



12th World Bamboo Congress

Taiwan, 18-22 April, 2024

www.worldbamboo.net



Resilient resonance: placing bamboo at the intersection of culture and nature and the case of Philippine bamboo music

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Abstract

Amongst communities in the Philippines, musical instruments produced from bamboo are both diverse and widespread. They are also considered crucial both for cultural maintenance and socio-economic survival – as explored most recently by the Bamboo Musical Instruments Innovation Research and Development Program, a collaboration of the Philippines’ Department of Science and Technology - Forest Products Research and Development Institute (DOST-FPRDI) and the University of the Philippines Center for Ethnomusicology (UPCE). In this paper, I draw on my experience within this project, as well as the concepts of “music ecosystem” (Shapiro 2022) and “eco-trope” (Titon 2023), to explore the significance of bamboo as a conduit of culture existing at the intersection of culture and nature. I examine the ways bamboo functions in the complex system of music-environment reciprocity and, as a result, how bamboo music can help uplift various facets of Philippine communities such as environment, employment, and education. The interplay between culture and nature, particularly in the case of Philippine bamboo music, demonstrates specific ways that it can be valid and useful to consider music as an ecosystem as it allows us to understand music more completely, which in turn, enables music to contribute to solving life problems, such as in the pursuit of cultural resilience and sustainability.

Keywords Bamboo musical instruments (BMI); Cultural resilience; Sustainability

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1. Introduction

The link between culture (music) and nature (environment) provides an ideal opportunity to explore one of the most versatile raw materials in crafting musical instruments—the bamboo. It is exceedingly ubiquitous that among the various materials used to create musical instruments, none is “more widely used or of greater significance” (Grame 1962) than this treasured natural resource. However, more than just “a naturally shaped musical instrument” (bamboovement.com), bamboo also has a vital cultural significance in numerous communities in the world. By placing bamboo at the intersection of music and environment, this essay aims to initiate a discussion on how bamboo music can aid in building cultural resilience that, in turn, can lead to sustainability in the Philippines. By examining the ways bamboo functions in and contributes to the complex system of environment-music reciprocity, it opens the investigation of the fluid and reflexive contextualisation of bamboo music, and how it can undergo redefinition with its manifold cultural significance. In the Philippines, bamboo has a complex and multifaceted cultural meaning because of its varied roles in tradition, celebration, and folk beliefs (Almario 2015). In a well-known ancient lore, it was told how the first Filipinos were born from the bamboo. From a bamboo pole that was pecked open by an enchanted bird emerged the first man and woman, named “Malakas” (he who is strong) and “Maganda” (she who is beautiful) (Demetrio 1986). From Coronel’s interpretation, the seemingly “simplistic, stereotypical, and even sexist” (Coronel 2022) creation myth is profound. Coming from the same bamboo stalk could mean that “every person, be they a man or a woman, is both strong and beautiful—just like bamboo, whether as building materials, furniture, and household utensils,” and that “the bamboo musical instruments are both strong and beautiful, both in structure and in sound” (ibid). Furthermore, bamboo’s versatility and durability signify a resilient nature, a quality that is often attributed to and celebrated by Filipinos (Garay et al. 2020), thereby making it a suitable symbolism for Filipino culture. To locate bamboo in the convergence of music and the environment, its function within and contribution to this complex synthesis and exchange must be identified. By and large, bamboo serves as a conduit of culture in at least five significant ways.

2. Human-Nature Affinity

There are specific ways of choosing, harvesting, and caring for bamboo, as well as of crafting bamboo instruments, which makes instrument-making tied to the environment. Hence, bamboo fosters strong affinity between the maker (human) and the material (environment). Coronel explained that unlike processed wood and brass, two of the most basic raw materials in making musical instruments, which are commercially available and can be produced to the client’s exact specifications, bamboo simply cannot be summoned like any other material (Coronel 2022). Using bamboo in creating musical instruments entailed establishing an affinity with the maker, a quality which Coronel referred to as “nartisan,” a portmanteau of “nature” and “artisan.” Furthermore, BMI makers and players are highly knowledgeable and respectful of their natural environment, making the cultural master of bamboo music who is both a craftsman and performer, a virtuoso, a sculptor, and a naturalist (ibid., 18).

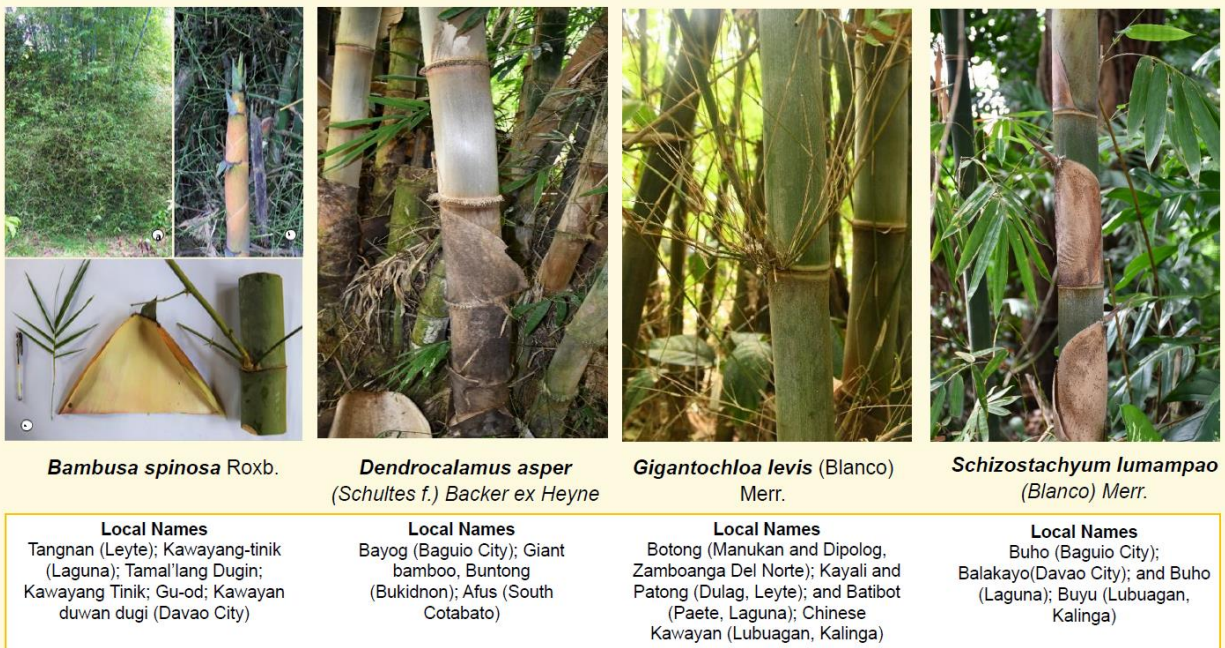


Figure 1. Bamboo species commonly used in bamboo musical instruments in the Philippines (Source: “Bamboo Musical Instrument Innovation R&D Program – Project 1 Documentation” of the Department of Science and Technology - Forest Products Research and Development Institute)

The survival of bamboo music, whether in instrument-making or in performing lies on being passed on from one generation to another, that is why cultural experts are wary about the waning

interest in and support of local bamboo music, especially among the younger generations. (Coronel 2022). However, there is more to this than simple transferring of information or passing of tradition, since most of this knowledge is “crucial to survival and sustenance” (Curran et al. 2019). This contribution of bamboo music in helping maintain and sustain life is evident in the direct correlation of the varied and extensive musical elements for bamboo (Nicolas 2008), and its wider variety of over several hundred species (Dioquino 2008).

3. Familial and Communal Kinship

In Asia, ancient musical cultures date back to the Neolithic Period, when bamboo and wood were associated with rice, ancestral veneration, and shamanism (Nicolas 2008). In the Philippines, though the bamboo musical instruments are not as vital to the celebration as the gongs are, they bring life to mundane affairs where they contribute to the general merry making of the people (Maceda 1998).

Instrument	Method of Sound Production	Melodic Range	Role in the Ensemble	Function in Ritual or Social/Cultural Activity
	Kesal (slit drum, idiophone)	laid horizontally, beaten with two wooden sticks	A3 Individually played Accompanies t'ngongong	Personal entertainment Festivals Community celebrations
	Kumbing (jaw's harp, idiophone)	plucked	Kumbing1 C3-F#3 Kumbing 2 C#3-A3 individually played	Personal entertainment Festivals Community celebrations
	Klintang sokong, (idiophone)	Beaten with sticks on the open-ended upper tube	A2-B2 Played by 2 Plays with the rest of the instruments in the klintang sokong ensemble	Personal entertainment Festivals Community celebrations
	Sloli (chip on ledge flute, aerophone)	blown	Sloli 1: A3-D5 Sloli 2: C#3-B5 individually played	Personal entertainment Festivals Community celebrations
	Few onuk (flute imitating bird sounds, aerophone)	blown	A7#-B7 individually played	Personal entertainment Festivals Community celebrations
	Sludoy (5-stringed tube zither, cordophone)	plucked	D3-A3 Individually played	Personal entertainment Festivals Community celebrations

Figure 2. Bamboo Musical Instruments of the T'boli in Lake Sebu, South Cotabato and their functions in the community (Source: Guadalupe and Abelardo 2022, Vol 2, Elementary p. 13)

Bamboo music repertoires consists of texts that are often chant-like, and the compositions are usually extemporaneous. The transfer of cultural knowledge is done using apprenticeship and informal arrangements. Because of the inclusive, collective, and participatory nature of these activities, the audience and the performer become one. With no designated teacher or facilitator to take charge of the learning experience, informal music learning is described as an “organic” (Schippers, 2010) process and is a form of learning that is common in what we now commonly refer to as “community settings” (ibid.). Because bamboo music is embedded in social situations where the people’s primary goals are not usually artistic, but rather functional such as for ceremonies (life cycle rituals, festivals), working (subsistence, child care, domestic chores, wage labor, hunting), and playing (games, pastime entertainment), it reinforces the alliance among the people and strengthens familial and communal kinship.

4. Channel for Communication

Apart from communal festivities and recreation, bamboo musical instruments also serve as tools for communication. BMIs are played to send messages and signals to “warn villages against marauders and impending natural calamities” (Coronel 2022). Mouth harps, usually made of bamboo or wood and “one of the most common instruments found throughout the world” (Miller and Shahriari 2009, 51), often acts as a “speech surrogate” (ibid., 72) in this manner: “Performers use it to imitate speech patterns and phonemes in order to create the illusion of speech in a musical context. The sounds of the mouth harp are often considered to be speech that is “disguised,” in order that it not be understood by eavesdroppers” (ibid.). In Papua New Guinea, the bamboo jaw harp called *susap* plays an integral cultural function: While mouth harps are commonly used for self-entertainment, they are also frequently found in traditional courting rituals. In Papua New Guinea, the *susap* is considered to possess love-controlling magic that men can use to attract a woman’s affections. By using the instrument as a speech surrogate, the man is able to “say” things to the woman that might otherwise be considered inappropriate. The instrument also provides impunity from rejection. If the woman is attracted to her suitor, then the magic has worked; if not, the magic was either ineffective or not correctly utilized by the performer. An ignored suitor either has to improve his technique or use a different instrument to put the woman in the desired mood. (ibid., 71). Like many indigenous music cultures, traditional bamboo music in the Philippines is also a link to the spiritual plane, wherein all living things, animate or inanimate objects and natural phenomena possess a spirit (animism), and that music revolves around the relationship with nature

(totemism). In Kalinga and the Cordillera, bamboo and the indigenous beliefs are firmly linked, which is reflected in ceremonies and sacred objects (Prior 2011). The sound of certain bamboo species is used to amuse the *anitos* (ancestor spirits, nature spirits, and deities), in order to distract them from meddling in ceremonies and causing misfortune and harm (ibid., 57). For example, the *tongatong* is played during *pangudan*, the ceremony of naming a child, and bamboo is even used to construct a home for the anitos (ibid.). Manolete Mora describes how the spirit of bamboo is taken from the living plant and inhibits the musical instrument among the T'boli people of southwest Mindanao (Mora 1997). In another book, Mora describes this as “the close bond that exists between T'boli musicians and the supernatural realm” (Mora 2005), which “underlies many aspects of T'boli life more generally, from agriculture to augury, hunting and healing, and it is at the heart of the cultural practices... namely, myth, mimesis, magic, and music” (ibid.). Bamboo music is consequently embodied in the connections within the human plane and beyond, coalescing extramusical elements in various social, cultural, political, and ethical, and spiritual dimensions.

5. Music-Making in the Homeland

Unlike Western music where it is unusual to expect that a violinist also creates their own violins, it is common for indigenous and traditional music players to also be the instrument makers. Same is true for bamboo music (Coronel 2022). And as such, it is not only the instrument making that is tied to the environment, but also the music making. More importantly, music bears with it the emotions and memories of the land. In Christine Muyco's study on the bamboo music instruments of Panay Bukidnon from central Philippines, she cites significant uses of the BMIs in the way people live their daily lives and get in touch with their emotions. She explains: In the use of bamboo instruments, particularly, Panay Bukidnons recall their experiences of pains and joys. They share these experiences through *sugid* (telling), singing, and music-making via the *tulali* (flute), *suganggang* (buzzer), *tikumbo* (zither-percussion), *subing* (jaw's harp), and *litgit* (bowed instrument). There are specific pieces in these bamboo instruments that trigger their feeling of resentment and shame as they have been criticized by lowlanders or the people in their nearest town areas. They are tagged as “*buki*,” which means “outmoded” or having ways of mountain people. On the other hand, the playing of instruments brings to mind folk stories, humor, and other interesting tales that enliven community members. (Muyco 2016)

Figure 3. Bamboo musical instruments of the Panay Bukidnon (Source: Muyco, Christine. “Bamboo as Conduit Connecting Humans, Communities and Cosmological Realms in the Panay Highlands”)



Apart from emotional links to the homeland, another way that music can cultivate one’s sense of place is through the concept of localness. Meghan Chapple, the Vice President of Sustainability at Georgetown University, underscored at the Music Ecosystem Forum 2022 that when tackling the role of music in addressing climate change, “it’s not just the materials we use for the instruments. It’s creating that sense of place and that connection with one another in a place that is really essential to creating more sustainable systems” (Chapple 2022). Michal Silvers, one of the panelists at the forum, emphasised the importance of localness in music sustainability. When asked about his opinion on the real impact the music industry can have on creating a better relationship with the planet and one another, he underscored localness as the main thing to focus on. He shared: “I think a music industry that focuses on local musicians making music for local communities with local resources... [for example] local woods... I think the more local the better” (Silvers 2022). He further elaborated on this idea of local as “curating beauty and art and complexity in the place where you are as opposed to looking for it somewhere else” (ibid.). Supporting local creativity is also one of the missions of Music Policy Forum, the organiser of the Music Ecosystem Forum (musicpolicyforum.org). When tackling the role of music in addressing climate change, “it’s not just the water bottles and it’s not just the materials we use for the instruments. It’s creating that sense of place and that connection with one another in a place that is really essential to creating more sustainable systems” (Chapple 2022). Indeed, more than just self-expression and recreation, people also create and perform music as “part of their responsibilities to the environment” (Turpin 2023).

6. Resilience and Sustainability

This principle of music being human’s duty to the environment elevates its value into an ethical imperative (Titon 2015). What is the purpose of music? As Chloe Sinclair asked: “What is the purpose of climate change music in the concert hall?” (Sinclair 2023). It is a nagging question that cannot be ignored, otherwise we are forced to face the age-old dilemma of “art for art’s sake.”

This regard for the “real-world relevance” (Keogh and Collinson 2016, 2) of music exists in the realm of ecological discourse. A great deal of musicologists believes that to completely understand music (Seeger 2013) and obtain its full potential, which includes “lifting people out of poverty, creating jobs, and bolstering education” (Center for Music Ecosystems 2021), “it needs to be seen as an ecosystem” (Shapiro 2022). The term “music ecology” and the concept of “music as an ecosystem,” collectively referred to as “eco-trope” (Titon 2023), pertains to the “methodological approaches that suggest music behaves like nature, or that the production, consumption, and distribution of music is best understood through reference to the natural environment” (Keogh and Collinson 2016). Despite this promising framework, it inevitable received its share of criticisms that were collected in an article by Keogh and Collinson (2016). Eco-trope proponent Titon responded to the critics in his newest article (2023), and the rebuttal can be summarised in the table below.

Characteristic	Critique	Defense
1 Balance/ Equilibrium	Conceptual problem: Totalizing/Holistic It is too complex and “the sheer volume of moving parts makes it difficult, if not impossible, to form a systematically cohesive concept” (ibid., 5).	The all-encompassing model provides a more concrete, tangible, and measurable framework, which, though may not be perfect and too nuanced, does not have anything better to replace with.
2 Interconnection of elements	Ethical problem: Teleological There is no real causal relationship between the elements within an ecosystem.	The interconnection of elements considers the social and cultural contexts of music, and therefore fosters diversity and aids in the safeguarding of music-cultures.
3 Ethical imperative for sustainability	Political problem: Utopian This “utopian” and “pastoral” idea naturalizes capitalist power structures and therefore “the vested interests of those institutions that threaten that very sustainability” (ibid., 12).	This ethical imperative empowers music to contribute in solving life problems and throughout history has proven to be effective in doing so.

All of these three principles are encapsulated in Meghan Chapple's definition of sustainability at the Music Ecosystem Forum 2022: "creating a right relationship between ourselves and the planet that we call home, and a right relationship between one another as we engage with the planet" (Chapple, 2022). This paper therefore argues that it is valid and useful to consider music as a complex ecosystem because the interconnectedness allows us to understand music completely, which in turn, enables music to contribute to solving life problems, such as in the pursuit of cultural sustainability. Undeniably, the eco-trope is not perfect, as in the case of any other existing framework. But after careful consideration, it can be maintained that its advantages outweigh the disadvantages. While critiques of the eco-trope framework are relevant as they encourage further discussions and deeper analysis of the topic, at the end of the day, it is more convenient to find criticisms. Unless we can offer a better alternative, it may be best to support the efforts of those who strive to use music to help improve people's lives. Using the eco-trope model, bamboo bears an immense potential for the pursuit of sustainability, as "the most valuable tree in the world" (Porterfield 1933). In the Philippines, one noteworthy use of bamboo to help mitigate climate change is for "flood and erosion control systems" (Guadalupe 2021, i), among a multitude of others: [Bamboos] are used in many ways, principally as a timber substitute in building abodes. Some species are used for fishing poles, digging, or plant props. They serve as water pipes as well as water carriers. Their barks, when peeled off, are woven into mats or sheets (*sawali*) used as walls and dividers in homes, or for baskets. Their shoots are used for food and some bamboos provide medicine. Their abundance accounts for the variety of music-making devices that have been fashioned out of it. (Dioquino 2008). For bamboo music, its contribution to sustainability is underscored in the bronze-bamboo dichotomy: "In contrast [with the bronze], bamboo instruments were borne of simple technology much older than gong smithing. Because this type of grass grows everywhere in the islands, the material is cheap and widely available. Bamboo musical instruments, like other everyday bamboo implements, are temporal objects—they can be replaced easily when damaged or lost. Furthermore, because of the absence of the restrictions associated with bronze instruments, bamboo instruments easily lend themselves to innovation and creativity" (De la Peña 2022a). Bamboo being versatile enough for innovation and creativity ties in well with Chapple and Silver's pursuit of localness since it can fulfil the needs of a certain place and culture. Moreover, innovation and creativity in bamboo foster diversity by allowing different types of musical tools, which according to Chapple is a key element of a resilient ecosystem: "an ecosystem

is healthier when there's more diversity in it... there's more resilience in an ecosystem when there are more different kinds to withstand different stressors and shocks" (Chapple 2022).

Conclusion

At the intersection of music and the environment, bamboo functions as a conduit of culture by: (1) fostering a strong affinity between the maker (humans) and the material (environment); (2) strengthening familial and communal kinships; (3) cultivating a strong connection between music-making and the land; (4) enabling communication within/between human and spiritual planes; and (5) bearing a great potential for sustainability. Bamboo is abundant, accessible, renewable, multi-purpose, pliable, and has the quality of resilience. However, notwithstanding the well-documented and celebrated economic, social, and environmental benefits of bamboo (Pagad 2016), its role in cultural sustainability has yet to be thoroughly explored. With the recent global pandemic, the utmost significance of culture in collective survival has been recognised, hence the call for its own pillar in the sustainability paradigm (Culture Action Europe, 2020). Furthermore, since sustainability is a recent concept in the field of ethnomusicology and resilience is even newer (Titon 2015), further research on bamboo music offers hopeful possibilities, fresh insights, and a promising future.

Acknowledgement

The author is grateful to the following institutions and people for their contributions to this study: the Philippines' Department of Science and Technology - Forest Products Research and Development Institute (DOST-FPRDI); University of the Philippines Center for Ethnomusicology (UPCE); University of the Philippines College of Music (UP CMu), specifically to Dr. LaVerne David C. de la Peña and Dr. Jocelyn Timbol-Guadalupe; and University of Sydney Conservatorium of Music, specifically to Dr. Catherine Janet Ingram.

Conflict of Interest

The authors declare there is no conflict of interest

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