



Circularity for Educators

BLOCK III Circularity in Architecture and the Built Sciences

Practitioners Interview Series

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I am Marlon Jonkers, I'm an architect and I'm working now for three years at Moos, that's where we are now, and I'm head of design.

I guess it's good to point out at first that Moos is not an architectural firm, it's really not existing what we do here, but I guess it's more important what we do than what we are. Our main goal is to solve the housing shortage and we'd like to do this in a responsible way. We really believe that everybody deserves to have a good home where they feel at home.

One way how to solve this is to build with a modular building system. We build our modules in our own factory where we control the production process and we really have influence on how a project gets built. We actually coordinate the whole building process, so not only the design, also the execution of a building.

We have a great interdisciplinary team where we organize everything from acquisition, to the design, to the realisation, and the realisation exists or consists of two parts, one in the factory and second on site, and also the maintenance of the building later.

What drew you to circularity?

I was always interested in the making of

buildings. I love to make a beautiful design, but when you also actually build something, it's getting real. And, I think, the only way to build in a responsible way is to build circular.

I feel responsible for what I build and I love to make beautiful buildings, but I believe that a building is not only beautiful on the exterior, let's say, and not only when you deliver it, but there's also a lot of beauty in a beautiful building process and way of collaborating and also in the way a building is executed and how it's built up.

Can you discuss one of your projects in terms of circularity?

Appelweg is a project we are currently building. It's a social housing project for Ymere, consisting of 64 apartments and it's two building blocks, four stories high, and it's a beautiful location in Amsterdam North at the water.

Building circular is really what we do at Moos. It's in our DNA. Firstly, we achieve to set up an entire circular framework: that's finding the right clients that care about building circular; it's providing the right legal documents; it's having a great architectural team that makes good circular designs and enjoys it. We're also running our own factory, so we control the assembling of our modules. We have our own building site that we coordinate.

I think the most important thing is that we have found great partners where we work with. We call this our partner ecosystem or also the Moos family and this is a team of about 20 different companies. We do long-term collaboration together. There are advisors but also people from the building industry. And with them, with their different parts, we assemble our modules. I think this is what makes us unique and also gives us the possibility to build in this way.

The framework is one thing but also we really focus on making good circular design. For me this means taking into account all the stages. So firstly, what do you put in? It's the materials you use. As much as possible you choose for wood, for example, our main building structure is CLT wood. And of course we try to design it so sustainable as possible that during the life of a house you don't need that much energy.

And also what do you do with the building once it's done? About this latest stage, we really took into account three scenarios: or you have a scenario where the whole building can be moved actually to another location, so you can dismantle the modules and build them up elsewhere; we can also reuse the module on its own and reuse it in another project; and if that's not the case, we can reuse the different elements, the different parts, because we detailed everything in a demountable way. I guess there's still one more, quite important, that as Moos we also have a return policy, because we do believe it's only a matter of time when the materials of a building will only increase in value.

The big advantage of a modular builder is that you can redo what you did before. And while redoing it, you can get better and more experienced and use the lessons you learned and improve them for the next time. I think that's great about modular building. It's a challenge sometimes to find the right moment to implement changes and improvements while asking for quite a lot of flexibility, not only

from a designer, but also for all the partners and the builders and the whole team.

Major lesson that I learned in the last three years is that it's actually possible. We started three years ago not knowing if the market was ready for it, but we have now already built, we're building our third project and we have about 300 apartments lined up to produce. I guess the major lesson that I learned is that if you organize a good collaboration, find the right people to work with, and share responsibilities, then you really can make a difference and you can build, really build in a circular way.

How does the transition towards a circular built environment challenge the role of the architect?

I do think the role of the architect should change a little bit. We should go a little bit further than just the architectural design. You should expand your fields because if you want to build in a circular way, you really have to understand how things are getting built.

As an example, our architects here at Moos, they all participate in internships. Every architect is not only making the drawings on paper, but they also physically go to the factory, help the workers there, help the people that construct it, and see for themselves what it means if you detail something in a way, how to execute it. And we do the same on the building construction side. We try to educate architects within our company to have a wider field and to understand the consequences of a design.

I guess also architects, they're often very individual, talented people and they are great at solving design issues, but, I think, they should also feel more responsible about the project after delivery. We should take into consideration a little bit more the fourth dimension of a building. So not only the design itself, but also what the value is of a building after a certain amount of time.