

## ROSARIO ENCARNACION-TAN Architect

What strikes one about Ning is the passion that infuses her and the integration she seeks in all the aspects of her life: as an architect by profession, as an individual who espouses voluntary simplicity, and as a Filipino who sees in bamboo creative opportunities for Filipino folk architecture to re-emerge and as a basis for viable livelihood opportunities.

What brought her to bamboo is the word "relevance." She recalls delivering a short talk where she related architecture's relevance in relation to the reality that lumber was getting expensive and also not readily available as before. The logging ban directly affected her thinking in seeking alternative construction materials that can replace some of the traditional wood-based needs in the industry. She thought about what is happening to Philippine forests and what she can do in her own role as part of the architecture profession.

Since then, she has continuously pursued education on bamboo and pushing its development, recognition, and acceptability in building and designing houses in the country.

While working on the book "Folk Architecture" during her fourth year in college, she went to different parts of the country to look at the various modes of house designs. A house in Antique inspired







in her the need to embed the harmony of structures with people's lives and other living things. The book was released in 1989 and sealed her path.

When she got married, she and her husband, Juju, built a bamboo house in their family compound in Quezon City that has since gained attention for the extensive use of bamboo in almost all aspects of the house. Eventually, they moved out of the compound and explored setting up their place in Nueva Vizcaya, a province north of Manila. She's presently doing bamboo workshops in San Mateo, Rizal, and undertaking initial work for a building project to improve some buildings at the University of the Philippines.

Ning sees that the present generation is different and there is exponential interest in bamboo as well. For her, architecture is an art and is always pulled back by gravity. Bamboo is like a sounding board, where one can hear the sounds of bamboo while it is being constructed. The actual handling of materials such as bamboo -- the sound it makes, the shapes and forms one can do with the material – is a full sensory experience.

The strokes in developing her architecture are found in the level of community involvement. She uses the term "community architecture" as well, where the house becomes more humane. "You're a good architect if you can let the clients design and jump in." She views Balinese architecture as "so good and so brave."

Folk architecture provides a cultural expression that is coherent for all the diversity within the nation. There is a history of events that relate, and there is a coherence and continuity, but it is also getting broken for many people.

There is a need to let in more light and shades; nature affects our balance the whole way through. There is a certain freedom that emerges, a self-identity, a "with it" in accompanying that is part of the sharing and being part of a natural reality. Seeing things regenerate regains what was lost.



But what are the scenarios or avenues where people will have the attitude to regain what was lost? As an architect, it is in allowing people to know they can design their own houses. Workers have changed and Ning is helping her workers in designing their own houses as well.

Ning describes her initial designing thought through two triangles she creates. When she is holding these two, she is designing already, as the brain cells communicate to the tips of our fingers. An interaction with culture and what is national can break through from this.

Ning's sense of culture and aesthetics developed from her long treks with her husband. She deeply sees the need to interact with the environment and with ourselves, and then looking for the pattern that connects; that sense of connection in the next moment that emerges with great creativity and response to the other.

Ning brought us to the house of a friend, where a distinguishing trait is the house's embracing of the neighbor's tree. This creates a whole new relationship. Relationships are essential for the connectivity they create. There is a need to recognize the extent of communication and how that message moves and to be at peace. If you are at peace at home you can bring that out through engaging with others. The community and network of people that emerges give very clear values, and the attitude can also be a source for change in certain zones of society.

Bamboo groves can sustain local livelihoods. Bamboo production in the uplands and river banks is presenting a viable alternative for non-wood forest resources. How seriously are people considering bamboo? Can bamboo provide a sustained return to ensure levels of human security? Bamboo and abaca are also species that can be planted to protect a watershed and its riverbanks. From such a focus what change can be sought? These are concerns for downstream users like Ning too.

Ning's bamboo promotion and how its popular acceptance can impact on livelihood development for the poor deserves much support. There is a pragmatism, a creativity, and a recognition of the reality that









Philippine forests need a break from the continuous degradation and can no longer sustain our wood needs, as they were defined by demand without recognition of supply.

At the same time, it is also a reality that what keeps us from halting the degradation is the massive extent of poverty in the uplands, where the forests provide the lifeline to survive. The situation can only flip or shift when we recover from the degradation and the poverty that is long term. To heal the environment, we have to heal and re-stitch the culture. Development strategies are a good idea, but they have to take into account the culture of the people.

If everybody is doing their part in a system of simplifying and realizing, this will create an impact on what is going to shift the landscape by showing what people can do with the materials, with their hands.

In poorer parts of the Philippines, one can see the simplicity of a house, where the color that emerges from an otherwise drab surrounding is a small bougainvillea plant in a rusty can. There can be found moments of sheer human nurturing and it does not matter what the context or material is.

In the end, "nobody needs houses." Ning's architecture is space-based, not matter-based and she wants to lead her clients in this direction and the liberation that follows.

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## HADJI MALIK PANGANDAMAN

Provincial Environment and Natural Resources Officer (PENRO) Lanao del Sur, ARMM

Hadji Malik Pangandaman is the Provincial Environment and Natural Resource Officer (PENRO) of Lanao del Sur under the Department of Environment and Natural Resources (DENR). As a government functionary, he is very conscious of his agency's mandate and how this is challenged by the context of the Autonomous Region of Muslim Mindanao or ARMM. While there is the DENR structure operating in the national government, its translation in the ARMM is an evolving adaptation and redefinition, especially in how forests and watersheds are utilized and valued for their ecological services.

His administrative jurisdiction covers Lake Lanao, the second largest lake in the Philippines, which still has substantial forest cover on the eastern side. PENRO Pangandaman admits though that this is being reduced as logging continues in the area, even with the issuance of national directives banning logging in the area and the presidential proclamation of Lake Lanao as a protected watershed reservation in 1992.

The Maranao, or people of the lake, for generations have bound their identity to Lake Lanao. Lake Lanao has a surface area of 357 square kilometers with a maximum depth of 112 meters. At

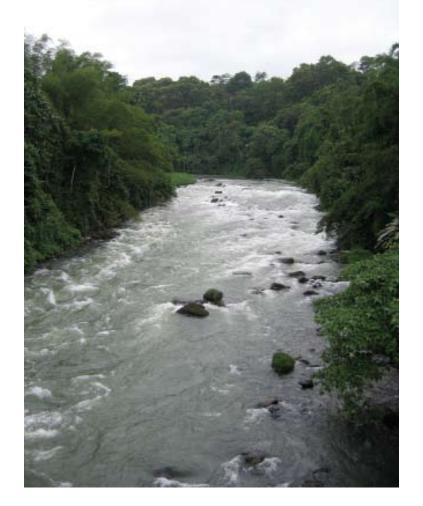


the lakeside, the Maranaos built their houses, mosques, fish cages, fishponds, and rice fields. Lake Lanao is also the cheapest and safest source of electric power in Mindanao. It supplies the six hydro power plants of the National Power Corporation (NPC), generating 727.35 MW of electric power daily. It is a powerhouse, but not for the people living there.

Lake Lanao is also considered as one of the 19 ancient lakes of the world. The natural water sources of the lake are the four major rivers from the Municipalities of Ramain, Taraka, Gata, and Masiu and the tributary streams and creeks. These main sources of water contribute to the volume of the lake, with a daily average of nine million cubic meters steadily flowing to its outlet, the Agus River.

1992 was a critical year for the Lake Lanao Watershed. In January, a presidential task force on the power crisis in Mindanao was created to identify short- and long-term solutions to the power crisis (Memorandum Order No 414, 14 January 1992). The DENR headed the task force and recommended the protection of the remaining cover of Lanao del Sur province. By the next month, the Lake Lanao area was declared as a protected watershed reservation and covering 180,460 hectares (Presidential Proclamation No 871, 26 February 1992). The following month, the Lake Lanao Watershed Protection and Development Council (or the Council) was created to formulate and develop a plan for the development and management of this watershed area (Presidential Memorandum Order No 421, 25 March 1992). And by 14 August 1992, Presidential Memorandum Order No. 30 was issued that directed the DENR to stop the issuance and operations of Private Land Timber Permits, Timber Production Sharing Agreements, private gratuitous permits, and all forms of timber-cutting permits in the Lake Lanao watershed area.

According to PENRO Pangandaman, from that time on there were no permits issued for tree harvesting within the proclaimed watershed. But logging continued, and the large concessions operating since the 1970s logged in areas outside of the watershed (such as in Bambaran



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The century-old houses of Lanao show the great craft, cultural and natural beauty of a people and their land

and Wao) until their timber license agreements expired. Thus, they were not stopped; their licenses have now expired.

He took up forestry along with his brother-in-law and they were part of a batch of forestry graduates who entered the logging industry. His main job now under the DENR-ARMM is in administrative control and supervision, and together with the Council, their tasks are focused on the implementation of the management plan for the Lake Lanao watershed.

But where administrative confusion is complicating the matter is the enactment of Republic Act 9054, the law governing the expanded ARMM in 2001. Wood companies are claiming to have timber licenses issued by DENR-ARMM. A senate inquiry in December 2004 expressed dismay over the unabated logging and there were questions asked why these logging permits were not revoked in 2001. RA 9054 requires the regional government to enforce a total log ban by canceling and nullifying all forest concessions, timber licenses, contracts, or agreements of any kind.<sup>1</sup>

DENR was not devolved in the ARMM and a parallel government bureaucracy was created mirroring the different bureaus in the national government (forest management, land management, environmental management, protected areas, and mines and geosciences). PENRO Pangandaman contends that it is only the forest management sector that is actively operating, with their income coming from forest protection and reforestation funds.

Politically, the Lake Lanao area belongs to ARMM, but PENRO Pangandaman said that because of the 1992 presidential proclamations, the administrative supervision belongs to DENR-ARMM and the Council. The council members comprise: the DENR as Council Chair, the NPC as Vice-Chair, and the Armed Forces of the Philippines, ARMM, Mindanao State University, Save Lake Lanao Movement, Philippine Chamber of Commerce and Industry, and the Mindanao Association of Electric Cooperatives.

PENRO Pangandaman says that this creates a problem, as some of the members of the Council are themselves beneficiaries of logging. And in relation to the management of the Council, "maybe the national government thinks they are the main (authority), but they are not technically, financially capable of handling the development of the area," PENRO states.

Recently, PENRO said that "the request by tree planters for clearance was granted by the military. ARMM allows tree harvesting in private lands but the (real) profit comes when they are given passage to transport and dispose outside of ARMM, which is the problem in Bukidnon and other provinces that the trucks must pass through. For example, Lanao del Norte declared a total log ban, so what the tree planter requested was a passage through the province, because this is the only practical route going to Cagayan de Oro and other areas. Before DENR Secretary Reyes was transferred to the Department of Energy last August, he issued the passage clearance to the mayors."

(In a related interview, a former truck driver of these transported logs explained to us how they operated. He used to drive these 10-wheeler trucks from 1995-1999, picking up the logs from Pantar and Balo-i, just behind the Maria Cristina Falls area. The logs were hardwood species, usually red lauan (locally named ulayo) and apitong. At that time, the drop-off points were a two-hectare warehouse compound in Hagonoy, Digos, Davao del Sur or in Cagayan de Oro City. Sometimes they also dropped off the logs at General Santos City. They traveled in convoys of four or five vehicles, with each truck having a security force of five men with long-barreled arms. Drivers recruited were MILF members. It takes each truck six to seven hours of travel. Each of these trucks can make two trips a day. The main road was avoided and tertiary roads were used. The log-bearing trucks are allowed pass unchecked through all the security points, as these have all been tipped off. One of the bigger operators in Marawi City was an official of the Bureau of Customs in ARMM, who was responsible for hiring the drivers, most of whom did not even have driver's licenses. This former truck driver informed us that 20 of them recruited in their batch. All his batchmate-drivers are now dead, except for himself and another driver



Some reforestation in the watershed with mahogany (Swietenia macrophylla)



"People from as far as Cagayan de Oro and Butuan will pay to get the wood from this area. Then, these people living in these areas, they know that these areas belong to them. Can you imagine if you are living there, and being told not to cut? And when you build your house, you will have to use lumber from as far as Iligan? That is not common sense." who is now in Cebu. They were all killed during ambushes when rival groups stopped the trucks and stole the cargo. He says he is lucky to be still alive and never wants to do this job again.)

When asked about the current situation, PENRO stated that "there is forest protection, but there is also much illegal cutting, and within the watershed there is poaching. People gather the nearest materials for building their houses, and it is difficult to control people within their vicinity."

He is aware that the forest cover around Lake Lanao is getting reduced "because there are no existing reforestation projects." He understands too that reforestation is part of the NPC's responsibility and is one of the conditions in its environmental compliance certificate, whereby a portion of the fees they collect for power generation is to be used to finance reforestation. "The NPC is submitting reports and conducting reforestation projects because they are mandated," he says. The NPC is undertaking these projects in the western side and mostly in private lands, but the eastern side is most critical for maintaining the watershed, and also where the major logging activities continue. "I don't know the basis for selecting the western side in their implementation of the reforestation project, but I believe there are problems when it comes to the eastern part. The place is still not barren and the forest is intact."

For him, "the real problem is on the western side as most of the area is privately owned and they are fighting over their properties. The NPC is encouraging farmers to plant trees in their private lands. That's the thinking of the NPC, establish the rehabilitation area and implement the reforestation projects in the eastern side of the lake."

PENRO shared his thoughts on the future as he acknowledges that forest cover is going down. "I think there is still a need to maintain the forest cover. The problem here is how this can come about.

People around the lake need to utilize forest materials in order to earn a living. They want to establish their income for their family, for their siblings. People from as far as Cagayan de Oro and Butuan will pay to get the wood from this area. For the people living in these areas, they know that these areas belong to them. Can you imagine if you are living there, and being told not to cut? And when you build your house, you will have to use lumber from as far as Iligan? That is not common sense. What discourages us is the commercialization that is already considered logging. If that is the case, the majority of the people around the area will use and take from the different trees here within the watershed."

He questions the national government's focus on the people doing *kaingin* as he does not see this as strategic in reducing forest cover loss. "Every national government is sincere, really sincere in addressing logging in the province. But in our forest, I believe that *kaingin* is not the problem. There is not much kaingin in this place. Very few people are involved in kaingin, as kaingin involves burning, and burning is not viable because this area is always wet. They don't burn, they just cut. But there are so many people transferring to make business for their families. So only a few people are engaged in this former livelihood (kaingin). People abandon their activities in the forest once other opportunities emerge.

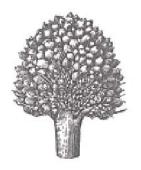
He also questions the integrity of the government's watershed management plan that the Council developed, as there was minimal participation in its formulation. He recalls a previous plan prepared in 2004-2005 by a people's organization where he was the Project Director, and also another forest management plan. What happened to all of these plans?

PENRO thinks that the declaration of Lake Lanao as a protected watershed reservation was not fully understood and valued. "Some understood the importance of preserving a forest, some did not understand. Thus, it is very hard to determine the attitude of people because there is always that frustration. In the lowland

ricefields, people are clamoring for better irrigation. The promise of irrigation was not achieved, it never even started . . . So people have a tendency not to deal with government anymore in seeking a response to their problems. So during dry weather, when the weather is not useful for the farm, some of them decide to sleep in the forest and make a living out of the wood."

PENRO showed us the row of trees along the College of Forestry that he and his friend Nilo planted more than 30 years ago. He takes pride in these 100 or so trees lining up the campus greens. And perhaps he needs these reminders of what could be possible as he tackles the daily tasks of a PENRO in Lake Lanao.

<sup>1</sup>Article 10, Section 5 of RA 9054 provides that "the proclamations issued by the central or national government declaring all old growth or natural forests and all watersheds within the autonomous region as forest reserves are hereby reiterated. The forest reserves shall not be subjected to logging operations of any nature or kind. Forest concessions, timber licenses, contracts or agreements of any kind or nature whatsoever granted by the central government or national government or the Regional Government as of the date of this Act, are hereby cancelled, nullified and voided, and shall not be renewed until thirty (30) years after the approval of this Organic Act."

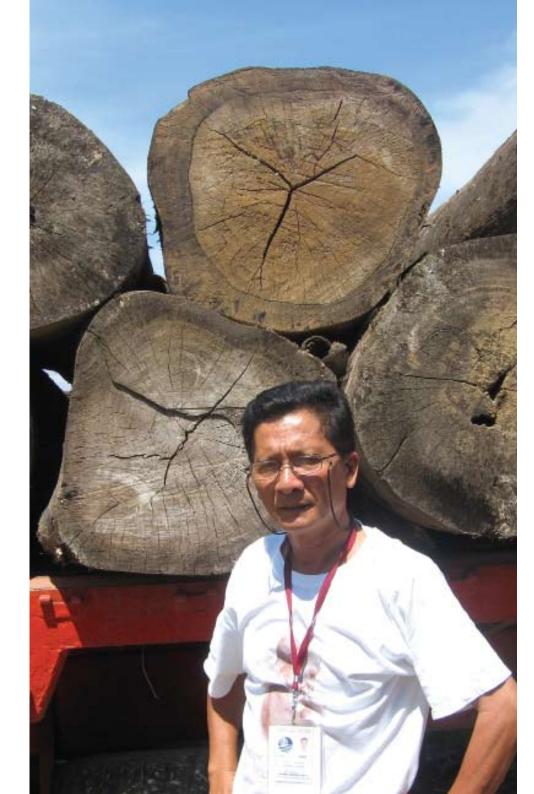


## RAUL ZAPATOS DENR Forest Guard

Sitting quietly behind his desk at the Office of the Motorpool, Infra and Maintenance Unit of the Department of Environment and Natural Resources (DENR) Region X Office in Cagayan de Oro City in Mindanao, Raul Zapatos attends to his tasks from 8:00 in the morning and goes home to his family at 5:00 in the afternoon.

Twenty years ago, work was completely opposite for this man, who spent a total of 11 months in a provincial jail in Prosperidad, Agusan del Sur, 13 months in a Cagayan de Oro City jail, and two and a half years at the National Bilibid Prisons in Muntinlupa, Metro Manila, from where he was released as a free man on 19 September 2003.

In 1987, he was part of a DENR enforcement group that was heavily enforcing the government anti-logging campaign and nabbing illegal loggers in San Francisco, Agusan del Sur in the CARAGA Region. By 1989, he was transferred to Bayugan, another town in the same province where their operative group arrested many trucks with illegally cut logs. Twice in a row, their group caught a truck owned by the Bayugan mayor in September. The mayor approached them and had the truck released to his custody, which Raul's group allowed, but without the logs which were impounded in the local DENR compound. By November of the same year,



the mayor's truck was caught again with illegally cut logs; Raul's group refused to accommodate the mayor's request for the truck to be released. The mayor clearly got angry and Raul started receiving death threats.

On 14 January 1990, Raul was in the DENR detachment (the military detail had earlier left for the city) when the mayor's armed civilian bodyguards raided the detachment. There was a firefight and the next morning, Raul learned that the mayor died during the raid. He got scared and surrendered himself to the local police. Murder and frustrated murder cases were filed against Raul and a legal battle ensued, where DENR Secretary Jun Factoran and his staff assisted. By August 1991, the Regional Trial Court dismissed the cases against him, but he was still detained at the National Bureau of Investigation (NBI) jail in Cagayan de Oro City up till 1992. By 1993, the case rested. But in a stunning reversal, the Sandiganbayan handed down a conviction on 27 March 2001 and he was sent to the national penitentiary where he stayed in prison as a convicted man until the Supreme Court reversed the Sandiganbayan ruling on 19 September 2003.

Looking back over the years, he was amazed how his family managed to stay strong for him, as he was well aware of his long absence as a family man and the pressures his family had to go through because of his case. "When I lost the case in the Sandiganbayan, my family was in Cagayan de Oro. When I was released in 2003, my eldest child was already 23 and my youngest was 11. My older children had to stop schooling. During all those times, my wife took care of everything." Secretary Factoran also made sure he obtained the services of the best lawyers. Mrs. Zapatos is a government employee with the Regional Office of the Department of Agriculture. His children and relatives are all proud of him.

"There I was, trying to implement the law and I ended up in prison. I felt very sad and I cannot explain why it happened." He held out for some hope as he knew that the DENR secretaries that followed Secretary Factoran all continued to assist him, along with non-government groups that mobilized support asking for fair treatment.

"In Muntinlupa, I was obliged to adjust myself, otherwise you will destroy yourself. I really had big hopes that the Supreme Court would decide favorably for me," Raul recalled.



Press coverage of Raul Zapatos' achievements and personal sacrifice as a living hero for the environment

Raul Zapatos with former DENR Sec. Gozun upon his release from prison





Beside a recently apprehended truck for transporting illegally cut hardwood

"There I was, trying to implement the law and I ended up in prison. I felt very sad and I cannot explain why it happened." It has been 17 years since the event and he reflects on forest management as it is occurring today. "Maybe it has changed," he softly said. But in the same breath, he says that it is still the same, rampant illegal logging continues. He then points out familiar problems: not enough funds for forest protection, no vehicles, forest guards are paid very low wages and do not get additional allowance for going into the forest, very poor forest protection, forest cover has gone down, and foresters are still at risk. He says it is up to the government to make changes come about. "Probably the situation is worse now and riskier than before as there are many armed groups. Forest guards may have cellular phones, but there's no signal in the mountains or they do not have funds to purchase 'loads' (prepaid phone cards purchased for a limited number of text messages and phone calls)."

Raul's job now is as a custodian of confiscated and apprehended trucks. He went with us around the DENR compound and showed us recent confiscations. One truck contained *to-og*, a hardwood, that had been confiscated because the wood was not included in the manifest of products to be transported. The other truck with *red lauan* also had no papers.

Going back to his case, he reckons that he gained the attention because he was not killed; he survived and continues to live. He reminds us that there are many forest guards killed in the line of duty, some of them his colleagues, but "they tell no tales. I feel so badly for their families who were left behind, who suffered tremendously, but who never got the support they needed."

Raul's second chance provides great inspiration but also great trepidation, as the context and the circumstances of his experience continue to prevail in the forests of the Philippines. As Raul continues to do his job, albeit less actively, there is a sustaining hope that what he experienced as a forest guard will be a thing of the past.



## JOEY AYALA Musician / Songwriter

Given a choice, Jose "Joey" Ayala would rather not be composing songs and poems of loss and lamentations of forests in the Philippines and their biodiversity. In the early 1980s, he was part of a generation of visual artists and musicians and poets that produced seminal work on environmental awareness. Born to a family of artists, his family moved to Davao in Mindanao in his early youth, and earned him fame for writing poems, composing songs, and directing and performing in theater musicals relating to the environmental and socio-political situations that the Philippines was then starting to realize. He independently produced in 1982 a collection of 10 songs that spoke of the social and the environmental volcano simmering, especially in Mindanao.

Joey's creativity is associated and acknowledged with the care and concern for the environment, something that he persistently and consistently reminds Filipinos about. His song composition on the Philippine eagle, *Haring Ibon*, and its endangered status made people appreciate and understand better the eagle's role as a barometer species. He unerringly linked the disappearance of the eagle to the disappearance of forests.

This ability to communicate relationships and systems thinking provides much room for taking action in Joey's songs, beyond the usual appreciation of catchy melodies and witty lyrics. The images he conjures up through his songs translates scientific terms to ordinary people's thoughts and layman pictures, provoking people into thinking and responding.



His early experience of forests he describes as something so basic that he took it for granted, as he spent a lot of time inside forests, which meant for him the trees. He got an air rifle at a certain stage and did target shooting of birds, until he realized that there was a link between forest creatures, the trees in the forests, and the forests itself.

This thinking permeated his songs and was confirmed by the various readings he managed to get hold of. He learned that trees are not discrete, and the inseparability of lives and relationships inside forests made him better understand impact, effect, and consequences. Damage one tree, change its chemical composition, and there is an effect on the rest. Thus for Joey, the forest is one creature.

Then he learned to dive and the marine environment opened up a whole new vista of life with all its variety and diversity.

Mount Banahaw in Dolores, Quezon is the most intimate place for him and offered a venue whereby he could reach and transcend a different state of being while inside its forests. The effect of forests for him is in the dilation of the senses and where forests become much more than their resources. This spirituality confirmed for him that when you lose a forest, you lose your spirit.

"We must find a space for the forestal spirit, so that the spirit nature of man will survive accordingly with nature, with capitalism, with the drive for efficiency," Joey says, while acknowledging there is much less focus now on efficiency.

As in theater where he put into motion much of his early craft, there must be the right casting in the right role.

The management system needed must be indigenous to the Philippines and must be considerate of the land. Where this system can be found in the forest cultures he met, there are concepts that

do not exist, such as "sakripisyo" (sacrifice) and "basura" (garbage or waste). Unfortunately, in today's mainstream society, this value system inherent in many of these cultures either gets subverted or isolated, thereby diminishing their contribution.

For Joey, "nature is like a chameleon, it adapts to its environment."

He dreams and fantasizes about the Philippines in terms of what can be done. He discovered that the highest return on investment in land is in memorial parks. In the Philippines, these plots of land are sold pre-need, with the living paying for when they die. If he applies this concept to forests where he can sell forests like a pre-need product, but as land for the living rather than the dying, perhaps he can get somewhere with securing forests and their survival.

In the pervasive and prevalent "mall culture" in urban centers and even in suburban areas, the connectivity between the youth and forests needs to be established beyond nature and trekking clubs, or the seasonal availability of volunteerism opportunities for young people. The alternative lifestyles that captured the imagination of young people in the 1960s, 1970s, and even in the early 1980s do not have parallels with their counterparts in this 21st century generation. Questions remain as to where the shift will come from, how this will occur, how to manage the undoing that must be done, and how to sustain the knitting together that's got to be done as well.

Joey sees an answer in education and in assisting curriculum formation where it is now disintegrative. He goes back to the application of systems thinking, knowing and understanding the left/right upper/lower backward/forward development, and balancing the visioning with the doing.

The balance Joey seeks in the interaction between the logical and the intuitive is addressed in some form through the workshop design



and facilitation that he now actively pursues through his Bagong Lumad productions. He related his experience in working with five coastal villages in the country, recording their songs, singing and talking with people, collecting their stories. As a musician, he listened to people singing, did songwriting workshops, and translated these activities as an exploration of an area's cultural geology.

Continuously exploring and innovating, Joey also dreams of a time when the songs he will compose and the poems he will write will no longer be dirges nor elegies of treasures and wealth we lost as a people, but rather of hopes and dreams turned real, seizing opportunities and taking action on what matters.

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