Anticipating culturally resilient transformation in Mariënburg, Suriname

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Context and method

As in many other Latin American and Caribbean countries, among the prime issues in Suriname are housing shortages[1] and high poverty rates. Relief cannot be solely expected from the State, whose organisational and servicing capacity is limited (ERM 2017, p. 21, Heirman, 2019). If families want to improve their housing situation, they have to take initiative themselves. Due to the absence of structure or zoning plans, land rights are given to individual parties as a favour or simply on request (ERM 2017,p. 22). Moreover, land for housing development is often appropriated in an informal way, since land ownership control is weak and enforcement is rare. These individual ad hoc actions are causing immense sprawl, leading to ribbon development of small farmsteads along roads and rampant suburban allotments around Paramaribo and in the countryside. Yet these rural environments contain rich and unique reminiscences of Suriname's development history, laid down in a range of both urban and rural vestiges (e.g. industrial artefacts, water management infrastructure, buildings and sites of plantations, or bauxite mining sites). Tapping into the collective memory, this heritage could yield culturally resilient urban transformations, as it offers significant opportunities to alleviate housing shortages and, specifically, for the development of sustainable and inclusive, community based city- and eco-tourism. However, the manifold opportunities are largely ignored; this heritage is neglected and abandoned both by the government and the civilians. Therefore, it seems appropriate to stimulate the reuse of heritage by both governmental and private actors.

Deploying the potential of heritage in culturally resilient urban transformations in vulnerable neighbourhoods is the aim of the research unit ISTT (Inter-

1 In 2004 there was a housing shortage of 2581 houses in the urban area of Paramaribo, and in 2012 the shortage was 4801. This is leading to families living in overcrowded situations (Heirman 2019 based on Mencke 2016). In 2017 of the 58.825 houses in the district Paramaribo, 21.256 houses needed big repairs and 504 houses were beyond repair. In the district Commewijne, of the 1212 houses, 518 houses needed big repairs and 13 were beyond repair (ERM 2017).

national Studies for Territories in Transition)[2]. This unit set up the research project **PL**atform for **A**ctivating **N**etworks for **CU**ltural **Re**silience[3] (subsidized by VLIR UOS between 2016 and 2017, and from 2017 to today without subsidies). Since previous project trials of ISTT were conceived to be initiated by the government which then failed to implement them, the Living Lab methodology, based on Boelens' Actor Relational Approach and Living Labs (Boelens, 2009, Boelens et al. 2016, Boelens & Goethals, 2016) seemed more appropriate to apply to the issue of sprawled urbanisation in Suriname. This methodology aims at shifting spatial renewal agency from the government to collaborations among citizens, companies, and government. During a Living Lab, planners and designers activate and mobilise social groups that can form strategic alliances, depict spatial solutions, investigate financial, juridical and organisational feasibility, and evolve together with stakeholders and experts on operable civic projects (Boelens, 2009; Boelens et al., 2016; Boelens & Goethals, 2016).

Four planners' activities are deployed to move actors into action for institutional change: *tracing, mapping, diagramming and agencying* (Boelens et al., 2016; Boelens & Goethals, 2016).

- *Tracing* is about tracking of qualities, problems, causes, chances, and stakeholders (owners of problems and solutions) in a region. Tracing encompasses bilateral talks with actors and searching referential projects.
- The *Mapping* activity comprises designer depictions of spatial chances and solutions and the investigation of the financial, juridical, and organizational feasibility of the solutions in a business case. The chances should be open enough to be adaptable to new actors and precise enough to genuinely make a resilient match. A second step is to find complementary actions that upgrade small local actions in systemic innovation.
- *Diagramming* is about building up solid actor networks using an iterative set of round tables and adjusting business cases to the suggestions of involved stakeholders. During this process, business-cases become more concrete and achievable. By jointly looking for mutual matches of interest and possible added values, the actor network becomes real and stronger.
- *Agencying* is developing procedures and agencies that can facilitate similar co-evolution processes in other settings.

Experiments with Living Labs are not only happening in Europe. The "multi-stakeholder participation" deployed in recent best practices of slum improvement in Nairobi and Lima is based on principles that are similar to the living lab approach. "Multi-stakeholder participation" is defined here as an '*open, transparent and iterative design process that harnesses a community's social, political, and economic capital and know-how, while involving the technical knowledge of design professionals, the political will of local government, and the investment capacity of the private sector. A successful project requires the full and active participation of residents, from conception through implementation and into long-term operation*' (Odbert & Mulligan, 2015: 178). The authors add two more strategies to their slum improvement approach: "Sectoral Integration" - the combination of physical, social, and economic strategies in a single intervention - and "networked change": addressing macro-scale issues, such as watershed improvement or poverty alleviation, through a network of micro-interventions (Odbert & Mulligan 2015, p. 178-179).

These strategies are applied by ISTT in two case studies on the countryside of Suriname: the bauxite mining company town Moengo in the Marowijne district and the kampong of the former sugar cane plantation Mariënburg in the Commewijne district. Kampongs are rural villages evolved out of housing areas for foreign contract workers on the former plantations in Suriname.

The research team consists of master thesis researchers of the Master Architecture[4], Urbanism and Spatial Planning and Heritage Studies (University of Antwerp), and bachelor students in Infrastructure from the Anton de Kom[5] University in Paramaribo (ADEKUS) and their promotors: professors from UAntwerp and ADEKUS[6]. ADEKUS professor Marciano Dasai has contacts in Mariënburg and is very committed to the perpetuation of the Javanese traditions in Suriname. The research is performed during an internship of two to three months for

2 The interdisciplinary research unit ISTT (International Studies for Territories in Transition) at the Antwerp University is an initiative of the Master Programme Architecture joined by Urbanism, Strategic planning, and Heritage studies. Its research is focused on shifting building cultures and spatial transformations in post-colonial non-Western contexts (Morocco, Egypt, Suriname, Nicaragua, and Brazil). The goal is to instigate sustainable urban development in real life situations of vulnerable neighbourhoods. Spatial opportunities are used to make fragile actor networks more accountable and action oriented. The method is action research, executed by master thesis students during internships of two to three months. In order to be successful, each research project goes on for several years in which each year new teams of UA and UNICAP students capitalize on the results of the previous team.

3 Plan4CuRe (PLatform for Activating Networks for CUltural Resilience) is a VLIR-UOS-SI project on development aid in Suriname that was carried out by ISTT between January 2016 and December 2017. The project's goal was to stimulate cultural resilience in Suriname by the reactivation of cultural heritage as a sustainable resource for urban and regional development. For the method used in this project see footnote on ISTT.

4 Eline Blom, Nathan De Feyter, Martijn Willems, Luwalhati Peeters, Celine Voorspoels, Dieuwke Cappaert, Aline De Bruyne, Adriana Smets, Emma Claassens, Flore Cotton, Caroline Thaler (Mariënburg) Pia Looz, Sander Velmers, Nathalie Janssen, Renée Feenstra, Nina Hooyberghs, Lisa Molemans, Stijn Coekaerts, Juliette van Baar, Mathieu Moyson, Mirte van Dooren, Tom van Vilsteren, Minne Somers, Eline Herthogs, Lotte Groven, Birgit Grootjans (Moengo).

5 Menouschka Baldwin, Felicia Somoredjo, Louferinio Royanto (Mariënburg) Kevin Sapoen, Hateem Kasnawi (Moengo).

6 Professors: Johan De Walsche, Marciano Dasai, Hans Martinus, Angelika Namdar, Sigrid Heirman, Dirk Laporte, File Hanjoul, Marleen Goethals.

Belgian students in Suriname. Students carry out bilateral contacts while their professors join them for the overarching, multi-lateral actor workshops. The goal is to inform and instigate culturally resilient and sustainable spatial transitions that are respectful to cultural heritage in real life situations and transform fragile actor networks into accountable and action-oriented actor networks. Such projects can only be successful if the research goes on for a long enough period. Therefore, the research started in 2016 and is still in progress. Each year, new teams capitalize on the results of the previous teams. This ensures continuous interaction between student-researchers and local stakeholders and stimulates the development of shared ideas. Commitment by local governments and civic stakeholders is fostered, encouraging implementation of the projects they share. Below we describe the living lab of the Kampong Mariënburg.

Kampong Mariënburg Lab

The former sugar cane plantation Mariënburg is situated at a distance of 35 km from the capital city Paramaribo, across the Suriname river, in the rural district of Commewijne. In Commewijne, ribbon developments and dispersed allotments have spread rapidly since 2000, when the Jules Wijdenbosch bridge, connecting Paramaribo with Commewijne, was built[7]. While suburbanization is rampant, renewal of plantation kampongs in this district lags behind. Kampong is the name for traditional informal settlements in Indonesia. This settlement type was introduced in the Surinamese plantations by Javanese people working there as contract workers between the 1890s and the 1930s. After completing their contract, they received land rights to build small farmsteads on the plantation. The history of the kampong of Mariënburg is slightly different, because it evolved from a series of wooden barracks built between the drainage canals by the plantation owner. Javanese contract workers appropriated the houses after the closing of the sugar cane factory of Mariënburg and adapted them to their cultural traditions. Nowadays the kampong in Mariënburg is a vulnerable neighbourhood inhabited by a few remaining former Javanese contract workers and their descendants, as well as immigrants recently arrived from Haiti and Guyana. The original wooden barracks evolved into larger timber and brick houses, but Javanese traditions of collective life and open space rituals still prevail: most of the parcels are not fenced, turning their canopied doorstep seats (emperan) towards the street. The kampong consists of a primary school, mosques, and a few grocery stores. New allotments developing around Mariënburg contrast with the kampong: there are no canals between parcels, gardens

7 The population in the district Commewijne grew from 24649 in 2004 to 31987 in 2012, a growth of 26,1%. Continuing growth could lead to 49000 people in the district Commewijne in the year 2030 (Bureau of Statistics, census 2004 and census 2012).

Figure 34.1 Areal photograph with situation of Mariënburg (source: Google Earth, 2019)

Figure 34.2 Wooden barracks built between the drainage canals in the kampong of plantation Geyersvlijt around 1915 (source: Augusta Curiel, Stichting Surinaams Museum)

are fenced, and streets have sewage pipes. Demolition and replacement by a 'normal allotment' lacking Javanese socio-cultural traditions, is threatening the old kampong.

Tracing

We set up the living lab in 2016 with a team of three UAntwerp and four ADEKUS students. The focus was on the conservation, densification, and renewal of the kampong as a valuable and lively core for the surrounding allotments, while sustaining the Javanese socio-cultural traditions. The development as a tourist site connected to the already occurring visits to the ruin of the old sugar cane factory and the staff village was a second focus.

A first round of *tracing* with observations of the kampong, data collection and bilateral talks (with inhabitants, governmental actors, teachers, and the leader of the community group), made clear that cheap, quick, hands-on solutions allowing citizens to improve sanitation, potable water supply, and flood protection were in high demand. Since for many families growing vegetables and fruits in their gardens or in peripheral 'kostgrondjes'[8] was an important means of livelihood, it was established that short supply chain agriculture, directed to nearby cities, could offer opportunities for this community. Moreover, the community group dreamed of a farmers' market. And finally, it became increasingly clear that heritage qualities worth rehabilitating did not lie in the precarious kampong houses, but rather in the correlation of collective space with Javanese social habits, and in the plantation's landscape, carved with wide and narrow canals punctuated with locks and pumping stations. One of the prevailing problems for the community is the regular flooding during heavy rainfall that became more frequent and more intense during the last decade. Therefore, the revaluation of the canal system not only strengthens collective memory but climate resilience as well.

These insights led to the identification of four project themes and gave way to a new task division in the student team: two students decided to further focus on the history of the kampong and on a tourist kampong trail, two students on new socio-cultural infrastructure, two students on the sewage and water system, and one student on new housing developments combined with short supply chain agriculture. In what follows, we will briefly discuss the latter two projects on which work has proceeded until today by new teams of students or by other actors.

8 "kostgrond" is the Dutch term for a plot of subsistence farming.

Tracing, mapping and diagramming

The *tracing* activity was continued with a more focused spatial analysis and interviews with stakeholders, discussing the project themes and their possible solutions. This was followed by the collection of international referential cases for each theme and design explorations (*mapping*). The internship of the UAntwerp students was finalized with a public workshop in Mariënburg in which the provisional results of the analysis, the design explorations, and the referential projects were discussed with residents, their community leader, and government parties.

The four project themes were accepted for further elaboration. A few weeks later the weekly Sunday Mariënburg Farmers' Market was already in business underneath the existing roof of a public recreation hall. Apparently, the living lab activities had roused the latent idea. Surinamese student team members helped the community with designs for the market tables and the spatial lay-out of the market. The committed ADEKUS professor Maricano Dasai acted as a go-between. In the months that followed, students in Suriname and Belgium further elaborated on the designs and business cases.

Figure 34.3 Interviews with stakeholders (source: ISTT, 2017)

Renewal of the drainage system

This project is about the renewal of the original kampong drainage and irrigation system and its adaption to urban uses and small-scale agriculture (Baldwin, 2017; Blom, 2017). A dike and a ring canal provided each plantation with separate discharge into the river, while smaller, perpendicular canals drained into the ring canal. The barracks were built around 1890 with small pathways and footbridges allowing access to them.

Nowadays the water quality in the canals of the kampong is very bad because domestic wastewater is discharged in it; the use of septic tanks is not generalized. During heavy rainfall and high tide, the streets and the gardens of the kampong are regularly hit by flooding from the dirty canals. Under 'normal' circumstances though, the old drainage system is very versatile as it can also store rainwater during periods of high tide, when discharge in the river is not

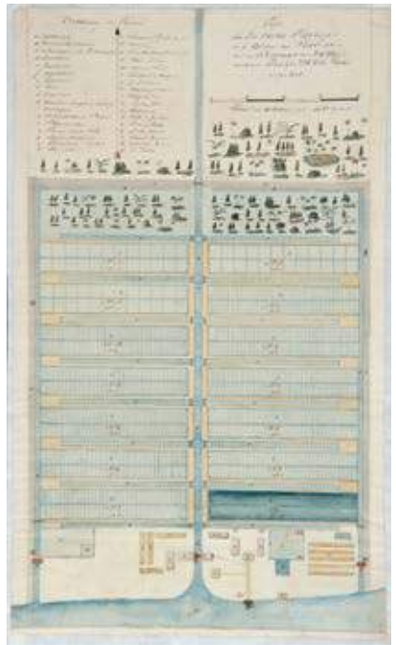

Figure 34.4 Typical drainage structure of a sugar cane plantation in Suriname (Collection Nationaal Museum van Wereldculturen. Coll.no. (source: TM-H-3350)

Figure 34.5 Mapping of the relicts of the former canals (source: Blom, 2017)

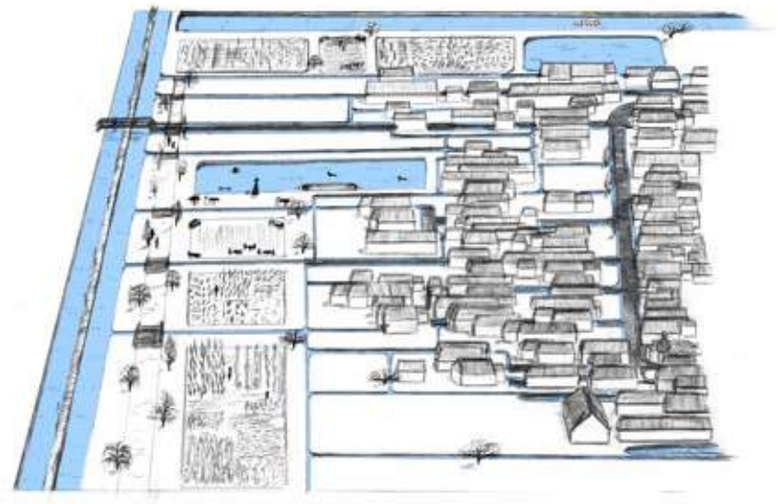

Figure 34.6 Concept drawing of the re-activated water structure as a backbone for new development (source: Blom, 2017)

possible. Bad maintenance of the canals reduces the flow section of the canals. Lack of awareness among the residents and weak control of drainage regulations further contributes to the increase of the flooding risk: residents fill canals to enlarge their properties and to create parking spaces for their cars. One canal contains drained source water from inland wetlands and is used by residents to collect water for domestic use, as there is no public potable water supply. Since a development cooperation project for potable water supply is on the way, we decided to focus on the drainage and sanitation of the kampong, thereby providing residents with sufficient non-potable water and reducing their dependence on costly tap water.-

Mapping of the relicts of the former canals led to considering the reinstatement of the former drainage system by reopening filled canals. The project proposed several scenarios for the installation of rainwater retention, septic tanks, helophyte fields, and purification ponds. The different scenarios articulated either more individual or more collective solutions, always maximizing the use of rainwater to minimize costs when the tap water system will be in business. Ponds were to contribute to the irrigation of new collective urban agriculture fields. A natural swimming pool and recreation paths along the canals were considered (Baldwin, 2017; Blom, 2017). Finally, designs for

Figure 34.7 Above: Re-activation of the existing canals, funded by UNDP as a result of the Plan4CuRe living lab. Right: Residents working together in the renewed shared space of the canal. (source: Dasai, 2019)

the location of this infrastructure, cost estimations, and a proposal for an organisational structure were produced. In the academic years 2017-18 and 2018-19 new student teams elaborated on more precise designs for the open space and the canals in Kampong Sawa, a separate neighbourhood in Kampong Mariënburg, giving special attention to the patterns of use in the public, collective, and private domains (Cappaert, De Bruyne & Smets 2018; Claassens, Cotton and Thaler, 2019).

The Kampong Sawa designs were a follow-up to an official meeting, where interim research results were discussed by the professors with the political leader of the district, officials from ministries, and the leader of the community group. This meeting raised the latter's enthusiasm and led to a pilot for the installation of septic tanks, the digging of a connection to a principal canal and a cleaning campaign of Kampong Sawa's canals. Technical aspects and images of possible layouts for the open spaces were discussed in neighbourhood meetings with the residents. Grants from the Japan-Caribbean Climate Change Partnership were arranged, and the implementation started in the beginning of 2019. The residents of Sawa agreed to carry out a large part of the work themselves. The work was done based on the cultural concept of Gotong Royong, in which local societies work together to improve their living conditions, a cooperative Indonesian tradition nearly forgotten by the locals and tapped into by the project.

Today the canals in Sawa are cleaner and families are reorganizing their parcels. Families having their houses on both sides of the canal transformed the rear side of their houses into a shared space on the canal. But in the meanwhile new challenges have appeared. Only a small part of the former drainage system is working again, so in order to really protect against flooding the complete former drainage system needs renewal. Therefore, the roll-out of the lab to the entire kampong of Mariënburg is paramount. The pilot's success can help to convince their neighbours. Another challenge is how residents of Sawa can be encouraged to take responsibility for the maintenance of their drainage system. An experiment with an elected maintenance board, supervised by students and professors, is now in progress. Crowd funding, also pertaining to Gotong Royong, will ensure the necessary monthly resources. Last, and definitely not least, the wide-spread use of herbicides, pesticides, and fertilizers in Surinaame's agriculture, which continue to threaten bio-diversity and health, takes challenges to another level.

Renewal of the plantation system: from extensive sugar cane to intensive small-scale agriculture

A second project theme investigated by the research team deals with larger scale challenges and requires another level of accountable actors. Although Suriname imports food, fertile former plantation grounds remain uncultivated, since they are too argillaceous for heavy agricultural machines. As the planta-

Figure 34.8 New typology for small and mid-size peri-urban farmstead (source: De Feyter, 2017)

tion grounds lack economic return, the drainage system is unlikely to receive proper maintenance. The government has no means and residents are reluctant to maintain these, since the sewage of new housing areas doesn't require such recurring labour. Therefore, the project sets out to further develop the existing home-based agriculture economy, restoring the raison d'être of the drainage system and producing new revenues on the former plantation (De Feyter, Peeters & Voorspoels, 2017). Small-scale cultivation doesn't require heavy equipment and is in line with the historic landscape characteristics. The kampong's farmer's market can become its home base.

An allotment of small farmsteads, similar to the existing roadside farmstead is proposed on abandoned plantation fields, adjacent to the kampong. This agricultural model thrives on cheap ground within driving distance from Paramaribo and is considered a cultural asset in Suriname, with the ability to provide for the livelihood of numerous families, stopping the rural poor from heading to slums in the capital (ERM, 2017, p. 143).

Integrating the farmsteads inside the plantation results in a more compact spatial model, with full- and part-time farmers living near the kampong, keeping surveillance on their crops against theft. The allotment is framed by the existing canals, to be used as an irrigation system, for water retention and for drainage alternately (De Feyter et al., 2017). The urban farmstead development turns into both a housing strategy and a renewal of the plantation economy, while maintaining the area as green, open, and permeable; conserving the valuable landscape; maintaining the canal system; and protecting the village from flooding.

The farmstead development can provide the kampong with a more diverse range of housing types. The short chain agricultural development can turn Mariënburg into a self-sufficient and lively centre in the Commewijne district (De Feyter et al., 2017).

Residents responded with vivid interest to these ideas and the research team continues its efforts. As the project was recently included in an action plan for the sustainable growth of Paramaribo, commissioned by the Inter-American Development Bank, the search for suitable actors can now acquire more momentum.

Discussion

The projects described above demonstrate how Living Labs in countries where authorities fall short can contribute to a better life situation for vulnerable communities while preserving and valorizing heritage characteristics. By tracing and mapping, the kampong lab research team discerned pressing issues with flooding and sanitation, as well as hopeful initiatives in spatial practices and part-time agriculture. For all these, the canal system inherited from the plantation itself offered solutions. The students' frequent contacts with residential groups created a buzz, accelerating long-dormant ideas into realization (the farmer's market), and increased the community's revenue. Through discussing propositions with actors, disseminating telling images, and studying elaborate business cases, awareness grew of the resilience of the inherited landscape and of the community's ability to take agency for it, which resonated with the age-old communal work culture Gotong Royong. This establishes hope that neighbourhood organisations can be accountable for maintenance and further expansion of canal renewal, becoming a motor of "networked change".

The Mariënburg projects elucidate the importance of well-supported community leadership and social capital. In other projects of the research unit ISTT, in the former bauxite company town Moengo, home to many citizens victimized by the Surinamese Interior War (1986-1991) many of whom only recently moved in, such supported leadership is badly missed. Therefore, implementation of suggested projects still fails. Even as we learn to know the community better and living lab activity raises growing interest, alliances that are taking the agency to improve living conditions in Moengo haven't arisen so far.

Also for Mariënburg, the allotment project proposing small farmsteads and a regional agricultural centre is still in its infancy. Before parties accountable for the solutions can be identified, the ownership of the proposed farmland needs clarification. In a country where legislation and administration fall short, this is less easy than could be expected. Uncertainty about owners' rights is likely to hamper citizens in collaborating on communal projects for the improvement of their living conditions. Meanwhile, ISTT's Living Lab planning approach has been notified by the Inter-American Development Bank, who invited ISTT to draw an Action Plan for Paramaribo's sustainable development. In this plan, living labs are proposed for a range of projects. The research team has adopted this new track to try to identify the accountable parties still missing for the Mariënburg plantation farmstead project.

There can be no doubt that the Belgian Master students and Surinamese Bachelor students are pivotal persons during living lab sessions in Suriname. As the initiators of real-life actor networks and relevant project ideas, their commitment is vital for these action research experiments in complex situations with extremely limited resources. Therefore the living labs in Suriname are not only a way for students to acquire international and intercultural competences, but also an opportunity to perform service learning at the universities, fostering sustainable change in vulnerable neighbourhoods in developing countries.

Anticipating culturally resilient transformation in Mariënburg, Suriname: A student's testimony

NATHAN DE FEYTER

As a final diploma student of the Master of Architecture at the University of Antwerp, I was part of the first group of students to participate as student-researchers in the fieldwork undertaken at the Kampong of Mariënburg in 2016. I stayed in Suriname for ten weeks. During this period, I tried to understand a country that is substantially different from my own. The first weeks were overwhelming: losing time on practical matters and feeling like an intruder met with suspicion threatened my own over-ambitious expectations. I only made progress after losing the fear of failing my own ambitions. This took time.

Our research was structured following the four activities of the Urban Living Lab methodology developed by Luuk Boelens e.a.: *tracing*, *mapping*, *diagramming*, and *agencying*. As pioneers to work in Mariënburg, the *tracing* phase was critical to define the main interests and concerns of the inhabitants and understand the Kampong, trying to get rid of the Western idea of the ideal neighbourhood.

During our visits to Mariënburg, we were always accompanied by local students from the University of Paramaribo, which made us more approachable and less invasive. The fact that we spoke the same language played to our advantage and the local students eased the process of assimilation, as we didn't know which parts of the plots were perceived as private or whether we had to accept or refuse a proposal or gift to be polite.

We started our fieldwork by simply walking around and talking to people, explaining the purpose of our presence. We started making small drawings, went to buy drinks in the local supermarket, and had lunch in the local warung. The next day we took a guided tour in the abandoned sugar factory, as recommended by a man we met the day before. The guide Sukardi, a well-known figure in Mariënburg, was happy to respond to our interest in the Kampong and showed us his house and introduced us to his neighbours. This set off a train of events. After a while, when we started recognising (and meanwhile became) familiar faces, we started taking pictures and measuring streets and plots.

Out of these preliminary explorations, new ideas emerged about the potential and opportunities in kampong Mariënburg. The opportunities and qualities were obvious: tourism and agriculture could help tackle the growing social disintegration and unemployment in Mariënburg. Next to the material heritage of the old plantation (the buildings and plantation structure), the immaterial heritage (the mainly Javanese culture of its inhabitants) proved that the kampong had a lot to offer, both as a

neighborhood and as a community. Beside the great potential and opportunity, the challenges were clear, too: no drinking water, poor sewage and rainwater management, badly maintained road and building infrastructures, population growth, uncontrolled informal renovations, constructions that put pressure on rare open spaces that were important for residents, not only for cultural reasons but also for recreation, water buffering, and small-scale agriculture.

Explorational conversations with governmental organizations made it clear that solutions would not be found in big scale governmental projects. The lack of heavy equipment and funding directed our research towards small scale, home-based, bottom-up propositions.
I chose an unused old plantation site to design a new typology for spatial development, that considered culture, production, and water management. The site's choice fitted seamlessly with the Plan4Cure idea: deploying heritage as a motor for sustainable development. The housing shortage implied the provision of new dwellings. The unemployment on the other hand, required the integration of productive landscapes, which were organized between the new dwellings. This intertwining was necessary: first because the residents needed the ability to keep an eye on the crops or animals to keep them from being stolen, and second because Javanese people are used to doing small-scale agriculture on their own property in the so-called home garden or pekarangan.

The search for a suitable master plan was made during a co-evolution process, following the principles of the living lab strategy explained earlier. Simultaneously two repetitive actions supported each other, the first of which was research (by design). The second action consisted of activating and mobilizing decisive local and supra-local actors. The final master plan intertwined living and working in a small scale, provided retention basins for water collection, and left room for short-term processing and public space to relax.

The work I did in Suriname was very instructive and continues to influence me in my current practice as an architect. My Surinamese experience has taught me not to be afraid of the experiment. This actor-centered strategy proved to be very promising during our time in Suriname because it enabled us to elaborate on locally supported proposals in a relatively short time. Moreover, deploying people and communities to co-creation scenarios in a 'living lab' is most likely to result in smart solutions that you would never think of yourself.

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