



cological ethos took time to find its way into Western architectural expression. The Grecian notion of the built environment

as separate from the natural, validated by the Romans' conception of man lording over nature, has pervaded the intellectual and ethical consciousness of many designers in the early years of civilization. It was only in the 19th century that the concept of ecological design would spread across Europe and mainland United States with the writings of modern thinkers like John Ruskin and Aldo Leopold who first saw the environmental impacts brought by the unprecedented rise of factories and skyscrapers in Western cities and colonies. Bothered by its implications, architects began to acknowledge the significance of designing buildings in harmony with nature. This awakening, so to speak, challenged succeeding generations of designers across the world to break away from egocentric ideals and start putting design in the service of

Such was the challenge that confronted Hitesh Mehta, a landscape architect and planner from Kenya. Inspired by the Indian philosophy of Jainism and ahimsa, both teaching nonviolence and respect for all living things, Mehta had an epiphany as a child living among leopards in the African wildlife. Standing at the foot of Mount Kilimanjaro along the borders of Kenya and Tanzania, Mehta marveled at the landscape architecture of the Amboseli National Park, which promotes natural conservation while empowering the Maasai communities who lived there for centuries. So inspired was

man and the environment.

he at the idea of reconciling the built and natural environments, that he took it upon himself to travel the world and expose himself to foreign cultures and places that would shape his ecological conscience and design sensibilities.

In 2002, Hitesh Mehta co-edited the definitive International Ecolodge Guidelines, a book that argues for authentic ecolodges. In the book, Mehta distinguishes ecolodges from traditional hotels and resorts as lowimpact facilities that conserve the environment, benefit local communities, and offer tourists interpretative experiences. Since then, he has become one of the world's leading experts on ecotourism physical planning.

It's not surprising that when the Philippines, a country with a diverse well of natural tourism assets threatened by corruption and carte blanche development, updated its National Ecotourism Strategy and Action Plan, Mehta was the first in mind of former tourism secretary Mina Gabor, founder of the International School of Sustainable Tourism (ISST), to launch an awareness campaign on ecotourism planning in the country. "The whole trend around the world is towards visitation to natural areas and we have a tremendous number of sites that we can be proud of," says Gabor.

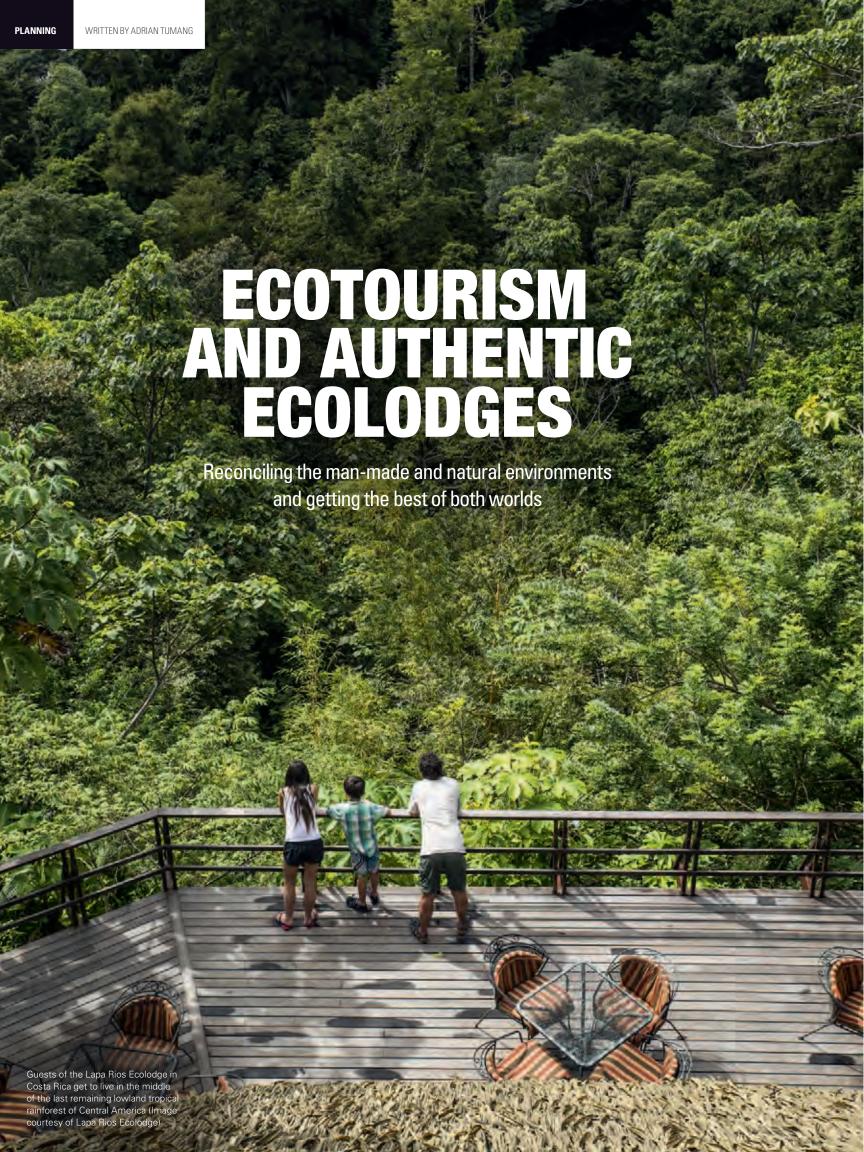
Gabor partnered with architect Emmanuel Miñana to bring Mehta to Manila for a weeklong Ecolodge Planning Workshop and Design Charette from March 2-6, 2015. Mehta showed up in a barong tagalog on the first day to kick off the series of lectures. By the third day, he was walking barefoot in the vast organic gardens of bank executive Flor Tarriela in Antipolo, leading the

participants in a walkthrough to experience the place with their six senses—the sixth being the spiritual—before drafting a site analysis and translating it into a plan. "Our common mistake is that we go to a site and immediately act as designers. We need to analyze first the things around us," says Mehta.

The event became doubly significant with the participation of major influencers like architects Jorge Yulo, Conrad Onglao and dean Joey Yupangco, along with representatives from leading architecture firms like Leandro Locsin Partners, Rchitects, Inc., Casas+Architects, and C|S Design Consultancy. Representatives from developers such as Rockwell Land, Greenfield Corporation, and Nuvoland among others were in attendance as well as land owners, tourism facility operators, and architects in civil service.

If at the start of the workshop there were reservations, misgivings or misconceptions about designing for the health of our ecology, these were replaced midway through by excitement and a strong sense of commitment to tread lightly on our land and seas, and to spread the message of the eminent benefits of ecoarchitecture, ecodevelopment and ecotourism.

Through this series of articles, we hope to share the transformative knowledge and experience that the workshop participants journeyed through. Through these pages, we hope to give ecological design ideas fertile soil in which to flourish; and to inspire in architects, owners, developers and public servants a desire to make informed decisions, commit to sustainable practices, and ultimately, to forego the ego in order to build for the eco. ■





uring a holiday in India, architect **Emmanuel** Miñana chanced upon a limited slot in a tribal mountain cottage within a spice village in Kerala. At 300-400 USD per room per night, the accommodation wasn't cheap yet at those prices, the cottages were surprisingly fully booked. Independent travelers like Miñana demand value for their money, preferring to stay in natural settings even if it means paying more. And they are not a minority. There is a growing number of educated and discerning clientele willing to spend top dollar in places that offer a more authentic and holistic commune with nature and culture. This is the concept of ecotourism.

What is authentic ecotourism?

Ecotourism is one of the fastest growing niche markets of tourism in the world. It accounts for half of all international tourist arrivals in 2011 and is expected to grow rapidly over the next two decades. As a "megadiversity" country, the Philippines has tremendous potential, ranking 25th worldwide in terms of plant specie abundance and fifth with regard to number of endemic animals. According to the government's recently completed National Ecotourism Strategy (NES) and Action Plan 2013-2022, the potential market for Philippine ecotourism ranges from 1.2 million to 14.2 million tourists.

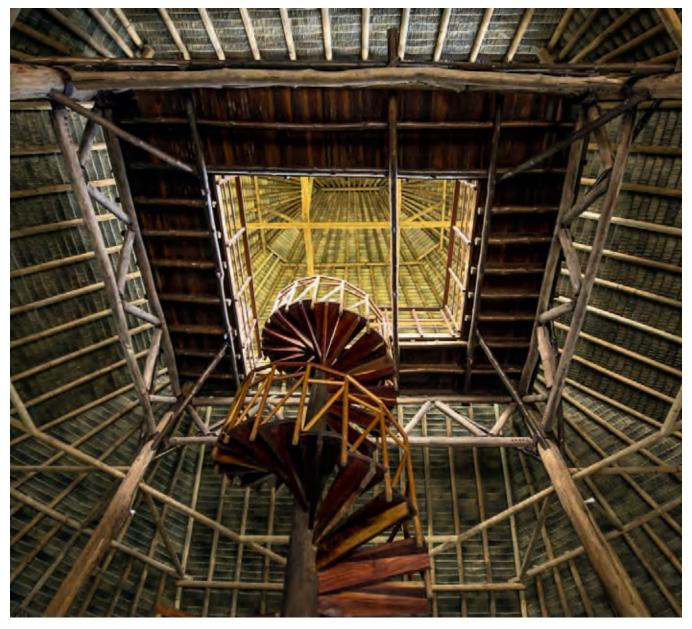
Despite its growing popularity, ecotourism Adventure Tourism includes at least two of the following three elements: physical activity, natural environment and cultural immersion. (Adventure Travel Trade Association as cited by United Nations World Tourism Organization, Global Report on Adventure Tourism)

Sports Tourism includes travel away from one's primary residence to participate in a sport activity for recreation or competition, travel to observe sport at the grassroots or elite level, and travel to visit a sport attraction such as a sports hall of fame or water park (Gibson. Attle, and Yiannakis, 1997 as cited in Sport and Adventure Tourism by Simon Hudson)

VolunTourism is a seamlessly integrated combination of voluntary service to a destination along with the best, traditional elements of travelarts, culture, geography, history and recreation in that destination (www. responsibletravelreport.com)



remains one of the least understood concepts of tourism. It is defined by the International Ecotourism Society as responsible travel to areas that conserves the environment and improves the well-being of local people. For better understanding, it might be useful to examine not only what ecotourism is, but also what it is not. According to Hitesh Mehta, a landscape architect recognized by National Geographic as one of five pioneers of sustainable tourism in the world, ecotourism is often confused with nature tourism. Nature tourism means all tourism dependent on natural resources. This rather simplistic definition is easily distorted to the detriment of nature itself.



According to Mehta, the Lapa Rios Ecolodge is one of the few in the world that met 10 out of 11 principles of authentic ecolodges. So far, no ecolodge has met all the criteria. The only principle that Lapa Rios wasn't able to achieve was the involvement of the local community in the initial planning stages. (Image courtesy of Lapa Rios Ecolodge) Below: Finca Exotica Ecolodge in Costa Rica features thatched cabins in a tropical garden. (Image courtesy of Finca Exotica Ecolodge)



Technically, riding a smokebelching tourist bus to a natural park can be considered nature tourism. So can recreational hunting and fishing. Or driving motorbikes and airboats that disturb surrounding wildlife. All of which defeat the idea of ecological conservation.

Ecotourism, therefore, is non-consumptive and nonextractive. Furthermore, it should not cause behavioral impacts on or affect the emotional well-being of wildlife

and other non-human species in the area. There is a significant body of published literature confirming that animals suffer life-long psychological impacts from death of family members due to hunting.

What is an authentic ecolodge?

Ecotourism poses exciting prospects as well as challenges for the architecture industry as it calls for a specialized and inclusive approach in planning

"TOURISM IS ONE OF THE BEST WAYS TO EDUCATE THE PUBLIC ABOUT ECOLOGY." - HITESH MEHTA

WHAT IS AN AUTHENTIC ECOLODGE?

The deceptive business practice of greenwashing—that is, portraying an organization's corporate practices and products as eco-friendly without them actually benefitting the environment—is rampant in the tourism industry. In 1999, Hitesh Mehta wrote the following 10 principles that separate ecolodges from traditional hotels.

An authentic ecolodde must:

- **1.** Help in the conservation of the surrounding flora and fauna
- **2.** Have minimal impact on the natural surroundings during construction
- 3. Fit into its specific physical and cultural contexts through careful attention to form, landscaping and color, as well as the use of vernacular architecture
- **4.** Use alternative, sustainable means of water acquisition and reduces water consumption
- **5.** Provide for careful handling and disposal of solid waste
- **6.** Meet its energy needs through passive design and renewable energy sources
- 7. Use traditional building technology and materials wherever possible and combine these with their modern counterparts for greater sustainability
- **8.** Endeavor to work together with the local community, and involve them in the initial planning stages
- **9.** Offer interpretive programs to educate both its employees and tourists about the surrounding natural and cultural environments
- **10.** Contribute to sustainable local development through education programs and research

In 2002, Mehta developed a definitive criteria system based on these principles. An authentic ecolodge must satisfy the three basic principles of nature protection, local community benefits, and offering of interpretative programs. In addition to the three, an ecolodge had to satisfy at least two more principles to deserve the name.



and design to provide guests with lodging facilities that integrate well with fragile ecosystems. This is precisely the concept of the ecolodge.

"The ecolodge is the heart of ecotourism," says former tourism secretary Mina Gabor, one of the organizers of the recently concluded Ecolodge Planning Workshop and Design Charette with Mehta as the speaker. An ecolodge is a 5 to 75-room low-impact, nature-based, financially sustainable accommodation facility that helps protect sensitive neighboring areas; involves and helps benefit local communities; offers tourists an interpretative and participatory experience; provides a spiritual communion with nature and culture; and is planned, designed, constructed and operates in an environmentally and socially sensitive manner.

By this definition, there is clearly more to an ecolodge than just lodging.

Basically, part of the guests' fees goes to the conservation fund and the improvement projects of the local community. At the grassroots level, ecolodges also provide local employment and deliver a competitive advantage for small enterprises wanting to venture into the tourism business.

Interpretative experience

But what really sets the ecolodge apart from traditional hotels, aside from the environmental and local community benefits, is the high level of interpretation it offers. Interpretation is an educational activity that aims to reveal meanings and relationships through the use of original objects, by first-hand experience, and by illustrative media, rather than simply to communicate factual information (Tilden, 1977). Interpretative experience is the main product of ecotourism and the ecolodge enhances this. Savs Mehta: "Tourism is one of the best ways to educate the public

about ecology." By providing physical spaces and activities that promote responsible tourism, ecolodges educate travelers, including the ecolodge staff themselves, on the relevance of environmental conservation in property development.

Participatory planning

However, ecotourism planning is a distinct specialty that usually falls outside the training of an architect. It requires a bottom-up approach where the involvement of allied professionals like landscape architects, community leaders, and other stakeholders from the earliest stages of the project development process is crucial. There is tremendous amount of knowledge that these people can bring to the table to help the architect understand the local landscape and culture. As Mehta reasons, "you cannot protect what you cannot understand."

Take the Kapawi Ecolodge in Ecuador, for example. The developer partnered with the native Achuar tribe to build an ecolodge on the land owned by Achuar Indians.

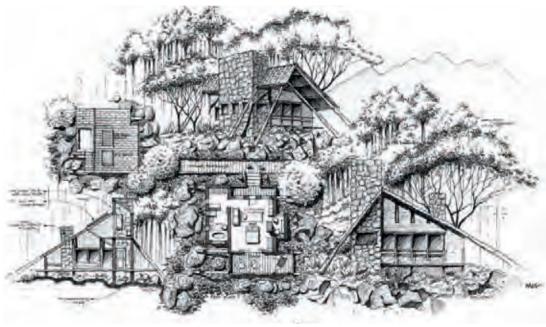


Using peg construction methodology, not a single nail was used in building the Buddhist Temple-inspired main lodge of the Three Camel Lodge. Featuring traditional Mongolian *gers* or felt-covered tents, this ecolodge was named by National Geographic Traveler as one of the World's Best Ecolodges in 2013. (Image courtesy of Nomadic Expeditions)

The tribe's knowledge of the site was instrumental in drafting the official maps used as the basis for the site plan. In 2011, the ecolodge was turned over to the Achuar people who are now operating the business on their own.

Setting before structure

An authentic ecolodge is more about the setting than it is about the structure itself. It derives its value from the biodiversity that thrives in the area that is not threatened by overdevelopment and crowding. Maintaining such biodiversity also means integrating with the surrounding landscape and avoiding the introduction of exotic plant species which affects ecological balance. (This issue is discussed in the article, Extinction Crisis, on pages 46-51). This is why Mehta advocates that planning for ecolodges begin first and foremost with a metaphysical analysis of



the site. Where the concept of holism engages the five senses, metaphysical site analysis involves six—sight, hearing, touch, smell, taste and *feeling*. This allows the designers a few days to "feel" the site and be "one" with the site before conducting the more objective process

Bound by DR Congo, Rwanda and Uganda, the Virunga Massif is home to half of the world's mountain gorilla population. It is a conflict area but the three countries pledged to work together to promote ecotourism as a means to lasting peace and stability in the area. The Sabyinyo Ecolodge is one of the ecolodges in the Virunga Massif that provides livelihood to local people. (Image courtesy of Hitesh Mehta)

COMMUNICATION VS. INTERPRETATION

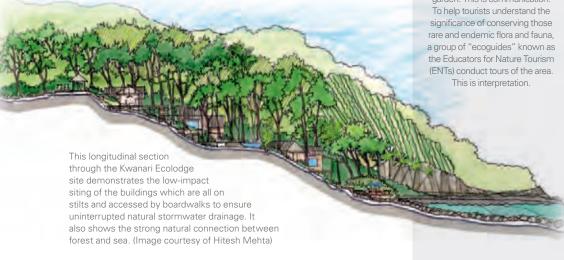
Dr. Roberto Cereno of the UP Los Baños College of Forestry & Natural Resources made a distinction between communication and interpretation. Communication simply means providing information, facts and figures, while interpretation means providing meanings. The Makiling Botanic Gardens at the northeastern slope of Mount Makiling, for example, offers both communication and interpretation. Informational boards are posted along the site's "ecotrail" providing data and facts about the animals and plants in the garden. This is communication. To help tourists understand the significance of conserving those rare and endemic flora and fauna. (ENTs) conduct tours of the area. This is interpretation.

of physical site analysis and data collection. On day three of the ecolodge planning workshop, Mehta had the participants experience the metaphysical exercise for themselves, bringing them to a garden property in the hills of Antipolo, for which they would be tasked to design an eco-friendly resort and event space. Everyone who went through the exercise said that it brought an added dimension to the design process that was to come. (Excerpts from the participants' metaphysical site analyses on pages 40-44)

Continuity of the vernacular

The architecture and construction of ecolodges uses locally sourced materials and labor, and adheres to the concept of continuity of the vernacular. This should not be construed as propagating replications. On the contrary, as seen in the examples presented by Mehta during the workshop, the International Ecotourism Society rejects designs that are homogenous, derivative and arbitrary.

AN AUTHENTIC ECOLODGE IS MORE ABOUT THE SETTING THAN IT IS ABOUT THE STRUCTURE ITSELF.



SAMPLE SITE PLANS



Eco-psychology Analysis: Planning for the Kwanari Ecolodge is based on the concepts of eco-psychology and deep ecology. An eco-psychologist was hired to conduct eco-psychology workshops to help the client and consultants become "one" with the site and understand the interdependence of humans and natural elements. "We want to connect people with all the things that they do that's affecting nature," says Mehta.

Since it was mentioned that the ecolodge is more about the site than the structure, then it just follows that the structure itself should be anchored on the local aesthetic language, blend with the physical and cultural context of the site, and contribute in developing a sense of place for the site.

Moreover, continuity of the vernacular goes beyond the skin. It encompasses the use of passive design strategies characteristic of vernacular architecture. That means using eco-friendly materials and sustainable construction methodologies to build spaces that are sensitive to climate, and comfortable even without mechanical ventilation. But more than that, ecolodges must also observe proper water and waste management as most of them are located away from sources of water or within delicate bodies of water.

Not just a building

By now it may be gleaned that an ecolodge is not just a building but also an economic model. It introduces a new and alternative economy in natural areas to take the place of possible unsustainable enterprises like logging or mining. But could ecolodges generate revenue and add value to businesses? Yes, according to Mehta. The market for ecolodges caters primarily to college graduates between 35-54 years old (the age is dropping now), and willing to spend more than traditional tourists but at the same time are more demanding. And they comprise over 82% of the ecotourism demographics! Moreover, while the concept of ecolodges is geared towards the environment and community, these highly educated tourists enjoy the spillover effects of getting closer to the area's biodiversity, and interacting with local communities.

Though skeptics often argue that the initial investment in building ecolodges cost more than that of conventional hotels, recent studies show that if green building strategies are incorporated from concept to operation—as they should be then an ecolodge would actually generate significant savings in

the long term due to efficient performance.

Come to think of it, traditional hotels are banking on the surrounding natural environment to attract guests and customers. However, through unsustainable practices, these establishments soon destroy the very environment that tourists—their clients have travelled long distances to enjoy. The economic question, therefore, is not whether we can afford to do ecolodges but, rather, whether we can afford not to.

Ecolodge as a commitment

Quoting the International Ecolodge Guidelines, a book he co-authored and edited, Hitesh Mehta said, "I wish every single building was an ecolodge or was designed or planned like an ecolodge because it's such a holistic and win-win approach in design. You're thinking about nature, you're thinking about local people, and you're thinking about your clients—everything!"

The concept of the ecolodge is relatively new in the Philippines and much remains to be done to promote this ideology. "We are not vet measuring our success milestones. We are still developing awareness," says Gabor. If that's the case, then the recent Ecolodge Planning Workshop and Design Charette is a major headway.

Asked about their takeaways, a group of participants eloquently said: "The ecolodge is a commitment, a decision, and a mindset for all." Statements like this all the more motivate Mehta to continue this advocacy despite the gargantuan tasks ahead of him. "I'm here on this planet. I want to be useful. I want to make a difference. I want to be the change that Gandhi said I want to see in the world." ■

