

**Agronomy Campus Bella Vista – How to Care?
On the Process and Product of a Design-Build Project**
Franziska Sack

»Architecture and urbanism are always concerned with the future. Restoring the future to good condition does not mean more of the same, largely developer-driven and capital-centric architecture and urbanism, but rather long-term commitment to planetary care based on human and non-human liveability. We see an ethics of care as the most important perspective for an architecture and urbanism in our times of catastrophic ruination.«

Elke Krasny in »Critical Care – Architecture and Urbanism for a Broken Planet«, 2019

Both the school building and the boarding house on the new campus in Bella Vista, Bolivia, are the result of an international collaboration between the NGO and ecumenical foundation Fundación Cristo Vive Bolivia (FCVB) fighting poverty reduction in Latin America, and CODE, chair for construction and design at the Technische Universität Berlin. Under the supervision of Prof. Pasel and his team about 70 students designed, planned and realised the project between 2013 and 2017 together with their local partners.

The new buildings are part of "Sayarinapaj", a vocational school offering young students from rural areas professional prospects within the field of study. The overall aim is to establish an exemplary new campus as a centre of innovation in the greater area of Cochabamba and central Bolivia. The use of renewable energies, resource efficient water and waste management as well as ecological farming are some of the main objectives as to the operation of the campus.

Therefore, the architecture is the result of a so-called design-build project. Within the academic context, the term refers to educational programmes that allow students to go through all stages of the design and construction process of a project. In a first step, the group collectively designs a project under the supervision of professors and instructors which is subsequently built with their own hands.

Defining design-build projects as 'socially responsible, inhabitable, full-scale investigations' Delpont lists several academic outcomes of such investigations mainly linked to skills that cannot be taught by conventional studios. Responsibility as to the client's expectations, the value system of both the academic and the professional context, and the contribution to a local community are mentioned as relevant outcomes (Delpont, 2016, 7).

Hence, the project of the agronomy campus deals with a broad spectrum of responsibilities: an educational mandate including all implications for the professional practice and the discipline's role for our collective future on the one hand and the implementation of the NGO's requirements for the exemplary new campus on the other hand. The reflection on the process and product of the design-build project is an iterative and ongoing process. This text focusses on the project's material conditions.

»Architecture starts when you carefully put two bricks together. There it begins.«

Ludwig Mies van der Rohe, On restraint in design; in NY "Herald Tribune, 1959

The above-mentioned quote by Mies van der Rohe, a trained bricklayer, describes the act of bricklaying as a pivotal operation within the architectural creation. If carefully carried out, it is supposed to mark its very beginning. It celebrates the focus on a seemingly simple action. Complexity within the discipline is reduced to a mere gesture requiring undivided attention. Here, the act of caring is related to a manual action.

The he agronomy campus project is made out of hundreds of thousands of bricks, laid by workers that were unskilled in the beginning. It is manually built by students of the TU Berlin, students of the vocational school who are also the future users and Bolivian female bricklayers in training. Decontextualising Mies' quote and applying it to the contemporary realities of the design-build project calls for a discussion of the project's interdependencies. In times when a proclaimed crisis of architecture is debated in the context of 'social architecture' (Gribat and Meireis, 2017) and questions are discussed on how architects deal and should deal with challenging environmental threats , economic forces and societal requirements (Richter, Göbel, Grubbauer, 2017) such a project asks for a reflection within diverse contemporary discourses. Debates on 'social architecture', 'care' and sustainability, being a field of discourses and practices in their own right (Owen and Dowey, 2008), open up a huge array of possible perspectives on the Agronomy Campus Bella Vista. The project's complexity is closely tied to the material conditions of its brickwork.

»Who cares, for whom, and how? This question is a provocation for design research. What do, or should, we care about in design and design research today? Underpinning the question are issues of culture and agency – who cares, for whom, and how? Taking care, or being cared for, evokes the choice of roles, and processes of interaction, co-creation and even decision-making. Caring, as a verb, emphasizes care as intention, action and labor in relation to others. Care can be understood as concern for that beyond oneself, for others and, thus, human, societal and even material and ecological relations are at stake. The question of care is also a call for questioning relationships, participation and responsibility, democratic and sustainable ways of co-existing. From this expansive societal standpoint, we could even ask who cares about design? And what should we do about it?«

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The debate on the concept of care in the context of the designing disciplines (Fitz and Krasny, 2019, Tronto, 2019, Imrie and Kullmann, 2016) was not present during the planning process of this project. Nevertheless, most decisions on the brickwork being the construction method can be directly associated with the above-mentioned queries. Questions about resource efficiency, local economies, climate-friendly constructions and empowerment guided the design decisions and the related collective and controversial discussions.

In technical terms, the decision to choose massive brick walls is based on the assumption of several advantages: The earthquake resistance of the chosen masonry bond, the potential for the indoor climate thanks to its heat regulating characteristics and a concrete-saving and therefore assumingly more resource-efficient construction are arguments underpinning the choice of the massive brick walls.

In terms of the construction process, bricklaying is a grateful building technique. It can be learned relatively easily and is feasible for workers with different levels of physical strength. A major advantage of the project is the cooperation with the NGO Procasha empowering women by providing an education as bricklayers., The agronomy campus was a work of major importance for the team of female workers enabling them to build up their own construction company afterwards.

From an economic point of view, the choice of brick is based on the assumption that locally produced construction material does not only support the small-scale brickworks but might also have a positive effect on potential reproduction. As the ubiquitous self-build construction method of a concrete frame with a thin infill of bricks is disadvantageous in terms of earthquake resistance and heat regulating effects, the design team assumed that the massive brick construction might serve as a role model. It was hoped that the performance of the massive brick walls would be so convincing that the construction method would be emulated.

All these assumptions made initially call for critical reflections afterwards in order to complete the process of 'full-scale investigation'. The leading question could be if the design decisions are based on caring about the 'right things'.

**»The point is not that contemporary architects and planners are all uncaring;
the point is that they are caring wrongly.**

They are caring about things, and, often, about the wrong things.«

Joan Tronto in »Critical Care – Architecture and Urbanism for a Broken Planet«, 2019, 27

The above-mentioned thoughts and assumptions about the design choices within the process of this project reveal their potential concerning the debates on the concept of care. Originally most relevant in feminist theory, thoughts about care become increasingly relevant for the realm of architecture and urbanism. As revealed by Fitz and Krasny, the definition of care by political theorist Joan Tronto and Berenice Fisher is especially useful for critical reflections on the focus of the spatial and design disciplines. "On the most general level, we suggest that caring be viewed as a species activity that includes everything we do to maintain, continue and repair our 'world' so that we can live in it as well as possible. That

world includes our bodies, ourselves, and our environment, all of which we seek to interweave in a complex, life-sustaining web.” (Tronto and Fisher, 1990, 35 in Fitz and Krasny, 2019, 13). Concerning the discipline of architecture Tronto stresses the fact that a first major step in making a shift towards a caring architecture is ‘to see architecture as a reflection of power’. She then asks how our power might be used in order to care for our planet and assumes that architects and urban planners ‘will surely provide a critical part of the answer to this question, if they care enough to try.’ (Tronto, 2019, 32).

The academic project of the agronomy campus harbours the potential to try and find appropriate ways in the spatial disciplines how to care for our ‘broken planet’. Needless to say that the approach of focussing on the interdependencies has a longer tradition in the architecture education. The attempt to shift the attention from the object to the problem was intensively discussed decades ago (Burckhardt, 1973). However, the urgency of today’s challenges puts new pressure on the discussion. As critical voices proclaim the need for a profound reflection of the project- and object-fixation within the debate on ‘social architecture’ (Gribat and Meireis, 2017), this provides a new impetus to the research on such a project.

Coming back to the educational mandate, the critical reflection and evaluation of the design choices concerning the material conditions could be used for rethinking the conventional architectural education as a whole. Being a crucial link to the alignment of the professional practice a profound discussion of the academic design studios is appearing on the agenda. Discussions of canonical contents of the architectural education in general (BDA Tag, 2017) might be nurtured by the insights of projects such as the agronomy campus.

»(...)no other discipline is less autonomous.«

Jeremy Till, »Architecture Depends“, 2009, 155-56

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