

Architecture is an extension of the natural environment

By  Sindy Peters

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After being named a regional winner in the 30th Corobrik Architectural Awards, Jean-Pierre Desvaux De Marigny from the University of KwaZulu-Natal went on to scoop the top prize in the national competition. His winning thesis, titled *Design for [bio] diversity*, explores the role of architecture in ecological conservation, proposing an environmental awareness and water research facility within the Springfield industrial park/ uMgeni River catchment area in Durban.

We interviewed De Marigny to find out more about his design, as well as the potential of architecture and urban design in the shift toward sustainable development.



Jean-Pierre Desvaux De Marigny

📌 Congratulations on winning first prize at the 30th Corobrik Architectural Awards! What does it mean to you?

Being awarded the opportunity to firstly take part in the 30th Corobrik Architectural Awards after winning the regional awards is by far an honour in itself. Then being announced as the top architectural student in South Africa and receiving the most prestigious award one can receive at a Masters level is truly an incredible feeling and I am humbled to be able to hold the title high as I continue my journey as an architect.

📌 What do you think set your entry apart from that of the rest of the competition?

I think it was a combination of both a topic which is extremely relevant at the moment, particularly as our world currently faces various environmental challenges, and also something that hasn't been done before, further indicating the potential of how through design intervention, we as architects can make and have a responsibility to make a major difference in this world.

📌 Tell us more about your design

My research and proposed intervention focused on the lower uMgeni river, viewing it as one of Durban's major life sources, currently in desperate need of ecological support, as it runs pass many communities that lack clean water and can't utilise the watercourse as it is so heavily polluted. This, in addition, is also beginning to cause many knock-on effects such as lack

of nutrition and food, increasing deaths of aquatic species and birds, as well as a lack of tourism and investment interest in these areas due to the vast amounts of waste being washed downstream on a daily basis.

As a result, this research problem generated a proposed architectural solution that was located downstream of the Springfield industrial park, that aimed to draw an analogy between the machine-dominated environment that exists and the natural ecosystems found within the uMgeni river.

Conceptually the design took the stance of 'viewing architecture as similar to that of a mechanical prosthetic device, so that the architecture (industrial machine) could begin to act as rather a natural life support system in the context in which it exists (ecology)', evolving into a multi-programmed hydrological awareness and water research facility that straddles the affected watercourse.

Attaching to an existing 440m-long pedestrian walkway bridge spanning the width of the river, the facility hosts minimal ecological footprint, in addition to providing direct access to the water body to ecologically filter both surface and subsurface water pollutants as they pass below. This is achieved through utilising both applied technological solutions, as well as integrated ecological living processes that take advantage of renewable energies for power, as well as support indigenous aquarian species that are able to purify water clean enough for consumption and rehabilitative purposes.



Jean-Pierre Desuaux De Marginy holding a model of his winning design with Allin Dangers (left) director of sales, KZN & Border and Lawrence Ogunsanya (right), head of the Department of Architecture at UKZN

Overall, the architecture aims to exist as merely a self-sustainable framework that actively expresses how the built environment is able to support the natural in a rather systematic and cyclical manner, further seeking to transform the idea of 'waste' (physical and metaphysical) into rather 'nutrients' for regenerative growth, as in addition to enabling a space for continued water research, the facility is able to provide the public with fresh fish, fertilisers, biogas, plants, vegetables and

clean water, all of which are by-products of so called 'waste'.

▀ ***Why did you choose a career in architecture?***

As a former pupil of Assagay's Roseway Waldorf School I was always 'alternatively creative' while developing a love and appreciation for the world and although I didn't initially know what path I wanted to follow, I knew it would be something within the creative field. I applied for various different courses but never felt the urge or calling to enrol into any, until I was accepted into architecture. At that point, I had no idea what the journey entailed, all I can remember is that something just felt so right.

So I guess it comes down to not only a personal appreciation for the beauty and perfection of the natural world, but more so a passion for creativity fused with a moral obligation towards environmental and social improvement.

▀ ***What are some of the challenges young people face in the architecture industry?***

I would say due to the vast amount of students that graduate every year, it is often hard for newly qualified architects to find their feet and build a reputation and often takes a few years before they are able to find their niche and are entirely recognised within the profession.

▀ ***What does the future of architecture look like - what are some of the current trends defining the field?***

Architecture has always relied heavily on many influences – the most predominant being economic and political, however today there is a heightened interest and awareness towards the environmental impacts our world currently faces and as a result there is a fast-paced movement towards developing solutions that deal with these issues.

During the past decade we have seen many environmental trends come and go, but I believe if we as 21st century architects are to truly make a difference for the future of our society, we will have to become pioneers of both the environmental and technological advances of our era, to not only change the way our built environment interacts with the natural world, but rather how we as human beings interact with the natural world.

▀ ***How big a role does architecture and urban design play in the shift toward sustainable development?***

I believe architecture can truly bring about change, not only in terms of environmental change, but also towards changing the public's perception of how what we create plays a major role in either enhancing or degrading our abilities as humans to coexist in harmony with the natural environment.

As a result the built environment statistically has proven to play the biggest role towards sustaining the human species, however it is not currently achieving this and if architecture does not adapt to the needs of the environment, the future of our planet will remain slim.

In addition, I strongly feel that there is a huge amount still to be done, specifically with regard to developing the perception the public hold towards viewing architecture as rather an extension of the natural environment and not something that blocks it out. Further acknowledging that these two elements (architecture and nature) need to be understood as rather integral and inseparable from one another, acting as the main interface between how we as humans connect with our surrounding environment.

▀ ***As a young South African, what, in your opinion, is the significance of Youth Month in 2017?***

I feel Youth Month 2017 plays a major role towards not only recognising the potential that our country holds but also gives us as young South Africans a stepping stone towards achieving our dreams moving forward and instils the confidence in us to do so, knowing that our country has faith in the next generation.

▀ ***Words you live by?***

“Always trust the path that leads you.”

ABOUT SINDY PETERS

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