

FIELDWORK

PRIORITIZING ACCOUNTABILITY IN ARCHITECTURAL EDUCATION: TWO CASE STUDIES FROM DESIGNBUILDBLUFF

ERIC BLYTH, MATTHEW CRANNEY, SHAY MYERS, JULIA WARNER

FROM POSTCOLONIAL CRITIQUES TO ARCHITECTURAL POSTCOLONIAL CONSCIOUSNESS

SÉVERINE ROUSSEL, PHILIPPE ZOURGANE



Eric Blyth is a multi-disciplinary designer currently based in Cincinnati. He holds a BS in Architecture from the University of Cincinnati, and an MS in Architecture from the University of Utah His recent work centers around an examination of the social political, environmental, and economic systems that make up the built environment and how to employ design thinking/practice as a tool for social good. Combining this mentality with a passion for building, Eric seeks to create beautiful spaces, objects, and experiences for the masses alongside his strange and talented friends.



Matthew Cranney is a designer and builder in Denver, CO. He holds a certificate in Public Interest Design Build from the University of Utah and an MS in Ecological Design from the Conway School of Landscape Design. His work focuses on addressing issues of social equity in the built environment and climate change adaptation and mitigation.



completing the M. Arch program in 2019. He received a degree in architecture from the University of Cincinnati where he worked on several design-build and fabrication projects. He managed the rammed earth construction for the DesignBuildBluff project of Spring 2018 called Fire Mesa and he continues work in rammed earth construction with Rammed Earth Wall Builders of Park City UT.



Julia Warner is an interdisciplinary artist and designer, with an interest in collaborative print and community shops as a place to share ideas and creative solutions. She graduated from UC Santa Cruz with Bachelors of Fine Arts and holds a Masters in Graphic Design from Otis College of Design. She is the co-founder and design editor of Materialist Press, an independent publisher that prints hybrid works. With experience in printing, woodworking, and farming, she enjoys doing things by hand, outside, or in a room with large windows.



Séverine Roussel, since 2010 has served as an assistant professor at the Faculty of Architecture of Paris La Villette (ENSAPLV). Prior to this appointment, she was an assistant professor at the Faculty of Architecture of Normandy (ENSAN) (2005—2010). At ENSAN, she chaired the pedagogy and research committee and coordinated the school's pedagogical program, a role that involved organizing material for periodic review by the Ministry of Culture. At ENSAPLV Roussel is founder and director of the Masters 1 architectural design program, "Architecture and Natural Hazards: Coastal Territories." She also heads the diploma unit on Architecture and Landscape. In 2009, she was appointed to the national committee—organized by the French Ministry of Culture—responsible for selecting assistan professors for schools of architecture in the field of Theory and Practice of Architecture and Urban Design. Since 1998, she has led the architectural office Roz0 architecture paysage environnement with co-founder Philippe Zourgane, where she serves as principal of project design. She teaches and practices in France and on the



Philippe Zourgane, Ph.D., since 2008 has served as an assistant professor at the Faculty of Architecture of Paris Val de Seine (ENSAPVS). Since 2015, he has been co-directing a post-masters group (DPEA) within the Architecture Milieu Paysage Laboratory at the Faculty of Architecture of Paris La Villette (ENSA PLV). He obtained his Doctorate in Architecture under the supervision of Avery Gordon and Eyal Weizman at the Centre for Research Architecture, Goldsmith College—University of London with a dissertation titled, "Architectural Free Zone: Reunion Island and the Politics of Vegetation" (2013). He has since developed the concept of "vegetation as a political agent" in various publications, conferences, and in the collective exhibition Vegetation as a Political Agent, PAV at the Parco d'Arte Vivente in Torino, Italy (2014). Since 1998, he has led the architectural office RozO architecture paysage environnement with co-founder Séverine Roussel, where he serves as principal of project design. He teaches and practices in France and on the island of Polymon and in Italy.

PRIORITIZING ACCOUNTABILITY IN ARCHITECTURAL **EDUCATION: TWO CASE STUDIES FROM DESIGNBUILDBLUFF**

MATTHEW CRANNEY, JULIA WARNER, SHAY MYERS, ERIC BLYTH

ABSTRACT

The common perception of the architecture industry remains dominated by the ideology of "architect as auteur." It is reinforced by ubiquitous, striking visual representations that most often define global practice. Memorialized in glossy photographs and renderings, the heavyweights of our built environment stand out as monuments, as if defying time. While much of the professional and academic institutions of architecture continue the longstanding pursuit of the monument, the tradition of Public Interest Design (PID) celebrates a messier process, namely the embrace of a mosaic. PID elevates not objects in space but people occupying space, the relationships they create, and the way they create them. Public interest stands above the monumental space producing architecture of temporality, event, contingency, chance, and dynamic movement.

DesignBuildBLUFF, the University of Utah's graduate Design/Build program, seems to have planted itself squarely in between what we call the mosaic and the monument. It is housed in the School of Architecture, offering the opportunity for first-year Masters in Architecture students to spend a year working with a client to design and build a project. After the first semester designing and developing construction documents, the class moves more than 300 miles south to Bluff, Utah where they spend a second semester building the project as a team. The program was founded in 2000 by Hank Louis as an elective for students to get hands-on experience building their own designs in a place where building codes are much less restrictive (Navajo Nation). Formally integrated into the university's academic structure in 2013, the typical outcome of each program year is a newly built home for a family in need, designed and constructed by the students themselves.

The Little Water House (2013) highlights the concept of aging in place. Lone Tree (2017) in partnership with Dennehotso Chapter has become the first recognized sweat equity project in Navajo Nation. Cedar Hall (2016) and Fire Mesa (2018) both serve as community spaces in the town of Bluff, Utah. Together, these projects synthesize a new path forward in the practice of Public Interest Design/Build. As four recent graduates of the program, we reflect on our experiences in two completed projects, consider the conflicting goals and limitations that drove our work, and offer strategies toward a better practice of Public Interest Design/ Build.

PUBLIC INTEREST DESIGN/BUILD

DesignBuildBLUFF is a self-styled Public Interest Design/Build (PIDB) program, integrating the pedagogical approaches of both Design/Build and PID. Students in a Design/Build program are responsible for designing and constructing a project. The process of building gives designers a visceral, tactile understanding of their creation. It provides an opportunity to iterate and adapt their designs as problems arise, and leads to a more informed designer. With the increasing digitization of the design process, there is knowledge to be gained from dealing with the physical constraints of the construction process. Design/Build forces students to be accountable to physical reality, and to work within the constraints of project completion on time and within budget.

Many contemporary academic Design/Build programs have a service component—projects built for non-profits or for disadvantaged clients who would otherwise be unable to afford design services. However, not all of these projects should be considered PID endeavors. We believe that adherence to the five tenets of PID, as defined by Abendroth and Bell, are appropriate criteria for designating work as PID:

- 1. Advocate with those who have a limited voice in public life.
- 2. Build structures for inclusion that engage stakeholders and allow communities to make decisions.
- 3. Promote social equality through discourse that reflects a range of values and social identities.
- 4. Generate ideas that grow from place and build local capacity.
- 5. Design to help conserve resources and minimize waste.1

Whereas Design/Build forces designers to be accountable to the physical constraints of reality, PID asks designers to be accountable to the social context within which they work. It shifts the designer's role from that of a lone author to that of a facilitator. By adhering to these tenets, a designer will avoid imposing his or her will onto a community. Designers must grapple with their social positions in relation to their clients and other community stakeholders, assess the position of stakeholders in relation to each other, and act in a way that is equitable in the face of structural power imbalances. It is entirely possible for an altruistic, service-based Design/Build project to presuppose a built solution to a community's problem without doing any community engagement work. It is also entirely possible that a successful PID project might conclude that the solution to a community problem is not a built solution, but rather a social or programmatic solution.

So much of architectural education is focused on the production of monuments, singular breathtaking works. The monument is most frequently celebrated by stylized documentation, removed from time, captured in a triumphant moment. And while the monument has its rightful place, we believe the PID process trains architects to be mosaic makers, to see their projects as nodes within an existing sociocultural and physical mesh, and that it is this greater context that can elevate even the most humble projects into great works.

The beauty and power of a successful mosaic is activated through use, and is best observed temporally.

> When the maker's (or fixer's) activity is immediately situated within a community of use, it can be enlivened by this kind of direct perception. Then the social character of his work isn't separate from its internal or "engineering" standards; the work is improved through relationships with others. It may even be the case that what those standards are, what perfection consists of, is something that comes to light only through these iterated exchanges with others who use the product, as well as other craftsmen in the same trade. Through work that had this social character, some shared conception of the good is lit up, and becomes concrete.2

We believe that integrating Design/Build into a PID process is uniquely powerful. As Crawford elucidates, a maker's work is enhanced by iterative exchange with a community of users. Design/Build work benefits from embracing its social context, and simultaneously, PID work is enhanced by being grounded in the tangible. The relationships developed in a community-engaged design process are deepened through the physical process of making, as our case studies demonstrate. DesignBuildBLUFF (DBB) is doing the difficult work of training mosaic makers, and while it has achieved a good deal of success, it faces challenges in fully embracing a PID process.

CASE STUDIES

Unlike most academic Design/Build programs, DBB's positioning between Design/Build and PID pedagogies affords students the unique opportunity to create and improve spaces in relationship with a community of users. The program's most recent projects (Lone Tree and Fire Mesa) illustrate that while Design/ Build pedagogy is both complicated and improved by a more holistic PID framework, the strict practicalities of an academic setting can restrict students' ability to engage meaningfully in those wider frameworks.



Figure 1: Lone Tree, completed by DesignBuildBLUFF students in the Spring of 2017. Courtesy: DesignBuildBLUFF.

Lone Tree

In 2017, a grassroots tribal organization called Dennehotso Sweat Equity Project (DSEP) solicited DBB to design and build a prototype house that would address the dire need for culturally appropriate, affordable housing within the Dennehotso Chapter of Navajo Nation. The project was introduced as an opportunity to create an impact through capacity building and sweat equity, with the potential for the resulting house to become a prototype for future affordable housing development in the region (Figure 1). If the design was suitable and within the given budget, the DSEP project director hoped to build at least eight more houses the following year.

The inner workings of DSEP remained fairly concealed from students. Little was known about the political climate, level of community buy-in, source of funding, or long-term viability of the program. These elements are understandably complex, and given the restricted parameters of a two-semester course (a recurring theme), students were kept at a distance from this level of engagement. Instead, we were directed to focus on a goal within reach: a single home designed for flexibility of use and ease of construction, with special attention paid to cultural appropriateness and opportunities for expansion.

As part of the design semester curriculum, an ancillary lecture course provided the conceptual framework and tools with which to assess and evaluate our design decisions in a holistic way. The syllabus explored sources such as Public Interest Design Guidebook³ and the online SEED Evaluator, 4 and exposed the downfalls of service-oriented design approaches that had come before us, the dangers of the white savior complex, the importance of community engagement, and the value of recognizing privilege.

In the safe confines of the studio, we considered infrastructural strategies of increasing economic accessibility, reducing environmental footprint, enabling job training, and instilling social support networks. Those elements within our reach, like incorporating natural materials or designing for

expansion, were addressed with some success. However, the infrastructural components remained aspirational under the semester's constraints, and we felt ourselves sliding into the now-familiar traps of service projects that came before us.

The client's budget restrictions could have been viewed as the project's greatest PID opportunity. Historically, DBB's annual project budget is \$50K (\$25K in cash funds, and approximately \$25K from in-kind donations including building materials, appliances, and fixtures), while DSEP had budgeted only \$15K per house (Figure 2). This money could have been spent a multitude of ways to further the long-term goals of the client: proving (or disproving) the concept of a \$15K house, constructing three houses instead of one, or investing funds into expanding the DSEP infrastructure by purchasing tools, covering overhead, or creating and funding necessary positions. All were valid ideas until the realities of the academic calendar set in. Halfway through the build, the team received word that the

LONE TREE BUDGET ANALYSIS

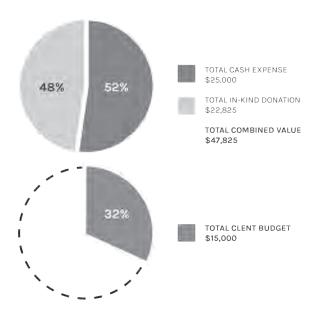


Figure 2: With nearly \$50,000 available through cash and donations, DBB students built a prototype that cost more than three times the budget defined by the Dennehotso Sweat Equity Program for future homes. Courtesy: Authors.

director of DSEP had been laid off, and the program beyond this house had been put on hold indefinitely.

Fire Mesa

Fire Mesa, the most public DBB project to date, did not have the well-defined parameters of a family home. In 2018, the Bluff Service Association (BSA), who operate the Bluff Community Center, saw a community kitchen as the first step toward transforming the Center's expansive lot into a park with recreation for all: sports and games for children from the elementary school, and walking paths and fitness equipment for the town's adults. The project brief for the design studio outlined a rentable cooking pavilion adjacent to the community center integrated into a schematic master plan for the entire site. The specifics were to be informed by conversations with BSA and community members. A series of public workshops and frequent studio discussions did not bring a consensus among the student cohort over key questions: what are we designing and who are we designing for?

Lacking clarity, four student teams proposed schematic designs, each addressing the criteria in different ways, and a design with a fifty-foot-long outdoor grill was the winner of a vote among the client, DBB faculty, and students. While it reduced the enclosed rentable kitchen space in favor of an outdoor grill, the winning proposal was the most conceptually clear, although arguably at the expense of responding to the site, program, and community input. The proposal envisioned two rammed earth walls of the kitchen, forming an L in plan and visible upon approaching the site; a grilling surface large enough for multiple families to use at once, also in rammed earth; and a canopy floating over slender columns to cover the grill and small accessory kitchen.

Fire Mesa, from the start, was monumental. It was based upon a simple floor plan and conceptual physical model (Figure 3). The incorporation of rammed earth, while aesthetically stunning, also introduced an immense technical challenge. As the selected design was developed, conversations about overall site strategy and master plan concept fell off as major changes were required to bring the initial proposal within the available budget. While attempts to glean a common



Figure 3: Scale model from the original Fire Mesa proposal, as presented to the clients, students, and faculty during the design semester. Courtesy: Authors.

vision from community members about the project were inadequate, and challenges in coordinating the construction process were discouraging, it was finally through the most daunting period of the build that we experienced buy-in from members of the community. Offering encouragement and support, many of them donned hard hats and grabbed shovels to move the many tons of dirt it took to build more than 600 cubic feet of rammed earth.

Laboring side-by-side with our neighbors in Bluff, and welcoming many others to see the earth-building process up close, proved to be the most formative period of developing community relationships. Without staging charrettes and workshops to hone in on a collective vision as we had attempted throughout the design process, we were finally able to see a community engaging in the building process as they found value in the project. As Crawford alludes to in *Shop Class as Soul Craft*, 5 it is not until the maker and user are situated in place together that perfection can be conceived.

In retrospect, the most collaborative experience of the project—one full of uncertainty, doubt and improvisation—was entirely circumstantial. Fire Mesa was the only one of four proposed designs to include rammed earth, and it seems unlikely that the project would have attracted as much interest from locals and passersby had it not been for the noisy process which produced the striking red walls (Figure 4). This element of happenstance begs the question of replicability. If Design/Build pedagogy is destined to churn out monuments, as DBB has in the past, perhaps there is a way to inject these vital moments of collaboration and community engagement into the construction process as an alternative to putting all the pressure on the design process.

LESSONS LEARNED / LOOKING FORWARD

DBB is constrained by incentives that favor monument-making, along with the continuity of timeintensive relationships required to create productive, community-engaged processes for building "structures



Figure 4: Fire Mesa, completed by DesignBuildBLUFF students in the Spring of 2018. Courtesy: DesignBuildBLUFF.

of inclusion." We suggest several strategies for addressing these constraints, broadly categorized as shifting a culture of appreciation, and expanding opportunities for engagement. These strategies are not only applicable to the situations in which DBB finds itself, but to the emergent field of PIDB at large.

Shifting a Culture of Appreciation

DBB, like most organizations of its kind, is held to the standards of their governing institution and the sources of capital that make the work possible. With these two bodies at the helm, any shift in direction must prove its value. Generally, the simplest way to communicate the value of architectural work from afar is through visual documentation, and as students we were often reminded of the weight held by staged photos of our completed project. These images become the most powerful representation of our efforts for our individual portfolios, but are also invaluable to the school. They attract prospective students, increase admissions competition, heighten quality of student output, and

ultimately enable improvement via capital acquisition from tuition and donations alike. It is not a selfish endeavor, it is a necessary one. But what happens when there are no settings to stage? What happens when it is a mosaic-in-the-making, an infrastructure and not a structure? Will it be valued in the same way? Will it be enough to continue attracting new students and funders?

In the case of Lone Tree, a beautiful set of photographs now memorializes our efforts on the DBB website. accompanied by text with no mention of the infrastructure necessary to implement all of our innovative ideas. We are instead left with a laundry list of our triumphs and one optimistic nugget: "It is hoped that the plans and principles set forth by this prototype will create a lasting legacy." With great intentions, we delivered yet another monument for the catalog: a thoughtful, beautiful home completed on time and within an understood budget—a wise contingency plan, in retrospect, when the bigger picture fell away. But if the financial foundation and

the academy it serves are only structured to value the monumental—Lone Tree will always be seen solely as a success—then the program will be forever limited in its scope. Any alternative path has to start at the top, with a shift toward valuing the mosaic just as much as the monument.

Expanding Opportunities for Engagement

Alongside a value shift, DBB needs to address the breadth of opportunities it has created for its students and clients on the ground level. Considering the last three projects had the potential to be yearslong engagements, the program's ability to foster successful extensive relationships with the rural and tribal communities in the months and years that surround its work should be examined.

As it currently stands, there is little room for overlap between project teams from class to class, with few opportunities to meaningfully engage with past students' successes and failures. Although this may require a deeper level of documentation in some ways, it is possible that simply facilitating an overlap between classes would help to grow this institutional memory. A record of missteps and challenges faced by previous classes, along with an inventory of successful strategies is important to building knowledge. An "onthe-ground" manual of best practices will create the desired communication between different classes.

Similarly, this knowledge transfer is advantageous in building and maintaining client relationships and the strategies for community engagement. If the program is truly moving away from one-off single family homes and toward community-centered projects, it has an obligation to cultivate relationships with organizations such as DSEP or BSA. The maintenance of these relationships is certainly not a straightforward process, but exposure to that messy process is arguably one of DBB's greatest assets as an academic program. It is through these communications that the groundwork of PID work is laid, and this is a facet of the program that students should be able to take advantage of.

That the program is within the School of Architecture, it is beholden to the curriculum requirements of an accredited graduate degree. With all the restrictions

that this imposes, there are also opportunities for new roles to be created within or in collaboration with the program that can fulfill the needs of the project type. If anything, PIDB work should be an embrace of interdisciplinary collaboration, and DBB is poised to take advantage of its well-renowned partners in planning and multi-disciplinary design schools within the College of Architecture and Planning.

The "fundamental pedagogic ambition of Bluff [is] to raise technê (making) to the status of episteme (knowing) ... keep[ing] in check, the academic preference that has grown throughout the twentieth century, for the conceptual over the practical."6 DBB has expanded this ambition, consciously moving towards an emergent PIDB practice. While students have been made aware of the need for a social technê to complement the physical, it has proven an elusive goal in need of continual reinvention. However, a concerted effort to measure and evaluate these social parameters can give this conversation a shared language for determining what success looks like. It is in this vein that we hope DBB and its peers will continue to push down the PIDB path, serving as necessary conduits to a new practice: one that interrogates the role of the architect in solving the great problems of our generation, and elevates the mosaic as an equal to the monument.

ENDNOTES

- 1. Lisa M. Abendroth and Bryan Bell, editors, Public Interest Design Practice Guidebook: SEED Methodology, Case Studies, and Critical Issues (Routledge Taylor & Francis Group, 2016).
- 2. Matthew B. Crawford, Shop Class as Soulcraft (Penguin Press, 2009).
- 3. Lisa M. Abendroth and Bryan Bell, editors. Public Interest Design Practice Guidebook: SEED Methodology, Case Studies, and Critical Issues (Routledge Taylor & Francis Group, 2016).
- 4. "SEED Evaluator 4.0." SEED Network, http://www.seednetwork.org/seedevaluator-4-0/. (Accessed Dec. 3, 2018).
- 5. Matthew B. Crawford, Shop Class as Soulcraft (Penguin Press, 2009).
- 6. Jose Galarza and Shundana Yusaf. "Taking the Pulse of Bluff." Dialectic, 2015, pp. 73-79.

FROM POSTCOLONIAL CRITIQUES TO ARCHITECTURAL POSTCOLONIAL CONSCIOUSNESS

SÉVERINE ROUSSEL, PHILIPPE ZOURGANE

ABSTRACT

We present interconnections between post-colonial conditions and architecture pedagogy through specific workshops we conducted in Reunion Island, in the Indian Ocean. These workshops addressed the following questions: Can we develop an architecture pedagogy that develops singularity? Can we take advantage of multiculturalism to engage singularity and speak of creolization processes in architecture? How can we create a new culture, one not given by the global market but instead developed through sharing experiences, common stories, individual experiences and specific knowledge?

This series of international architecture and landscape workshops, titled "Architecture and Vegetation," was organized by Séverine Roussel and Philippe Zourgane between 2002 and 2004. The session, "Architecture and Vegetation, Hybrid Home Spaces," that gathered together students from South Africa, Kenya, Madagascar, China, India, France, and Reunion Island in 2004 is presented here as a case study.

In this workshop, participants used vegetation to invent new relationships and new potentialities. In colonial territories, cultivated areas ordered the whole territory, including the city. Plant life had a certain autonomous agency, and the major/minor relationship between built and non-built space was inverted. Linking this inversion to the economic, financial, and political conditions of colonialism and post-colonialism allows us to avoid focusing solely on the planning and iconic architectures of these territories. We entitle this inversion of minor/major relationship as vegetation as a political agent. This foregrounds the ways in which vegetation orders social and economic relations. The use of vegetation today opens new fields not only for sustainable development and ecological purposes, but also for reworking vegetation as a political agent

in a different way than it was used during the colonial period.

Questioning the role of architecture in a post-colonial context means also questioning the notion of culture: local culture, common culture, the shared colonial culture, and universal culture. Thus, speaking about decolonizing pedagogy is not primarily about positioning Western knowledge against non-Western forms of knowledge. It is instead about breaking the structures of domination put in place by the colonizing powers and recognizing the legitimacy of the precolonial cultures. We envision building upon all the above-mentioned layers of culture and engaging a singularity in the process of becoming, a process of "creolization" instead of "globalization."

> There is a damaging and self-defeating assumption that theory is necessarily the elite language of the socially and culturally privileged. It is said that the place of the academic critic is inevitably within the Eurocentric archives of an imperialist or neo-colonial West."

> > -Homi Bhabha. The Location of Culture $[1998]^1$

INTRODUCTION

Between 2002 and 2004, Séverine Roussel and Philippe Zourgane (RozO architectes office) organized a series of international architecture and landscape workshops titled "ARCHITECTURE AND VEGETATION" on Reunion Island, a French department in the Indian Ocean. The workshops emerged from the recognition of the fading links between former colonies and colonizing countries that in turn revealed new arrangements, new trading routes, new aerial and shipping trajectories, and new fluxes. The boom of new global cities in the

Indian Ocean region—Dubai, Guangzhou, Mumbai, and Singapore—has led to new configurations. Europe is no longer the center of the world, as it was in the 19th and first part of the 20th centuries. Young architects have to reinvent themselves in this context, to situate their design potentialities in this new web of relationships. The aim of the workshops was to draw a new map for contemporary architecture, one that would replace the frame of reference from a Western-centric reference point to a multi-focal approach organized around the Indian Ocean. The workshops brought together students from countries situated throughout this region-students who share a common history, a common climate, a colonial history, and a new global economic situation—alongside some students from Europe. It offered these students a chance to share experiences and knowledge and to build common methodological tools in architecture.

Architecture and territorial planning have long been tools for colonization. Plantations in the 16th-18th centuries crisscrossed the territory with lines of force, starting from the furrow that organized the slaves' houses, the technical buildings, and the fences that made up enclosures. These lines, along with the network of roads and the city, created a matrix for the spatial organization of the colonial territory. The city was only an epiphenomenon of the plantation: the technical space connecting ships, stores, and warehouses, and, incidentally, the residents of the governor and local administrators. The city depended on the plantation, rather than the other way round. In the first phase of colonization, when plantations flourished, segmentation of spaces corresponded to the segmentation of social and racial groups and production. To each task corresponded a production tool: each human being was assigned a geographic location.2

During the second colonial period (19th-20th centuries), colonizers transformed the landscape as one strategy to pacify the colonized people. These transformations included the management of urban centers and management of the colonial territory at various scales, from village units to the scale of the whole colony. Trees, crossroads, natural springs and gathering points, signs, writings, micro-architecture, as well as administration buildings such as schools, courts, and

town halls suppressed indigenous ways of organizing the landscape and constructed a new landscape over them. The simultaneous transformation of the different scales of landscape was a strategy of colonial warfare and a tool of assimilation and acculturation.3

Questioning the role of architecture in a post-colonial context means also questioning the notion of culture: local culture, common culture, the shared colonial culture, and universal culture. Many of the new colonized elite abandoned local education systems and formed the first global universal elite, developing the universal intellectual knowledge that we all share today while helping to extend Western culture to the rest of the world.4

Thus, for us, speaking about decolonizing pedagogy is not primarily about positioning Western knowledge against non-Western forms of knowledge. It is instead about breaking the structures of domination put in place by the colonizing powers and recognizing the legitimacy of the pre-colonial cultures. We envision building upon all the above-mentioned layers of culture and acknowledging the singularity of our shared experience of becoming, a process of creolization instead of globalization.5

Edouard Glissant defines creolization as "the meeting, the interference, the shock, the harmony and the disharmony between cultures, throughout the worldearth." Globalization, in turn, is "harmonization to the bottom, the reign of multinationals, the standardizations, the uncontrolled ultraliberalism in global markets (a corporation advantageously relocating its factories in a distant country, a patient doesn't have the right to buy drugs for the best value in a neighboring country) ... the negative side of a wonderful reality that I call Globality."7

The workshop series "ARCHITECTURE AND VEGETATION" addressed the following issues: Can we develop an architecture pedagogy that supports this singularity as opposed to universality? Can we take advantage of multiculturalism to engage singularity and speak of creolization processes in architecture? How can we encourage this creolization to occur?

A CASE STUDY: THE WORKSHOP "ARCHITECTURE AND VEGETATION, HYBRID HOME SPACES"

In 2004, this two-week workshop took place in Hell Bourg village in the Cirque de Salazie, on Reunion Island.8 Directed by Séverine Roussel and Philippe Zourgane, with the support of the "Cité de l'Architecture" represented by Fiona Meadows, it gathered together fourty-four masters students (Figure 1) from nine faculties of architecture:

- Witwatersrand Faculty of Architecture (Johannesburg - South Africa)
- Nairobi Faculty of Architecture (Kenya)
- South China University of Technology (Guanzhou - Chinal
- Shenzhen Faculty of Architecture (China)
- Ahmedabad Faculty of Architecture CEPT (India)
- L'École Supérieure des Métiers et Arts Plastiques (Antananarivo - Madagascar)
- Reunion Island branch of ENSA Montpellier (France)
- ENSA Clermont Ferrand (France)
- ENSA Montpellier (France)

Students were invited to design and build a 1:1 scale model of an experimental house. To help students draw on their research and intuitively shared knowledge of tropical architecture devices, they followed a set of rules: each room of this house had to blur the inside and outside, and vegetation had to be used as an architectural material.

The workshop comprised one week of design and one week of building. Students were divided into seven groups composed of students from different universities, with each group in charge of a different room of the house. Diversity in the groups was key to ensure sharing of knowledge and technologies. Students from northern countries were in a minority in each group (Figure 2).

Frantz Fanon wrote, "Every colonized people — in other words, every people in whose soul an inferiority complex has been created by the death and burial of its local cultural originality — finds itself face to face with the language of the civilizing nation; that is, with the culture of the mother country. The colonized is elevated above his jungle status in proportion to his adoption of the mother country's cultural standards." Pecolonizing pedagogy accordingly requires the deconstruction of dominant global standards (mainstream architectural language) to incorporate diversity, to move forward, and to connect with singularity.

The program of the house consisted of the following seven rooms: one kitchen/dining room, one living room, one bathroom, two bedrooms, and two tropical



Figure 1- Photo of the whole group of students on the workshop site Courtesy: René Paul Savignan.



Figure 2 - Week of design process Students during the one week design working in groups to make models and sketches of their projects Courtesy: René Paul Savignan.

lofts. A majority of the rooms' designations were the same as those used in standard housing worldwide, suggesting the existence of a universal common usage of those rooms, and a common way of life. The decision to include a room that is not typically included in Western housing was made purposefully, to draw attention to the need to question those designations and to question ways of living and uses. The site is not an abstraction; it has peculiarities and a history, and from them the project arises.

The situation of the house in the countryside privileged vegetation as a design element. Plant life was central to colonial and modernist spatial operations. It has been the subject of botanical study, a source of wealth via spices or coffee, a field of production for agricultural plantations, and an exotic subject for literature and travel tales. During the 17th and 18th centuries, vegetation had a central position in the whole of Western society, being acclimatised and modified in botanical gardens. In the 19th century, vegetation became associated with a strict calculation of productivity and of the number of human beings needed to service the industry.

In colonial territories, cultivated areas ordered the whole territory, including the city. Plant life had a certain autonomous agency, and the major/minor relationship between built and non-built space was inverted. Linking this inversion to the economic, financial, and political conditions of colonialism and

post-colonialism allows us to avoid focusing solely on these territories' planning and iconic architectures. We entitle this inversion of minor/major relationship as vegetation as a political agent. 10 This foregrounds the ways in which vegetation orders social and economic relations. Vegetation orders financial flows, flows of human beings, and flows of intellectual ideas and personnel. In our post-colonial world, the role of vegetation in territorial planning and architecture allows designers to invent new relationships and new potentialities.

The workshop was situated in the hot and humid mountains, near a spectacular pond. The site held giant bamboo, cryptomeria trees, chayote lianas, hibiscus, and the remaining stone wall ruins of an old house. Students set up their living spaces in close connection with all the existing elements. Building materials and vegetation, micro- and macro landscape, were given the same level of importance and were considered as a pre-existing architectural frame and the potentialities from which the project emerged. This approach was a far cry from the modernistic tabula rasa.

The choice of materials included galvanised steel sheets, green mesh shades, plywood, transparent tarpaulin, wood battens, bamboo canes, and other natural materials. Our focus on materials reflects a belief that material choice can be one means to activate students' political awareness due to the economic, political, and social networks involved in the procurement and distribution of particular materials worldwide. All our chosen materials are low-tech, lightweight, and affordable, making them popular for low-cost and informal construction in countries on the shores of the Indian Ocean. Lightweight materials are valued for their low thermal inertia and as filters. external skins, sun protections, visual protections, and internal separation screens. We view the use of these materials falling somewhere between the construction of space and what we refer to as "texture." Following different social and environmental rhythms, these materials allow houses to be transformed for a single event or over a longer period as a family grows, not incidentally, fulfilling the modernist architectural fantasy of the modular, transformable dwelling. Architectural types such as the "garden house" suggest human dwelling spaces while seamlessly merging with

the surrounding vegetation. In these ways, buildings are less enclosed structures than part of the textures made up of building fragments and cultivated biological features knitted together by untamed vegetation.

Given these precedents, the workshop set students the task of reinventing human uses by using vegetation as an architectural tool. Through this process we were able to draw several important conclusions.

First, students' work questions standard domestic programming—living rooms, bedrooms. In some cases, students updated traditional practices (such as sleeping outside in summer, an outdoor kitchen, or an outdoor shower) that had disappeared in contemporary housing. In other cases, they were eager to design spaces in tune with the climate and nature.

In one experiment, the living room, re-named Alive Living Room, was not designed as the living space for a family but as a space to enjoy the refreshing breeze that offers an escape from humidity. Transparent swing panels allow the regulation of air flow without hiding the view. The room was built in the shade of a clump of giant bamboos to protect the corrugated sheet roof from heat.

The kitchen/dining room, named Gastronomica, was designed with two cooking areas: the main kitchen area outdoors, and an indoor one for use in case of rain. The design of the space allows the table to easily be

rotated for use completely outside (to enjoy the warmth of sunshine in winter or the fresh night air in summer) or in an outside-but-covered situation (protected from direct sun in summer) (Figure 3, 4).

The bathroom, Mossy Bath, was built in the portion of the site that contained ruins. It includes a sun bath area and an outdoor shower. The design sought a direct connection between sun and skin, wind and skin, moss and skin. The large bath space can be shared by several persons, subverting typical expectation of privacy and use (Figure 5).

A room named *Possible Loft* revisits the traditional veranda, as it is disconnected from other rooms. It provides shade, frames the landscape, and accelerates air flow. Another room named Threshold loft was built on the slope, with a succession of levels to literally inhabit the topography. This space is defined by its quality of light, type of humidity, and seating for small groups. It establishes continuity with the adjacent spaces formed by the vegetation:—it is a modulation or variation, not a break. Ceiling heights elongate the height of the trees' branches (Figure 6, 7).

The students created a house in which the placement of each room on the site considered climactic comfort. taking advantage of the existing topography, vegetation, views, draughts and breezes, and areas of shadow (Figure 8).



Figure 3 - Building of the scale 1 model - Gastronomica Students, during the one week of building, build a full scale model of their Gastronomic room using bamboo, prefabricated metal sheeting and green mesh shades. Courtesy: René Paul Savignan.



The Gastronomica room nearly finished is partially sheltered by giant bamboos on one side and is framing the large landscape on one end. Courtesy: René Paul Savignan.

This typology is common on Reunion Island in spontaneous housing districts. It required the design of a new spatiality that the students named The Link—a covered path connecting all the rooms together (necessary in case of rain) (Figure 9, 10).

Structural design mixed different concepts. The Gastronomica model used a complex grid structure;



Figure 5 - Mossy bath The Mossy bath room was built in the ruins on the site Courtesy: René Paul Savignan.

lightweight materials and lightweight structures from the Indian Ocean were mixed with high-tech knowledge. The group that realised the Possible loft model designed a structure combining different knowledge bases to design a large space free of pillars. In the absence of scaffolding, one of the Chinese students taught the others about a traditional Chinese structure that is assembled flatwise on the ground and then raised in



Figure 6 - Building of the scale 1 model Threshold loft To build the full scale model of the Threshold loft, students transformed the natural slope of the site to create a succession of levels and thus literally inhabit the topography. Courtesy: René Paul Savignan.



Figure 7 - Theshold loft The Threshold loft establishes continuity with the adjacent spaces formed by the vegetation. This space is a modulation or variation, not a break. Ceiling heights elongate the height of the trees' branches. Courtesy: René Paul Savignan



Figure 8 - General model at the end of the design week Picture of the whole house model at the end of the one week design. Courtesy: René Paul Savignan.

the upright position with the force of only a few persons (Figure 11).

In general, students' contributions did not bear a direct relationship with their own countries. In fact, in a context where Western standards are omnipresent and developing one's own singularity is difficult, such contributions can't emerge. Becoming aware of one's own culture is a slow and nonlinear process. We intend the word culture to describe one that is current and constantly evolving. Embracing culture in this way is less about reconnecting with one's own culture than it is about standing back from our everyday lives to understand changes in our own culture at a given time.

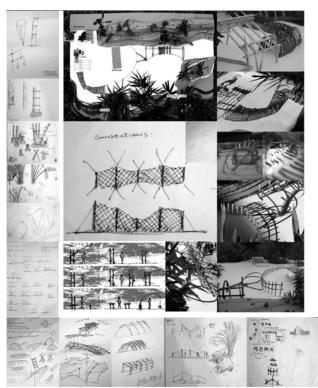


Figure 9 - Design documents The Link Selection of sketches and models presented by the group of students in charge of the general coherence of the house project. This group proposed a new spatiality that the students named The Link. Courtesy: René Paul Savignan.



Figure 10 - The Link One portion of the full scale model of the covered path connecting all the rooms together called the Link by the students using bamboo structure. Courtesy: René Paul Savignan.



Figure 11 - Building of the scale 1 model - Possible Loft Students build the full scale model of Possible loft which is a large space free of pillars whose structure revisits a traditional Chinese structure assembled flatwise on the ground and then raised in the upright position with the force of only a few persons. Courtesy: René Paul Savignan.

CONCLUSION

Our practice and pedagogy strive to redefine architecture. We speak about substances instead of forms; a pure substance is not defined by its limits but by its quality. We advocate for an architecture that intermingles nature and artifice, inside and outside spaces. We design hybrids that are no longer objects but rather textures characterized by a logic of sensations.11

This architecture doesn't produce recurrent and well-identified typologies, but substances constantly changed by new habits, new desires, or newcomers who bring a new cultural background. Creolization processes are thus activated in architecture.

Borrowing the concept of non finito/non cominciato, which Giulio Carlo Argan uses to describe Michelangelo Buonarroti's practice, our design work and teaching focuses on the activation of potentials, not on a tabula rasa, but within a constantly evolving field which is never "complete." 12 It offers an alternative way to mix concepts and thoughts without hierarchy, making room for a field of possibilities organized by forces and individual design concepts.

The workshops focused on exploring new bodily capacities, and students had to work through a nonformal approach. The result is an architecture that is fluid, following use and body movement: a hands-on,

non-formal approach whose theoretical grounding resides in the design process itself. A new identity emerges from these bodily encounters, from a reconstructed memory, from our new living conditions. Perhaps we have to think about our identities as no longer overdetermined by the perpetual dualism imposed by Western modernity (such as colonizer/ colonized, white/black, or dominant/dominated), but instead a being constructed in a much more fragmented way: a becoming Creole that mixes experiences, cultures, and political consciousness without hierarchy. •

ENDNOTES

- 1. Homi Bhabha, The location of culture, (London: Routledge, 1994), 28.
- 2. Édouard Glissant, Poétique de La Relation, Poétique III, (Paris: Éditions Gallimard, 1990), 78,
- 3. Philippe Zourgane, "Programming the landscape," in Destroy, Build, Secure, Readings on pacification, Edited by Tyler Wall, Parastou Saberi and William Jackson, (Ottawa: Red Quill Volume, 2017).
- 4. The spreading worldwide of the universal culture outside Europe began with the first colonial movement (XVI-XVIIIth century) with key words of the enlightenment such as democracy, freedom, equality; key words that remained an abstract set of
- 5. We borrow our conception of the process of becoming from Achille Mbembe, Critique de la raison nègre, (Paris: Editions La Découverte, 2013), 42-143.
- 6. Edouard Glissant, Traité du Tout-Monde, (Paris: Editions Gallimard, 1997), 194.
- 7. Edouard Glissant, La cohée du Lamentin Poétique V, (Paris: Editions Gallimard, 2005) 15
- 8. The book Architecture and vegetation. Hybrid home spaces is archiving this workshop. French version: Monografik Edition, Paris, 2006. English version: David Krut Publishing, Johannesburg, 2006
- 9. Fanon, Frantz, Peau noire, Masques blancs, (Paris: Les Éditions du Seuil, 1952), 37. "Tout peuple colonisé — c'est-à-dire tout peuple au sein duquel a pris naissance un complexe d'infériorité, du fait de la mise au tombeau de l'originalité culturelle locale — se situe vis-à-vis du langage de la nation civilisatrice, c'est-àdire de la culture métropolitaine. Le colonisé se sera d'autant plus échappé de sa brousse qu'il aura fait siennes les valeurs culturelles de la métropole." English version, Pluto Press, London (1986); new edition published 2008.
- 10. Philippe Zourgane, The Architectural Free Zone: Reunion Island and the Politics of Vegetation, unpublished Ph.D. Goldsmith College, London, 2013.
- 11. For a more in-depth discussion of this concept, see Gilles Deleuze, Qu'est ce que la philosophie?, (Paris: Editions de Minuit, 1991) and Gilles Deleuze, Francis Bacon, Logique la sensation, (Paris: Editions de la Différence, 1981).
- 12. Giulio Carlo Argan e Bruno Contardi, Michelangelo Architetto, (Milano: Mondadori Electa, 1990).