

Studio In-Situ: From Disjuncture to Dislocation

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This photo essay explores the possibility of radically shifting the understanding of the design studio as a spatial construct. By considering the seven-year evolution of a (so-called) design-build project known as the *Imizamo Yethu* Water Platforms, it recognises the possibility of dislocating the design studio from its traditionally centralised space in the academy and moving it to the site of its investigation or intervention for the duration of a project.

The *Imizamo Yethu Water Platforms* aimed to improve water and sanitation infrastructure in a severely under-resourced informal settlement in Cape Town, South Africa, through the insertion of small permanent public spaces. Due to a number of reasons, including the physical characteristics of the sites selected for these spaces, the design studio gradually shifted its physical location to such an extent that virtually the entire design, documentation and construction process took place in-situ.

#architectural education

#design-build

#design studio

#infrastructure

#live projects

Flows, Fluidity and Fixity

The *Imizamo Yethu Water Platform* project was a (so-called) design-build project in Cape Town, South Africa, that was run by the University of Cape Town's School of Architecture, Planning and Geomatics from 2010 to 2016 (Louw 2012). The project was initiated as a response to a severe lack of water and sanitation infrastructure in the settlement of *Imizamo Yethu* which was, at the time, one of Cape Town's two most poorly serviced informal settlements. The population of roughly 25,000 people had to share sanitation infrastructure to the extent that, on average, every toilet was shared by more than 60 households and every tap was shared by close to 400 households (Louw 2016, 214).

As with most informal settlements, the static nature or relative lack of infrastructural flows below ground is contrasted by the fluidity of the built fabric above ground. Houses are continuously being built, demolished, rebuilt, expanded or destroyed. Fires are a regular occurrence and the lack of infrastructure as well as constrained accessibility means that lives are lost regularly, and destruction often occurs on a large scale (a devastating fire in 2017 destroyed almost half of the informal settlement). Space is contested and negotiated, private and public space is temporary and some of the only permanent features are tarred roads. The water platforms, besides contributing to the provision of water and sanitation infrastructure, also aimed to provide a handful of permanent public spaces or points of fixity in a settlement that is continually in flux.

Disjuncture

Notwithstanding the challenges that are encountered when building, the challenges encountered when designing in a space like *Imizamo Yethu* are multiplied by a lack of data (there are no detailed contour maps, municipal surveys, servicing lay-

outs, or information on tenancy and ownership). Even when professional surveyors are commissioned, the surveys cannot indicate the unpredictable conditions below ground where poorly constructed retaining walls, illegal service connections, concealed waste dumps or former dwellings amongst others, are encountered when building starts. Open sites for projects that are identified with community members are often built on in a manner of days from when a survey is done to when the site is visited by students for the first time. The unpredictability of what is below ground and the rapidly changing conditions above ground mean that traditional methods of documentation, and withdrawing to a studio that is removed from the site of investigation or intervention, cannot respond quickly enough to rapid change; the linear process of documenting, designing and constructing has to be compressed or disrupted to the extent that these processes happen simultaneously on site in what Jonathan Foote (Foote 2012, 53) refers to as a dialectic process instead of a linear one. John Habraken (Habraken 2007, 13) is of the opinion that despite its many advantages, the design studio is often disconnected from the outside world and he argues that there are three specific factors that do not lend themselves to studio teaching: constantly changing environments, a distribution of design control, and the fact that there is often a lack of shared values between role players.

In many parts of the Global South, and in South Africa in particular, there are ongoing calls for the decolonisation, transformation, and reframing of tertiary curricula with varying levels of actual response. At the same time the academy is beginning to recognise the need for, and value of, engaged scholarship and social responsiveness in terms of teaching and research. Ashraf Salama and Nicholas Wilkinson (Salama and Wilkinson 2007, 5) are of the opinion that "Contemporary societies are in a continuous process of transformations and learning systems should respond

to the changes associated with these transformations.” While the design studio as a “social and organisational setting” (Habraken 2007, 11) is well placed to engage with these issues, as a spatial construct it is often hampered by its traditional positionality within the physical confines of the architecture school. Perhaps it should be considered that the space in which learning takes place also needs to change.

One way to do this in architectural teaching is through practice-based or online learning (whether this is through individual consultations, online group seminars, MOOCs or, as has happened since the writing of this article due to the COVID-19 pandemic, the ubiquitous Zoom call) which is becoming increasingly common and it is making the discipline more inclusive and accessible to many disadvantaged students. While peer learning and the capacity to absorb increased student numbers can be accommodated in these modes of teaching to some extent, the simultaneous connection with a community and a physical site as a group is not so easily accommodated. The flow of information and resources through technological means is mainly between the academy and students, and the challenge remains how to channel these flows to and from marginalised non-academic constituencies.

The disjuncture of the studio with communities, whether physical or virtual, becomes more apparent in conditions of increasing uncertainty. The *Imizamo Yethu* project is a case in point where structural inequality that was cemented by former apartheid policies is escalating, while political instability and widespread national student protests that happened during the last two years of the project challenged the very fabric of higher education directly. These, amongst many other factors including the uncertainty of physical space itself (both an inability to access studio space on campus due to protest and the fluid nature of the site) meant that over time, the project saw a gradual diminishing of the use of the traditional studio space.

The project was initially integrated into the design studio for two weeks before progressing into the technol-

ogy course for two weeks and then moving onto site for two weeks. This changed to a prototyping exercise in the technology course before moving on to site for two weeks, until eventually the entire project took place on-site with only minimal preparatory design work being done beforehand. In terms of documentation, some elemental surveying was initially performed on-site, but this could not surface a range of unknown factors concealed by vegetation and below the ground surface. Smartphones were used to document the site continually through digital measurement, photography, and photogrammetry. This assisted the decision-making processes where designs became assemblages of a collection of standardised precast components and found objects. This process, where the documentation, design, and construction happened simultaneously, enabled a more dynamic responsive approach and allowed students to be less protective over their design ideas. Similar to Foote’s experience (Foote 2012, 53), there was often no clear vision of the overall design at the start of the building process. No information was fed to a centralised studio, but the studio took place in-situ.

In terms of pedagogical transformation, the in-situ studio allowed students with skills other than those that are typically valued in the academy to come to the fore. Most of the participating students had never been in an informal settlement prior to the project and they were often initially uncomfortable. The importance of lived experience, the knowledge of social practices and indigenous languages, practical and artisanal skills, and being used to spaces of discomfort or uncertainty amongst others, mean that different students can show leadership and gain confidence which they may not have achieved in the traditional centralised studio space.

Dislocation

According to Ashraf Salama and Nicholas Wilkinson (Salama and Wilkinson 2007, 4), “Research indicates that designers in academia still distance themselves from

the real world, and still barricade themselves from real human problems, while missing the opportunity to learn from the richness and depth of human experience”.

The dislocation of the design studio from its traditional centralised space in the academy to an in-situ condition in marginalised spaces challenges the means of documentation and design, and the pedagogical structure and tools used for its delivery. John N. Habraken (2007, 17) notes that “If we carry responsibility for [the] everyday environment, we must study it.” The word “studio” has its roots in the Latin word *studium* which means to study, and this implies the application of time and careful attention. The in-situ studio should be embedded in the community over time in order not to be a form of architectural tourism; it should provide what Rudolf Perold and Hermie Delpport (2018, 43) refer to as “educational spaces in which critical citizenship can be fostered.” It should also be about going to the site and staying there for the duration of a project and beyond without retreating to the comfort of a centralised space in the academy. A design studio in any given context takes time to develop and while methods may be conceptualised and applied in different situations, real engagement cannot. If studio teaching “transmits the values of design professions and society at large” (Salama and Wilkinson 2007, 3) then the values and ethical base of the design professions and society in a vastly unequal society like South Africa should be challenged to reevaluate their modes and spaces of transmission. The displacement of communities should be echoed by a displacement of the focus of design professions and societies, which essentially entails a shifting of the spaces of power.

The in-situ studio, whether it is a design-build studio or not, is a dislocation from the centralised comfort of the academy into a space of discomfort. The situatedness of the studio within a community implies a shifting of the direction of social, economic, and technological resource flows; where these formerly ran from the site via the centralised studio to the student, a situation can be established where these resource flows become reciprocal with the greater balance run-

ning towards the community. The dislocation of the studio raises several questions: What happens if students are not able to withdraw to a centralised studio? What is the role of the traditional centralised studio in the future? It might even raise the taboo question of whether the centralised design studio is needed at all.

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Figure 1 (top): Students surveying the burnt-out interior remains of a building in Imizamo Yethu which was severely damaged due to arson; the mural on the external façade was painted after the fire damage which results in a curious inversion of inside and outside. *Source: author*

Figure 2 (bottom): Students from the BAS(Honours) elective, Studio Glocal, on a site visit to *Imizamo Yethu* to prepare for the design of a new Community Hub building which will incorporate the burnt-out remains shown in the image above. The water platform that was completed in O.R. Tambo Road in 2011 is visible below the tree on the left. *Source: author*













Figure 3 (page 37, top): Students assembling the formwork for the staircase that leads up to the 2012 water platform from O.R. Tambo Road in Imizamo Yethu. *Source: author*

Figure 4 (page 37, bottom): Students passing bricks to local community members who are building a support column for the 2013 water platform. A mural by an unknown artist is visible on a precast toilet block in the background. *Source: author*

Figure 5 (page 38): Students assembling the shading structure over the 2013 water platform. The structure is made out of stainless steel cables and short repurposed timber sections which were formerly the studio floors in the School of Architecture, Planning and Geomatics's Centlives building, but they had to be removed due to water damage. *Source: author*

Figure 6 (page 39): Students assembling the shading structure over the 2016 water platform. The structure is made out of stainless steel cables and repurposed milk bottle tops which were purchased in aid of Operation Smile, an organisation that funds operations for children with cleft palates. *Source: author*

Figure 7 (page 40–41): Students engaging with local community members while designing the 2016 water platform in situ. *Photography: Stephani Perold 2016.*

Figure 8 (this page, top): Students passing repurposed concrete test cubes to the site of the 2016 water platform. These were used as pavers and supporting structures for washtops. *Source: Photography: Stephani Perold 2016.*

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Bio

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