

● ● **JAN PETER WINGENDER**  
 IN CONVERSATION WITH  
 ARJEN OOSTERMAN  
 AND NICK AXEL

Arjen Oosterman **You are an architect, that became head of an architecture department and then became a researcher. Maybe we can start by asking about your relationship to education?**

Jan Peter Wingender The roles you describe go back to a certain opinion about the profession that has developed over the years. From the start I considered architecture to be a wide profession in which the act of making buildings is only one part. There is a whole range of other things like beauty committees, advisory committees on public developments, institutional boards, education etc. which all seem to reflect upon that act of making buildings and developing the city. For me the prime focus has been always the designing and making of buildings. That is what I like to do the most. It's the basis of the discipline. But in order to do that and to judge its relevance, you need to step away from making buildings. For me education is one of the ways to do that. By talking about design you start to reflect on your own design process and explore new topics that might come from an encounter in practice but then take it outside and work with students on it. When we were educated as architects the idea of the concept was paramount, the holy grail. One of the things that disturbed me already while studying was that the act of making was being ignored. I was critical about the act of making as a consequence of the concept, and questioned how the act of making can influence the idea or concept. Quite soon after I started to teach at the academy, with Machiel Spaan I developed projects that incorporated the act of making into the assignment. Later this developed into a program of summer workshops at the Academy of Architecture

Amsterdam and Arnhem that were fully dedicated to the act of making. We took a material and started to conceptualize that, to extract spatial, technical, architectural and even cultural meaning from it. We started to experiment with basic materials: fruit crates, wooden slats, the sand of IJburg, and in the end bricks. During the brick workshops discussions started to touch upon our own practice as architects. We were building a lot with bricks but by doing these workshops we started to reflect more widely on the application of the material. What are we talking about with brick? What is an appropriate vocabulary to discuss brick or what is the set of ideas through which we can discuss the contemporary meaning of bricks? These questions popped up during the workshop, but one evening we sat together and decided we really wanted to reflect on that. So we started to enter the field of research.

AO **Still staying within the realm of education, is there a physical element to the idea that material knowledge is essential to the understanding of architecture?**

JPW Absolutely. We often ask our students to start working with the material, physically. We don't give them an assignment but say: this is a brick; we have a very big stack outside, so go ahead. Then you encounter very basic questions, like if you build a brick wall, how do you go around the corner? Or what is the difference between the bricks that sit on the ground or the ones that end the wall high-up? All these questions were addressed while actually acting, and not just reflecting. Another workshop we did with Baukje Trenning was about designing your own brick. What would you do to go around a corner, what patterns or textures can you make with it? Once you've dealt with how something is actually constructed, the next time you encounter a new material you think differently. It could be glass or wood, it doesn't matter. It's a way of thinking.

Nick Axel **I'm quite interested in how these sorts of pedagogical exercises and learning experiences get incorporated in your professional practice.**

JPW When we started to work with brick we knew very little about its history, but we liked its possibility for expression. For example, we started out with quite a budding approach to tectonics.

in the mood

And for us the façade expressed that, the load bearing idea. But when we started to work with students and stacking bricks I realized what we were doing was just stacking a façade. So the question was really about expression, about texture, about light. So we started to think about ornament and decoration, but in the beginning found it difficult to fully understand and give it a place in practice. The playfulness, the lightness of the work we did with students slips into our projects, but those are in another timeframe. A student project is short, and before it influences building it has to be digested and that takes a long time.

AO **What I like about those projects is that normally you have convention, and then you have liberation from that. But this is more about discovering freedom first to discover what the conventions are.**

JPW That was part of our research project, to describe the convention and see what it is.

AO **My impression is that there is not much written down on the history or even the use of brick, so in that sense you also contributed theory to practice, and in so doing, establish a stronger position for that kind of knowledge.**

JPW We discovered that the last real attention given to brick was in an exhibition in 1941, in Boijmans Van Beuningen. There you read the essay by Van der Steur who radically dissects the application of brick, but after that it stops. In the whole controversy between traditionalists and modernists, brick was framed as a traditional material. But if you look at the history of the material you see that at exactly the time we didn't want to discuss it, technical innovations went incredibly fast. We wanted to bridge that gap of non-debate, to give a description not of what's new or what's coming but where we are at this point.

NA **What does it mean for brick, one of mankind's oldest building materials, to be innovated?**

JPW Back then in the Netherlands we did everything with brick: the foundation, the structural works, the load-bearing construction, the dressing, the interior... By the time we picked up again on the tradition in the nineties, everything was made of concrete. The only thing we do with brick now is the cladding. That is a fundamental

transformation of the material that was hardly discussed. And when people did start to talk about brick again, they would always refer to that load-bearing tradition. The old notions still seemed to be in place, but they weren't valid anymore. The material had another role. So in that sense I completely agree with an essay by Jacque Herzog where he says that firmitas is a category of the venustas.

NA **Brick has been one of the first materials to be parametrically experimented with because of its modular nature. Are you moving towards a free aesthetic play of the façade? I feel like there is something in between the one or the other where you sit.**

JPW I had a conversation with the Matthias Kohler of ETH Zurich, who you know did this brick stacking project with robots. They used bricks though just because they were modular, not because of the intrinsic qualities of brick. The project was about digital fabrication, and they just ended up doing it with bricks. In practice you can't just stack bricks; you need bonding; not because of stability but because without it you don't know where to put the next brick; the mason needs it. But what happens with parametrics is that you can start to stack out of pattern and still produce something viable. That potential is the fundamental shift there in the Garmazio and Kohler project. *BUT MATERIAL ESSENCE IS SURELY MORE THAN JUST TECTONIC PRAGMATISM.*

NA **Mies already said that to be an architect you have to know how to put two bricks together. So in that sense what does it mean to start with a brick and not with the fabrication procedure that finds brick convenient for it?**

JPW It goes back to this discussion about fundamentals. For me buildings are made out of materials, not ideas. I can do a building without an idea if I have materials, but not the other way around. But what I said about materializing the concept or conceptualizing the material, I don't think it has to be one or the other. It's most interesting when those processes can work in parallel. But for me,

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thinking through material is fundamental in that process. The decision you take to build something with wood or metal changes the way you think about the building.

**AO Can you explain the relation between your Brick book and the research you did on brick?**

**JPW** The whole project had three different phases. It began from the knowledge we had in our own practice. As an architect we knew how to build a brick façade and what sorts of challenges it has. I started to look around and see some very creative solutions to basic problems, like the expansion joint; cases where the material possibilities of brick were used to work around the problem with texture or relief, for example. So in first phase we took twenty projects and systematically documented them, particularly what was behind the façade, the whole secondary steel construction. This helped us reveal that the brick wall is really just the façade. This ended up in the 'Brick Dresses' exhibition and that set the agenda. We showed what was going on, that brick wasn't a load-bearing material anymore.

**NA Was it the goal of the twenty case studies to create a contemporary history?**

**JPW** It was to have a set of detailed case studies we could relate to and start to extract different topics from as a basic set, like a control group. The second stage was inviting people to really dig into the specific topics. We needed to address brick at the urban scale; that almost all of the projects we looked at were produced in an environment where the urban plan prescribed the use of bricks. So we wanted to know why that was happening. We asked Udo Garritzmann to address tectonics. Louise Schouwenberg pointed out to us that what we were doing, rethinking brick, was actually part of a much larger process in fashion and design that was moving in the same direction. So we asked her to reflect on that. We also started to draw the timeline of regulations and laws. The third phase was really the output phase, the book, lectures etc.

**AO That also relates to the peculiar reality in architecture that there is a body of knowledge in so many offices that is never formalized, yet is passed on to next generations, almost like freemasons. Was your project a quest to unearth that kind of knowledge?**

**JPW** We sure wanted to open it up to more people. I truly believe architecture is a collective endeavor. There are few people in the world that really do that.

**AO But there is another thing related to that. Architects who work with brick are often, relatively speaking, modest architects. Maybe it's the kind of commissions they get, but it's often not so much about the concept or expressing or shouting. Is there any relation?**

**JPW** I've thought about that too. Maybe it has to do with the type of architect, but maybe it's also something in the material itself that doesn't lend itself so much for expression. That's really changing now though. I was talking to Marlies Rohmer who tries to explore the expressive qualities and I wouldn't call her modest. There is a certain resistance in the material though, produced in this clash between idea and material. You cannot do everything with brick.

**AO In the book, you even describe that it tests your ideas.**

**JPW** For sure it transforms the ideas, and that's what I enjoy. There are a couple of architects who do that and I think they reach fantastic results. Brick is still one of the cheapest materials and the majority of the buildings we do are within a limited budget. In that sense brick is a mediating material. I can see architects playing with that and exploring the material to its limits of an everyday production.

**AO A last practical question about the structure of the book. You start differentiating between 'solid' and 'dress' but the majority of the book is about dress. You subdivide it into different categories. Is that a scientific obligation?**

**JPW** The five categories were for me a way to read the projects. To be honest, the first part about load bearing I wanted to get rid of at first, but a lot of architects are still referring to brick's solid aspects, whose projects I realized are dealing with the exact same problems as brick 'dress' projects. The categories were also a bit of an homage to Van der Steur's essay in the book *Nederland Bouwt in Baksteen* (The Netherlands Builds in Brick) that also uses categories.

I actually think that one of the categories, the self-supporting façade, could become quite important in the near future. By using a full brick instead of half brick, you can take away the

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secondary steel construction. That's what makes it self-supporting. The problem with secondary steel construction is that it goes through the building's insulation. With current sustainability demands, that causes many problems because of cold bridging; each point of structural fixture is a cold bridge. But also, in terms of durability, this second layer of steel construction lasts for

only a limited period, while the outer layer of brick and the primary load-bearing steel construction can stay for over 150 years easily. We are actually experimenting with this in a project in Switzerland where we have a load-bearing façade that not only supports itself, but also balconies. Load-bearing brick may cost a little more, but it saves in terms of energy and life-cycle costs.