The Sustainability of Indigenous Wind Instrument Making Practices in Bolivia

A while ago, I started my fieldwork with Indigenous wind instrument makers, bamboo harvesters and collectors in Bolivia. Bamboo is a fascinating material for wind instrument making. It unites certain characteristics that render them superior in comparison to other materials. It is a natural and sustainable material, grows hollow, has potentially solid culm walls with smooth surfaces from the inside, is fibrous, ductile and workable without greater mechanical or technological affordances. I studied how makers distinguish between certain musical bamboos – those native woody bamboos used for musical instrument making; how musical bamboos are part of a chain of commercialization and commodification; how wind instrument making practices transformed over the last decade in relation to socio-economic, political and ecological changes.



Native woody bamboos used for Indigenous wind instrument making

From a botanical point of view, bamboos are evergreen perennial flowering plants in the subfamily of *Bambusoideae* of the grass family *Poaceae*. They are divided into non-tropical woody bamboos, tropical woody bamboos and herbaceous bamboos. For my study, I mainly focused on tropical woody bamboos, as some of these species and genera are used for making Indigenous wind instruments. In this regard, I wanted to know, where and how they grow, what their potential threats are, how makers, bamboo collectors and harvesters relate to them. Therefore, before starting my fieldwork, I produced ecological niche models of some known and reported tropical woody bamboo species in Bolivia, and calculated their niche loss due to deforestation.



Páramo Yungueño in Inquisivi Province, La Paz Department

Then, during fieldwork, I had the chance to accompany instrument makers and bamboo collectors to the locations where bamboo is harvested, and to undertake ethnographic research with local actors involved in harvesting and commercializing bamboo. During these travels, I collected bamboo samples and ground-truthed harvesting locations in order to further improve

my ecological niche models. An important aspect of my study is the sustainability, transformation and continuation of Indigenous wind instrument making practices in 21st century Bolivia. This also relates to more sustainable ways of harvesting, commercializing and using natural resources such as bamboo.



Botanical Sample of Aulonemia sp.

For most Indigenous instrument makers, who are adapted to urban socioeconomic environments, and whose living is mainly based on wind instrument making, bamboos are of course resources in economic terms. And in economic terms, some Indigenous wind instrument makers are worried about the availability of bamboo for what they depend on to make their living. Bamboo as a resource is fundamental for the continuation of their work, and that of their children and grandchildren. This is where sustainability provides a normative framework to discuss, think and enact possibilities for future generations to make their ends meet, while at the same time reproducing and transforming cultural diversity and ancestral making practices.



Workshop of an Indigenous instrument maker in El Alto, Bolivia

While doing fieldwork *in situ*, I not only became aware of more nuanced distributions of some species, but also learned a lot about local livelihoods and bamboo harvest practices in different subtropical and tropical regions. Moreover, my fieldwork provided a more complex understanding of ecological threats of native woody bamboos, in relation to the selection of harvest places. On the one hand, deforestation and land use change destroy potential ecological bamboo habitats. On the other hand, human presences in specific regions is what it made possible to access and harvest bamboo in the first place. While the sustainability of Indigenous wind instrument making practices is sometimes discussed in rather uncomplex and essentialist

terrain, my fieldwork tends to complicate these discussions based on ethnographical and empirical data.