## WHY INTERGENERATIONAL THINKING IS ESSENTIAL TO HEAL THE PLANET written by Anne Pinto-Rodrigues

If you would rather listen, view this video about the jingkieng jri, the living root bridges in India.

In the state of Meghalaya in northeast India, ingenious elders from the Khasi community spent decades, even centuries, building living root bridges known locally as jingkieng jri. The bridges were shaped by pulling and intertwining the aerial roots of the rubber fig tree (Ficus elastica) over a bamboo framework until the roots reached the opposite bank.

There are at least 150 such bridges in the state in various stages of use and decay, and the oldest is estimated to be about 700 years old, according to Morningstar Khongthaw, a Khasi youth. He founded the Living Bridge Initiative in 2016 to preserve the community's living architecture traditions.

In many cases, the elders who planted the rubber fig saplings on the banks of the river, or those who initiated the construction of a bridge, would not have lived to see or use the bridge they founded. However, thanks to their long-term vision, the generations that follow get to use the bridges to reach schools, markets, farms, and other places of daily importance.

The rubber fig trees are not only the foundation of the bridges but also help keep the surroundings cool, purify the air, prevent soil erosion, and provide several other environmental benefits that generations of Khasis continue to enjoy.

Now in his mid-20s, Khongthaw continues working toward being a good ancestor. He, along with community members in seven locations, have constructed bamboo frameworks on which new living root bridges will be built in due course. These bridges will be sculpted and maintained by future generations.

"These bridges are an outstanding example of a complex, intergenerational, cultural-natural system," says Ferdinand Ludwig, professor of green technologies in landscape architecture at the Technical University of Munich, who has studied the Khasi bridges for several years. "They are a benchmark for regenerative design, which we urgently need in order to hand over our degraded environment to our children in a better condition than we found it."

Sadly, at the present time, most decision-making by governments and corporations around the world does not even look at the immediate impact, let alone a few years down the line. President Biden approved the Willow Project to drill oil in Alaska, even as UN Secretary-General António Guterres referred to the ongoing climate crisis as a "ticking time bomb," speaking soon after the release of the latest IPCC report in March.

Alongside the looming climate change catastrophe, exponential growth in plastic manufacture and use and the resulting pollution is affecting marine life and seabirds. Microplastic particles have also been found in human blood and lungs, as well as maternal and fetal placental tissues and in breast milk—endangering not just the current generation, but possibly the health and development of the next generation as well.



"Why are we not capable of looking beyond five years?" says Maria Westerbos, founder of the Plastic Soup Foundation, an Amsterdam-based nonprofit that works to reduce plastic pollution around the world.

Long-term thinking is urgently needed as humankind grapples with climate change and other burning issues, like fossil fuel extraction and plastic use, that will have huge and irreversible impacts for generations to come. Luckily, communities around the world have long shown it is very much possible.

One oft-cited example is the Seventh Generation Principle from the Haudenosaunee Confederacy (known during colonial times as the Iroquois Confederacy), which spans present-day upstate New York in the U.S. and adjoining areas in Canada. "The Haudenosaunee believe that what we do in our lives can have either positive or negative ramifications to the seventh generation yet to come," says Dave Kanietakeron Fadden, an artist and illustrator from the Mohawk nation, one of six nations that make up the Haudenosaunee Confederacy, along with the Cayuga, Oneida, Onondaga, Seneca, and Tuscarora nations.

Fadden shares how the Seventh Generation Principle translates to daily life for the Haudenosaunee. "Our traditional council of chiefs among the Six Nations deliberate every proposal with this in mind. As individuals, we also keep it in mind as we live our lives," he says. "Our decisions as leaders and as individuals are made with a great deal of thought of how an action, or lack of an action, will affect those that are not here yet. In contemporary terms, we are transitioning to utilizing as many new carbon-free technologies in our communities, from passive home construction to solar energy."

Fadden says, "Knowing that the natural world provides all we need to exist, it is our job as humans to take care of it for future generations."

Intergenerational thinking among the Māoris of New Zealand (Aotearoa) is rooted in the concept of whakapapa. The Māoris believe that all living beings—past, present, and future—as well as all non-living entities—like rivers, rocks, and mountains—are born from sky father Ranginui and earth mother Papatūānuku, and hence are related. This kinship is called whakapapa, and from it stems the responsibility of protecting nature for present and future generations. Whakapapa manifests itself at several levels in Māori life, including in law-making and policymaking as well as in the community.

In 2014, New Zealand became the first country in the world to grant legal personhood to a forest, and to a river in 2017. This recognition gave the Te Urewera Forest and Whanganui River the same legal rights as a citizen, and any offenses against them can be taken to court.

"This was an effort by the New Zealand government to take ancestral ways of knowing and being and doing in the form of whakapapa, and embedding them into the law," says Dan Hikuroa, senior lecturer in Māori Studies at the University of Auckland (Waipapa Taumata Rau). "At the highest level, there are laws that are being made and passed in the country that include whakapapa."

Day-to-day decision-making in businesses like Wakatū Incorporation—owned by 4,000 families descended from the original Māori landowners in the Nelson region of South Island—is also guided by whakapapa.



The group, which owns several companies in real estate, horticulture, viticulture, and fisheries sectors, has a 500-year plan, Te Pae Tawhiti. The goal is to achieve intergenerational prosperity while simultaneously conserving for future generations the natural and cultural resources that have been inherited from ancestors. Wakatū's short-term business plans are aligned with this long-term vision and the values of the original landowners.

"Knowing your whakapapa link to a place is important both as a motivator for the work you do, and for the sense of responsibility to the place and people," Hikuroa says.

Zealandia Te Māra a Tāne, a nature reserve established in 1999 near the country's capital, Wellington (Te Whanganui-a-Tara), also has a 500-year vision to restore the valley's forest and freshwater ecosystems to its pre-human state. "Our first 20-year strategy was completely focused on the valley itself and was all about getting a head start on restoration," says Danielle Shanahan, a landscape ecologist and the sanctuary's chief executive. "This included planting thousands of trees that will take the longest to mature and bringing in species like kākā [a large parrot] that were absent from Wellington city."

These visionary efforts have led to an estimated 250% increase in the kākā population compared with 2011 numbers, with several other native species of birds, insects, amphibians, and reptiles also thriving. The sanctuary is now in its second-generation strategy, which builds on the first, and is all about living with nature and helping the local community reconnect with the native wildlife.

"There is an inextricable link between people and the environment," Hikuroa explains. "If your rivers, oceans, mountains, forests, and your land is unwell, then you as a human are unwell."

So it follows that when communities keep in mind future generations as they make decisions, nature and humans can thrive together.

