirpeninsula. Its populations 12 belonged to the linguistic family of the Uralic regions¹³ Depending on the ethnic group, the agaric mushroom was and is used collectively, on the occasion of ceremonies and feasts, or employed by the shamans to promote trance during healing practices or to contact the spirits of the dead, in divination practices and in interpretation of dreams. It is also used as a stimulant during long journeys and hunting¹⁴.

The Andes of Chaparri, Lambayeque and the Amazon of Mayantuyacu, Peru

The symbiotic relationship in the Mediterranean forest as well as the visionary cosmologies of the Northern traditions seem to merge into the New

¹⁰ The intake of the chagafavors the normalization of the functioning of the cardiovascular and respiratory systems, and is useful in disorders of the gastro-intestinal tract, especially in precancerous states. As painkiller remedy is also recommended in combination therapy in cases of 3 and 4-stage oncological diseases to relieve the symptoms of the disease (ibidem) ¹¹ AgaricMuscaria (Jakkola *et al.* 2012).

¹² These populations may have discovered the psychoactive properties of the urine of those who ate the mushroom by observing the behavior of the reindeer intoxicated with both the muscular agaric and the urine of the other reindeers. However, according to the recent observations of Saar (1991), the use of the fungus has become extinct in these populations today.

¹³ The linguistic populations of the are: Khanty (Ostiaki), Mansi (Vogul), Nenets of the forest, Selkup (Samoidei group), Nganasan, Ket (Ostiaki of the Yenisei) (ibidem).

¹⁴ Probably the original use was exclusively shamanic; following the weakening of the institutions and the shamanic power the use of the fungus spread to more members of the tribal society (ibidem: 157, 173).

World environment, where ancient forests and cultures still coexist. The Amazon is conceived as the creator of anything indigenous. Its biotic network in the ethnography has created the cosmos, the plants the animals, along with humans. The cosmocentism of Andean and Amazonic territories implies that forest are the seat of original collective consciousness and that plants are ancestor teachers of any human knowledge. Two models of different biospheres are discussed: the dry forest project of the muchik community of Chaparri (Gavazzi, 2012, Golte 2009,) in Lambayeque and the ashaninka medicine of the amazon forest of Mayantuyacu (Gavazzi, 2010) in Pucallpa.

The research Muchikethnomedicine in the northern coast of the valley of Lambayeque connects the biologic heritage of the landscape of the dry forests with archeological evidence of sacred sites and the vernacular use of medicinal plants by the heirs of the muchik healers. The presence of over 40.000 hectres of ancestral dry forest owned and managed by the "comunidadcampesinaMuchik Santa Catalina de Chongoyape" (Plenge and Williams 2005) has in the last 20 years allowed a successful reforestation project connected to endangered animal species. The regrowth of the living land, while reconnecting the area to the hydrography of the rest of the region, has attracted numerous traditional and indigenous healers to the site for plan collecting and healing ceremonial activities. The local Mercado Modelo of Chiclayo (Bussmann et al, 2007), markets hundreds of different remedies of medicinal plants, both grown and collected in the wild from different sources.

Among these remedies, at least 35 are endemic from the Chaparri area (Lerner, 2003). The mocheethnomedicine, intact in essence from pre-Hispanic times, has reformed the sacred and ancestral landscape of the forest, revealing a cultural path that indigenous healers are still capable of using, for plant collection, healing acrtivities and medical treatment. The connection between the community and the curanderos developed to a point where ceremonial architecture has been built to complete the healing function of the forest space. SDG 3 is applicated in the development of ethnomedicine; SDG4 is implemented in the museology of the biosphere and ethnosphere; SDG8 generates a resource for the community SDG 15 finally is defined to 15 protect the Natural and Cultural Reserve.

The research *AshaninkaEthnomedicine at Mayantuyacu* in the Central Amazon of Peru, is defining the multidisciplinary relief of an ashaninka cultural landscape combined with the local pharmacopeia and ceremonial activities, in order to determine the combination ritual events activating the healing processes. The research develops in 2007 around the technomorphology¹⁵ of an ashaninkamaloca, in order to determine its embedded

¹⁵ Technomorphology classifies the construction process as well as the aesthetics and symbolism of ceremonial architectures and landscapes expressed in absence ow written records (Gavazzi, 2018).

cosmology activated during ceremonial activities. Throughout the combination of mythographic record, ancestral imagery, collective perception and construction evidence, the relief evidenced the central role played by ceremonial spaces in a plant based healing tradition of the Amazon.

The architectural typology of malocas includes the embeded logic of a biotic network, working with geomorphology, water, landscape, plants and sounds to generate the process of healing. In order to decode its complexity, a number of researches activities evolved around this stem. The work incudes a geologic and geophysical study, a botanic classification, clinical studies, medical anthropology, and musicology, centered on the work of healer Juan Flores in the environment of Mayantuyacu, connecting the pharmacopeia of Plant teachers and their musical harmony¹⁶. As by the Previous project SDG 3 is implemented in the study of ethnomedicine; SDG 4 protects the ashaninka medical knowledge, SDG 8 develops a center for health treatments and SDG 15 promotes the Reserve as an indigenous related biosphere.

Conclusions

The experience in Mediterranean, north European, Andean and Amazon forests, in spite of their extreme geographical differences, share similar traits. In all cases ancestral knowledge is found intertwined between biosphere and ethnosphere, determining a fabric which becomes perceivable through the architecture, music and cultural expression of healing. The interdependency of all species in the woods becomes the organicity – "holistic", in western terms – of the approach to the notion of healing, conceived as a progressive re-harmonization of the individual or the community to the site. The place therefore becomes a central part of the cure. Domesticated or wild, forests establish and tend to maintain a symbiotic relation with human cultures, which in time evolve the ability to decode its powerful medical resources.

All elements of the healing process – waters, cosmovisions, landscape, architecture, remedies and ceremonies work together to transmit and teach the consciousness of a harmonic well being. Mythographic structures, vital to sustain the balance of complex societies, become codes written into spaces, ceremonial activities and sacred imagery. These stories are sewed into the fabric of the landscape; the forest wears the environment. Decoding its shapes means creating a harmonic dwelling, where the order of the cosmos is reflected on the land. A site to heal and to be healed. From the Camaldolese monks to the Ashaninka doctors, to the Lapland shamans, to the Mochecuranderos, forest healers have developed a unique spiritual relationship with their woods, in order to generate the internal wellness

¹⁶ Within the multidisciplinary project involving several different institutions from Peru, Canada, Unites States and Italy, Gavazzi specialized in the architectural relief, Perotti in the Landscape design and Re in the Ethnomedicine.

importing it from the outside. Their awareness teaches the sophisticated notion of the dissolution of the self and the acquisition of the transcendent identity of a vegetal community. The monk becomes his tree. The ashaninka is sung by the plant. The Soul is composed of the external world.

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