Northern Designers in Africa: A Political Diary of Building a House in Rwanda

From June to August 2013, the non-profit design firm I co-founded coordinated the construction of a prototype home in rural Rwanda. We used the process as a training opportunity for Rwandan architecture students and members of a local association whom we believed to be the future residents of the house. A week before my departure and two weeks before my design partner arrived to take over the project management, the students came to me with furled brows. “The president of the association cannot be trusted,” they started, and unfolded the stories they discovered that afternoon. .

YUTAKA SHO
Syracuse University

PROLOGUE: ARCHITECTURE FOR POLITICAL EMERGENCE

The students had overheard a conversation between a villager and the association president, a powerful woman in the district and beyond, with whom our design firm collaborated over the past five years. She was complaining that I was not paying up various “fees” that she was trying to charge in order to pay the dominant players of the neighborhood. Thus began a series of heated discussions about how to outsmart this authority figure. The most disappointing discovery was that not all of the workers were on the list of 50 people to receive a house. They were simply “volunteers” who were put to work by the president. The recipient list instead included local authorities, land owners, and one (of several) of the presidents’ family members, who also happened to be a national soccer star. The association president was in control not only of the housing project but also the political life of the people in the village. We realized the extent of her influence when people, so fearful of her power, gasped when we called her by her first name.

At the time of this writing, the story was developing and we had not yet found a way to persuade the association president to benefit the poorest in the village as originally agreed. A radical idea took root: to establish a new association to build and teach construction in Rwanda. Although this new association will not solve the conundrum of giving the houses to those who construct them, the people of the village will gain the autonomy that a tangible economic program can lend. The participants of our project have realized that they have gained skills and knowledge that cannot be taken away, and they have begun to explore ways to use them to win independence for themselves. On the last Saturday of August 2013, after weeks of private and open debates about the future of the housing

project and the village governance, they established a new builders' association. Architecture was a significant part of the force that helped them emerge from the status quo.

Northern NGOs, governments and private corporations use relief and development funds as tools of diplomatic negotiations, normalizing a state of perpetual emergency.[1] Their propensity to override local peoples' agency has created a long a trail of failed humanitarian projects.[2] Because of this, early in the process, our firm decided not to interfere with the recipient selection process. Overcompensating for negative precedents, and trusting the association president's national reputation, we were about to take part in the exploitation of vulnerable villagers.

For northern designers and their clients operating in the global South, the arena is not level. Northerners appear and often intentionally present themselves as developed, technically advanced and wealthier than the southerners (a Rwandan student once asked in the seminar I taught at a local university: There are no poor white people in America, are there?). Capital pours in not only from the West but also from the rising economies of the East: various UN offices and NGOs share glass towers built by Chinese companies; facades of public buildings are decorated by Middle Eastern and Eastern Asian names; well-maintained trucks of the German Society for International Cooperation zoom by; and the expat employees and consultants occupy modern mansions where mud brick homes once stood until the city was rezoned by a Singaporean planning firm. Given the factual and imagined stereotypes of the northerner, the association president's actions were neither unique nor driven by malice. Bribery is prevalent in the North as well, except that it is called lobbying, and the bribes themselves "campaign contributions" or "promotional benefits". It is only when such practices are witnessed in the South that it is cast as non-democratic and underdeveloped. Faced with the visible discrepancies of economic power between the North and the South, and the double standard that the North uses to evaluate "good governance," it is no surprise that they should seek an alternate means toward equality.

In Masoro, we have come to realize that the association president is equally bound by Rwandan culture and is under pressure to answer to her benefactors, believing that it will benefit her constituents. During our five years of collaboration in preparation for construction, she has proven to be a committed community organizer and a superb business woman. Her attempts to skim money off of our budget tempted us to look the other way, because she had seen what we had, what we drove and where we lived. The latest turn of events was a brief glimpse into the effects of the uneven global power balance and a mundane clientelism embodied in a small house.

A REFLECTIVE BREAK

Architects from the northern hemisphere have established a presence in Africa. Numerous transnational and non-governmental organizations, churches and corporations from prosperous countries permeate construction at all scales. Personnel, technology, capital and policies from the North are transforming the built and natural environments of the Southern hemisphere. So what benefits do northern architects bring to Africa?

Take housing for instance. In Rwanda, Uganda and Ghana where I practice and research, homes for the low- and medium-income classes are often built by owners without contractors, let alone architects. Building codes are not strictly

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enforced. Building materials and technologies are precariously if ingeniously improvised. Because no one hires contractors or designers to build a home, most everyone has some experience in building simple structures. In addition, northern architects do not have the best track record of delivering an "improved" lifestyle to Africa via the modern built environment, although that is often the justification for their interventions. Northern-style democracy has not taken root by building public plazas. Neither has a "developed" lifestyle been guaranteed by eliminating chicken coops from village homes. Fulfilling shortages or delivering revolution is not the purview for northern designers.

In this paper I argue that northern designers' modest task in Africa is to critique our own building practice. Global development policies and local politics and social hierarchies that work hand in hand constrain access to space especially for traditionally oppressed peoples such as the poor and women. Clientelism, gender roles, political affiliations and other conventions sometimes enhance, and sometimes limit, the right to space. Here, unconventional projects by northern designers may be able to de-normalize conventions and to use architecture as a reflective break. So that this space created during our encounter could contribute to new activism that gains momentum after us.[3] Citing our recently completed housing prototype construction in Rwanda as a case study, I hope to show how architectural processes and products may challenge the presumptions of how and who should build houses, and to create an opportunity to test those aspirations and scenarios in real space.

The program of housing plays a unique role in Rwanda. Since the 1994 genocide, the country has been ruled by a single political party and the official narratives of what happened during the war, governance for today and future development have been closely controlled. Criticism against the ruling party is penalized and the press is monitored.[4] Therefore one of the only public spheres available for candid discourse is in domestic space and not in public plazas. The relative

Figure 1: Construction of an EarthBag house in Masoro, Rwanda.

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Figure 2: Election of the new association officials.

privacy of a house and its construction process offer a safe environment to discuss and imagine an open society.

In addition, an ambitious government policy called *imidugudu* is under way to relocate all citizens to planned housing. Properties close to the city center are forcibly purchased by the government for urbanization according to the master plan.[5] Land owners can trade their assets for plots in newly planned housing. Renters however must search for units further away. Citing the ease of providing infrastructure, the dispersed rural population is congregated in flattened sites, often away from their families and friends, jobs and amenities. In the government-initiated program TIG (Travail d'Intérêt Général), convicted genocide offenders have been mobilized to work instead of serving prison sentences, including construction of *imidugudu*.[6] Although initially conceived as a way for offenders to rebuild for the victims in their own village as a means of reconciliation, the program has been coopted as a free-labor camp for modernization projects. To plan, design and to construct housing in Rwanda directly correlates with the Rwandan people's rights and livelihood. Our project was a response to a vacuum of viable housing models for the low-income class. Such critique could be voiced only among the trusted members of the project, yet the artifact stood for an otherwise nonexistent discourse.

THE CLIENTS AND THE GOVERNED

In 2008, we met with a women-operated association in the rural village of Masoro, 20km north of the capital city Kigali. Founded shortly after the genocide, its 600 members, mostly survivors of the genocide, run numerous economic and social projects such as orphanages and craft enterprises. In 1997, the association built a village for its homeless and low-income members using soil and cement mix blocks. Responding to the government's policy to relocate to planned villages, and defying the policy's tendency to break up communities, the association built their village within and by the community. Upon returning from our first meeting, we began to plan, design and construct the new village for 50 homes and an accompanying community center.

I encountered the association and new housing policy during my research on women's roles in reconstruction after the genocide. In the immediate aftermath

in 1994, 70% of the population was women: the missing men were reported to be killed or in jail.[7] Previously prohibited from owning property or business, Rwandan women found themselves in charge of the country's physical and social reconstruction. I went to Rwanda to document how women designed, built and governed in their new roles. In Masoro, the women's association demonstrated their ability to incorporate their domestic knowledge in the design of space. Using the species that goats will not eat, living hedges protected the livestock and prevented soil erosion. Fruit trees were planted for shade, to supplement their diet and to be used for future house renovations. Communal and personal gardens and rain water collectors were provided. Although they did not have sufficient funding or architects to guide their planning, their design ideas were more comprehensive than those by the government.

The association is well-known as a successful community leader and its achievements have been awarded by the Rwandan President multiple times. Their reputation helped to secure the local government's support for our project; a particular boon as in Rwanda no project escapes government scrutiny. The district mayor signed an MOU promising to provide necessary infrastructure. Local landowners promised to donate their land. As in the previous village construction, the members were to build their own homes.

The above assumptions proved not to be straightforward, however, due to our ignorance of local politics and perhaps due to the intentional exclusion of facts on the part of our client. Once construction begun and we needed to bring water to the site, we found that wells are controlled by a private company and were not the domain of the mayor. What the mayor meant by infrastructure, and possibly how the English word was translated, was roads. The dispute between the association president and our design team originally started over the bribe to be paid to the water company, but other examples surfaced over time. The local authority agreed to donate land large enough for six houses only in return for a house constructed by the association members free of charge to her. And the idea of the association members constructing fifty homes with no wage, each one taking approximately three months to build, proved to be a fallacy. Of all of us, low income villagers/construction workers needed to be paid the most as they all had families to support. What sounded like a moral platitude during fund raising in the US - "In our project the widows build their own homes therefore all we need are the material expenses" - was amoral when demonstrated in actuality. But because we did not include in our original budget wages for the workers, we were able to pay a mere fifty cents a day to workers who were to receive the houses in the future, and two dollars a day for hired workers. Yet once we agreed on the wage, both the workers and designers felt a burden lift. For workers, they felt that their back-breaking labor was given a value that was recognizable, and with it came self-respect. For us designers, we were liberated from the burdens brought by pretenses such as "capacity building" and "helping the poor help themselves." Because the workers were paid, we could demand quality and commitment in their work without needing to coax or discipline. Money allowed us to inch toward mutual respect.

These are a few examples of the incongruities that surfaced during construction. Besides the obvious miscalculations and misunderstandings, our team designed the project naively based on the image of legitimacy defined by legality, transparency and community participation, as any well-meaning northern humanitarian aid organization would. If our presuppositions were not unraveled by the

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Figure 3: Utility section screen.

Figure 4: Exterior screen.

above incidents, we would have become a successful institution that replaced the government in a supposed act of a critique against it. In "The Politics of the Governed," Chaterjee states:

> The rural poor who mobilize to claim the benefits of various government programs do not do so as members of civil society. To effectively direct those benefits toward them, they must succeed in applying the right pressure at the right places in the governmental machinery. This would frequently mean the bending or stretching of rules, because existing procedures have historically worked to exclude or marginalize them. [8]

The same realization could be applied not only against the government but any governmentality in Foucault's sense that may limit the right to space.[9] In a project like ours, legality could mean a breach of a silent contract hard-won by the local leader in order to access government benefits; transparency may be necessary only for blind outsiders like us; and participation may be a euphemism for exploitation. Yet our northern funders require this legitimacy, and thus far we cannot, if ever, explain our dilemma to them effectively. Masoro villagers' answer to this dilemma was to establish a new builders' association, which saved us from engaging in illegal and exploitative conduct. Our clients saved us from ourselves.

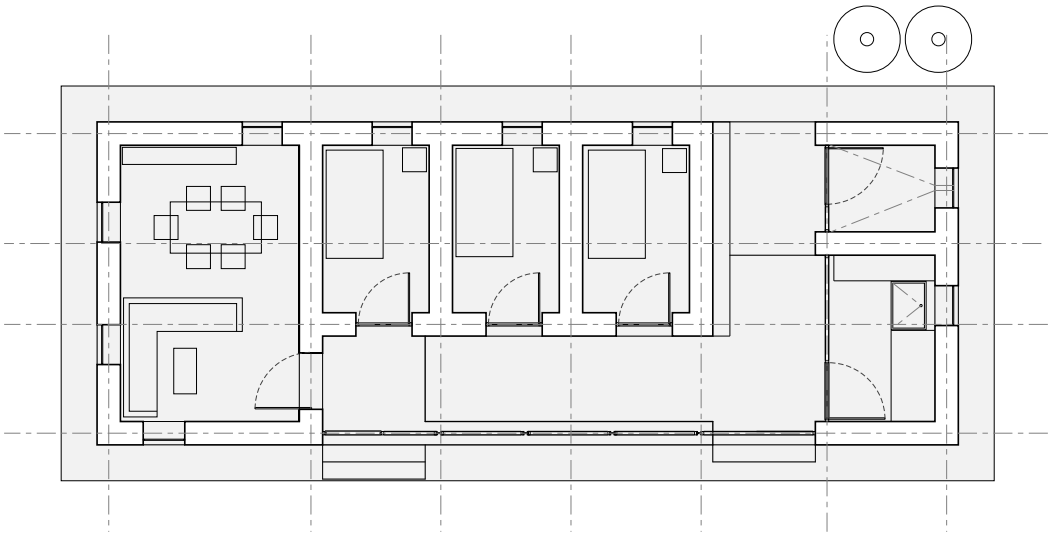
MATERIAL AND DESIGN AS CRITIQUE

Our commitment to build homes with unskilled association members led us to build with EarthBag (EB) walls, implemented for the first time in Rwanda. EarthBags are an age-old military bunker construction technique, and the version we used was updated for civilian use by the South African firm Eternally Solar.[10] Polypropylene bags, readily available in Africa for transporting grains and charcoal, are stuffed with sifted site soil, stacked and pounded to stabilize them. The three-channeled bags eliminated the barbed wire previously used as connectors between the layers. Cement and steel re-bars are needed only in foundation and at lintels, dramatically cutting the size of the home's carbon footprint in a country where every construction material is imported.[11] This technique was born from the Africa-wide need for sustainable dwelling not only in terms of environmental impact but also of cost, accessibility, maintenance and durability. A by-product of petrochemical processing, polypropylene is a waste that is unlikely to disappear while we depend on oil for our energy needs. The flip side of the non-biodegradability of polypropylene is that it is indestructible, lasting for fifty years or longer if protected from UV rays. When constructed correctly, EB walls are water-, termite- and bullet-proof, with high-resistance to seismic activities, superb thermal insulation and acoustic performance. They are cheap, easy and fast to construct. While green-wash projects flood the market, constructing affordable and high-performance housing with petrochemical waste responds to the real need for sustainability in Rwanda.

We invited an EB construction expert from South Africa to conduct a three-week workshop in Masoro.[12] The prototype was built in three and a half months, and many of the workers were unskilled women. EB construction does not require literacy or math skills. Other than knowing how to use a level and to understand basic geometry, the tools required are simple and affordable. The EB technique's flexible nature allows great freedom for the builder to improvise details without jeopardizing structural integrity. The workshop was not so much a series of instructions as a collaborative problem solving session combining the South Africans' construction expertise, northern designers' spatial insights and Rwandans' climactic and cultural knowledge.

EB was not our invention and our project did not improve its technical function. We did not introduce the technique to Rwanda assuming that we would make it a cornerstone of our careers. Instead we found opportunities in EB on multiple fronts. By proposing an easy, affordable and sustainable construction technique, we critiqued the existing building culture and housing market that tends to exclude the poor. Because the final product is indiscernible, appearing just like any other masonry building once it has been plastered, it avoids the stigma of becoming a material for the poor. Also because of its thick heavy walls, it challenged the design team to innovate light construction methods as a counter-design.

The design of a covered terrace derived from two practices in Rwandan domestic space. Rwanda has two annual rainy seasons. Torrential downpours prevent necessary activities such as drying cassava and beans, cooking and washing clothes. In parallel, Rwandan homes are traditionally surrounded by fences or hedges, partially for security reasons but also reflecting Rwandans' private character. In our house a covered terrace with a sitting wall separates the outside from the inside but makes an occupiable work space that engages the passersby. It is a boundary that connects instead of fortifies.



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During the kick-off workshop, villagers informed us that there are many single men in need of rental rooms. In Rwandan society men cannot marry if they are not able to build a home for the new family. While single women can be hired as live-in maids, single men have a tougher time. Yet the government housing typology does not reflect social phenomena of this kind, and instead promotes the ideal nuclear family by making bedrooms accessible from the living room. Our house plan responded by making each bedroom accessible from the covered corridor. Similar to Riken Yamamoto's reconceptualization of residential units in post-war Japan, residents enter their home via private rooms because firstly they are individuals and secondly members of a family as a social unit. Becoming a family is an independent active decision; you "do" a family by entering the common.[13]

One of the successful enterprises that the association conducts is weaving. Women weave and sell housewares and ornaments using sisal, papyrus, reeds, water hyacinth, banana leaves or plastic ropes. Materials and skills are available in Masoro, but weaving had not been applied widely in an architectural context.[14]

Figure 5: Masoro house plan.

In addition, weaving is considered to be women's work, as construction is considered to be men's. In this project women were active construction workers with weaving skills already at hand. So to engage these skills, in the bath, kitchen and at the front terrace we designed woven screens to bring air and light but also to create visual separations. A minor perk of being an outsider is to be able to naively disregard traditions, and using weaving in construction was one such occasion. Previously I have taught a studio in a local school in Kigali that explored architectural application of weaving, and some of the students from the studio were interns in this project. They will make sure to use this as a precedent for innovative development of other local knowledge and skills.

From the start, our aims were to work with those traditionally excluded from the benefits of design and to train them in construction skills. We wanted to make ourselves obsolete as quickly as possible so that the skills and knowledge to exercise the right to space will be cultivated and stay with people. But unexpectedly and more importantly, the project sparked awareness in Masoro villagers that they can change their built and political environments. Recently they have secured land for their storage/ office/ information building, their first independent project. When the self-governance of the Masoro group is realized, it will be due to the fact that together we conceptualized the building experiment as a critique of what governed us. At every step of the construction process, from the material choices to organization and training of workers, design of the plan and establishment of the new association, we questioned the image of an ideal life painted by northern development agencies. This development ideal permeates policies and cultures (they provide 40% of Rwandan federal budget), and it governs us all. It makes us want northern-looking buildings and without them, we think that we are not yet developed. This project critiqued such ideal so that someday we could be "both partner and adversary to the arts of governing" ourselves.[15] Perhaps then a category that is neither North nor South is possible.

ENDNOTES

1. Michel Agier, Managing the Undesirables: Refugee Camps and Humanitarian Government (Cambridge, UK: Polity, 2012).
2. Among numerous critical work, the following has informed the author: Arturo Escobar, Encountering Development (Princeton: Princeton University Press, 1995); James Ferguson, Global Shadows: Africa in the Neoliberal World Order (Durham: Duke University Press, 2006); Jennifer Hyndman, Managing Displacement: Refugees and Politics of Humanitarianism (Minneapolis: University of Minnesota Press, 2000); Amartya Sen, Development as Freedom (Anchor Books, 1999).
3. William F. Fisher, "Doing Good? The Politics and Antipolitics of NGO Practice," Annual Review of Anthropology, Vol. 26 (1997), 459.
4. Andrea Purdeková, "'Even if I Am Not here, there are so Many Eyes': Surveillance and State Reach in Rwanda." The Journal of Modern African Studies 49, no. 3 (Sep 2011, 2011): 475-497.
5. OZ Architects, Kigali Conceptual Master Plan, Ministry of Infrastructure, Republic of Rwanda (Kigali: 2008).
6. Kazuyuki Sasaki and Fortunée Bayisenge "Community Service for Reinforcing Reconciliation? Perspectives on Rwanda's TIG Program" in Protestant Institute of Arts and Social Sciences, Public Reforms in Rwanda, PIASS Publication Series no 1, Butare, Rwanda (2012): 72-102.
7. Elizabeth Powley, "Strengthening Governance: The Role of Women in Rwanda's Transition: A Summary." United Nations Office of the Special Adviser on Gender Issues and Advancement of Women (OSAGI) Expert Group Meeting on "Enhancing Women's Participation in Electoral Processes in Post-Conflict Countries," at Glen Cove. (19-22 January, 2004).
8. Partha Chaterjee, "The Politics of the Governed," in The Politics of the Governed: Reflections on Popular Politics in Most of the World (New York: Columbia University Press, 2004), 66.
9. Michel Foucault, "What is Critique?" in The Politics of Truth, ed. Sylvère Lotringer (Los Angeles: Semiotext(e), 2007), 41-81.
10. Eternally Solar is founded by Dr. Johnny Anderton. For more information see www.earthbagbuilding.com
11. In Rwanda most wood is from the Congo and Uganda; glass, steel and cement from Uganda; and some cement, and most hardware and construction tools are from China. Locally harvested wood is available but they are not dried, necessitating a long lead time.
12. The workshop was given by Riaan Hough. For more information see www.earthkaya.co.za
13. Ueno, Chizuko. "Dismantling of nLDK: Family Theory via Residential Design" in A Box That Contains Family, a Box That Transcends Family. Tokyo: Heibonsha, 2002.
14. One exception is the Kimisagara Football for Hope Centre by Killian Doherty that used weaving in screens, ceilings and limp shades. Some of the traditional Rwandan structures were built with woven reeds, such as the King's palace in Nyanza.
15. Foucault, "What is Critique?," 44.