



Image of a carpenter by Jan Luyken (1694). Rijksmuseum, RP-P-1936-458

(Re)constructing architecture

Questions on the architect's involvement in construction on a path towards systemic change

A personal starting point

Before starting my bachelor studies here at this faculty (Architecture and the Built Environment, TU Delft), I was presented the privileged opportunity to take part in the complete construction of a row house in the north of Amsterdam. What ensued were seven months of intense learning, working on everything from the foundations to the assembly of the CLT structure and the glass curtain facade, the installation of services, the hand-nailing of the larch facade cladding and more. This experience became quite formative in the sense that it greatly influenced the way in which I perceive both architecture and its conception. After more than four years of studying during which the building site remained very distant, I sought out a semester of work at an architectural office that is greatly involved in the construction of its own projects (Enzo Valerio), again working on site everyday.

Stemming from this personal interest in the physical act of building, and crucially the learnings involved in that act, I am driven to use my personal research during my graduation project to further deepen this interest. Acknowledging however that both of the aforementioned cases describe a very niche practice, I wish to gain a better understanding of the (emerging?) role of the architect that is more directly involved in construction against a backdrop of the persistent belief that there is, or should be, a division between the acts of design and construction, between manual and intellectual labour.



Assembling the glulam structure of the curtain facade during the project before my bachelor studies. Photograph by Bart Verschoor.

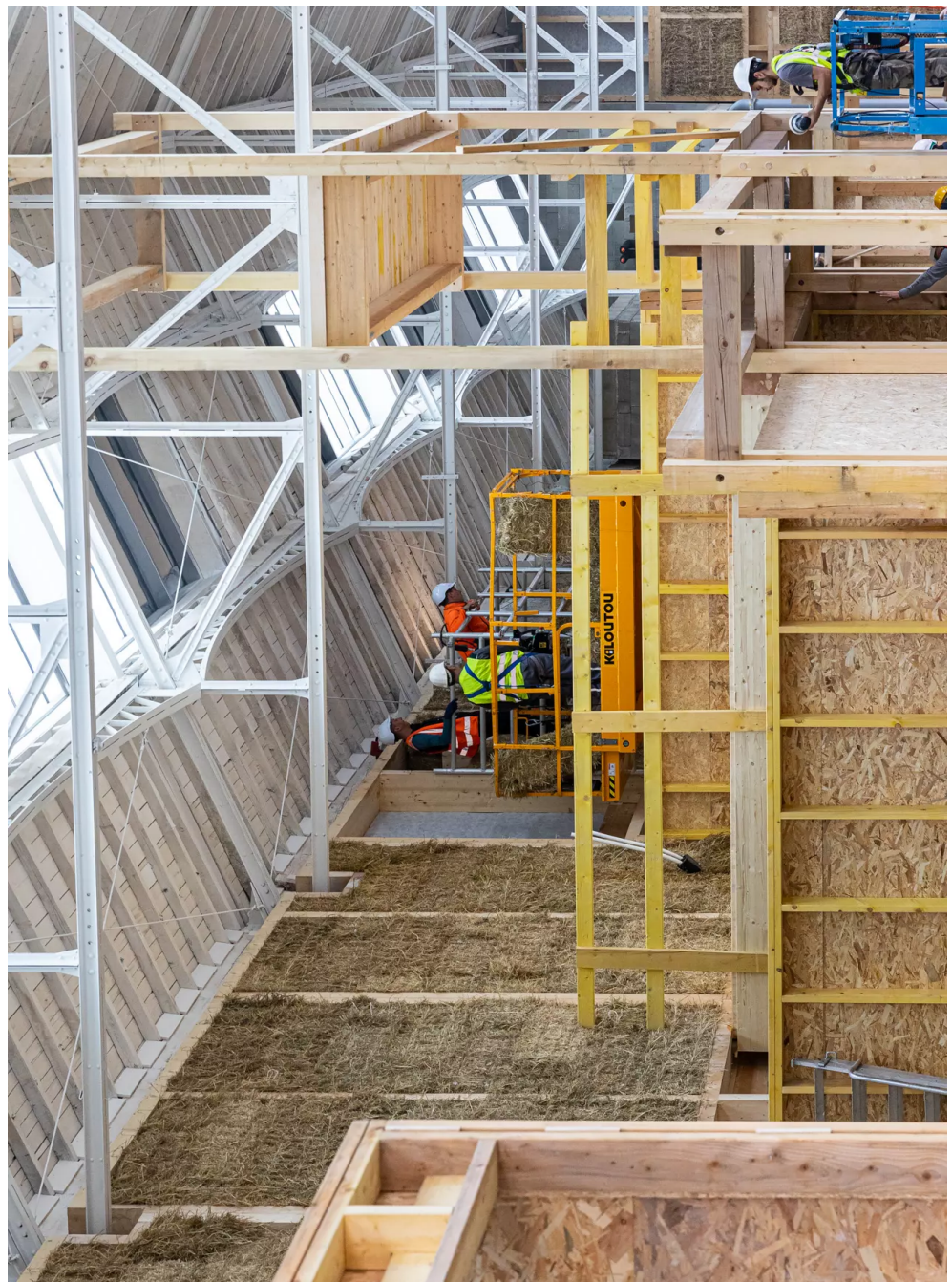
Problem statement, contemporary context and relevance

In a globalised world where our (often western) starchitects produce fantastical designs that boast promises of environmental and social sustainability, but that often fail to deliver, and are sometimes even realised through exploitative labour practices (Ferro, 2024, p 97), one can start to question the will and ability of the field to understand and work with the problems that we face.

Yet, being confronted with resource depletion (Watari et al., 2023), the substantial carbon emissions of the construction industry (Ramage et al., 2017) and the consequential climate crises (among others), many architecture practices do search for (an expression of) a certain sustainability in their work. Understandably, despite the best intentions, some of those efforts remain superficial as they stay reliant on existing structures and methods. Nevertheless, some seek to redefine these existing structures and methods in spite of the fact that “*attempting to ‘practice differently’ can be a lonely endeavour with much risk and little reward*” (Non-extractive Architecture(S), a Directory of Design Without Depletion, n.d.), thereby redefining the role of the architect along the way.

As Lefebvre (2021, p13.) argues in her book; *Thinking Making; When architects engage in construction*, the ways in which different architectural practices may engage in the act of making can vary greatly. The book covers case studies of architects that choose to directly participate in construction, as well as those who engage with the processing of materials in their design practice, and many instances in between. The broader message however, that there seems to be a reemerging interest in the act of making in the field of architecture, aligns strongly with my own observations.

Part of this phenomenon can be perceived in a specific subset of practices that are directly engaged in construction, thereby attempting to ‘practice differently’. In those practices, one may notice a shift in attention (back) towards construction and the building site that is linked to a drive for a post-fossil and non-extractive future architecture, often grounded in its regional context. Multiple practices align with this development, but I found that three in particular (when looking relatively close to home) stand out. These are the UK based *Assemble* and *Material Cultures* and the Belgium based *BC Architecture* (& research & materials). All three of these practices undertake a multidisciplinary approach, attempting to break free from dominant paradigms through design, research and education. An example where these practices directly influence architectural education can be seen in a design studio taught at the KU Leuven (by Wes Degreef of BC architects); The Architect Changemaker. Quoted in the description of the studio; “*The pre-industrialised idea of the master builder may just reemerge in the context of circular building materials and techniques. It embodies the notion of an integrative method of architecture, rooted in regional context, regional resources, and regional workmanship. We look back at the time where the professional architect wore many hats; generalist, facilitator and master builder within the wider scope of the built environment.*”



On site at LOT 8, a project by BC, Assemble and Atelier Luma. Photograph by Adrian Deweerdt.

Three practices presenting themselves

Following up on the problem statement, and before delving into the proposed questions and methods, these short descriptions are copied from the websites of the three aforementioned practices, thereby sharing their own intentions in their own words.

***Assemble** is a multi-disciplinary collective working across architecture, design and art. Founded in 2010 to undertake a single self-built project, Assemble has since delivered a diverse and award-winning body of work, whilst retaining a democratic and co-operative working method that enables built, social and research-based work at a variety of scales, both making things and making things happen.*

***BC** is a hybrid practice, designing and undertaking "acts of building" towards systemic change in the construction sector. We strive for bioregional, low-tech, circular, beautiful and inclusive design. We work with our minds and our hands, undertaking activities such as community organisation, material production, contracting, teaching, prototyping. We aim to impact positively on people's ideas and planet. We act on behalf of the generations after us.*

***Material Cultures** – an organisation which brings together design, research and action towards a post carbon built environment. Inherently integrative, the design-led research project intersects material science, engineering, systems thinking, digital technologies and architectural design with a direct, active and practical approach. We aim to co-opt the factory as a place of creativity rather than mass homogeneity. We are interested in developing qualitative prototypical buildings, which are sustainable, economically viable, and positively impact their inhabitant's lives through considered design and accessible adaptability. We develop building typologies which touch lightly on the ground. In a climate in which warranties dictate design, and the nature of construction contracts limit quality, Material Cultures seeks to redistribute the priorities of the construction process in favour of design and sustainability.*



Growing Place; a series of participatory workshops by Material Cultures, hosted on site over summer 2024 explored the use of experimental materials made from agricultural by-products. Photography by Elena Cremona, Michael Sabuni and Henry Woide.

Questions and methods

If I were to phrase a main research question, it would be the following;

Could an architectural practice that is directly involved in making and construction allow us to engage with both environmental and societal problems more effectively?

Recognising the relatively abstract nature of this question, I wish to engage with the three (and potentially more) aforementioned practices to ground the topic and my questions in their day to day practice. Therefore, the main body of this research will consist of (online and physical) interviews and conversations with the aforementioned practices. Additionally, a form of onsite ethnographic research would be desirable, relating the interviews to the actual practice on the construction site.

Some more specific sub-questions that I wish to pose to these practices to start are;

What are and have been drivers for the practice to operate in the way that it does?

What is the importance of the multidisciplinary nature of your practice ?

In your attempt to 'practice differently', what role does your direct engagement with the construction site fulfil?

Who is included in the changes that you strive towards? Do existing actors in the construction industry take part?

Bibliography

Ferro, S. (2024). ARCHITECTURE FROM BELOW: An Anthology. *Material Reform*, Material Cultures.

Lefebvre, P., Neuvels, J., & Possoz, J.-P. (2021). *Penser-faire: quand les architectes se mêlent de construction ; Thinking-making : when architects engage in construction*.

non-extractive architecture(s), a directory of design without depletion. (n.d.). <https://directory.nonextractivearchitecture.org/?wayofpractice=the-politics-of-construction&location=belgium>

Ramage, M. H., Burrige, H. C., Busse-Wicher, M., Fereday, G., Reynolds, T. M., Shah, D. U., Wu, G., Yu, L., Fleming, P., Densley-Tingley, D., Allwood, J. M., Dupree, P., Linden, P., & Scherman, O. A. (2017). *The wood from the trees: The use of timber in construction*. *Renewable & Sustainable Energy Reviews*, 68, 333–359. <https://doi.org/10.1016/j.rser.2016.09.107>

Watari, T., Cao, Z., Serrenho, A. C., & Cullen, J. (2023). Growing role of concrete in sand and climate crises. *iScience*, 26(5), 106782. <https://doi.org/10.1016/j.isci.2023.106782>