

Circularity for Educators BLOCK III Circularity in Architecture and the Built Sciences Practitioners Interview Series

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I'm Lidia Egorova. I'm an architect and one of two associates at Space&Matter.

We at Space&Matter specialize in architecture and urban design, and we do it with an intention, with an ambition, to create a positive impact through the urban environment and society.

What drew you to circularity?

Circularity is really a foundation of Space&Matter. With every project we ask ourselves a question: How can we make this particular place better for people and planet? So for us it's not only a bare necessity, but it's actually a driver of all our concepts and ideas. And I personally deeply believe in it.

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

This summer the first residents are moving into *Common Woods*. *Common Woods* is a circular, socially inclusive neighborhood. It is located in Amersfoort. It consists out of 56 households on the edge of the forest. Yeah, it is basically circular in many ways.

First of all, circularity comes from the location itself. The area was an area with a poor nature due to the old usage as a field riding school with

a lot of horses and now we are transforming it into nature-inclusive area. The urban design helps here a lot. It allows forests to come and integrate the neighborhood in itself as much as possible.

We don't follow the standard grid system with roads and houses in between with front gardens, back gardens and a lot of private territory. But we instead create a community, a cluster with a central square so that the forest comes to the central square and leaves spaces for houses, so-called 'boskamers' in Dutch, and the central square works as a space for interaction for the community.

The whole aspect of community is very important also for us in the design. It happens not only in the urban part of the design, but also it comes back in architecture. The architecture follows the idea of stepped facades creating a lot of terraces on different levels as a space for interaction for the community. Circulation spaces into apartment blocks: one is gallery topology, another is a topology with a central staircase with a natural daylight. Those spaces we see as a real space for spontaneous encounters.

There is also a greenhouse that will be coming where future residents will be growing their own herbs and leaves.

What is important here is of course the construction, the neighborhood is made out of wood, CLT structure, and it gives a nice quality of living both inside and outside. Outside we chose a palette that is based on the colors of the forest itself. It was the first inspiration after our first site visit. Deep red, black, a nice light grayish color, all natural palette.

Another aspect I would like to name is biodiversity. As we call our little stakeholders, they play an important role in the design from the very beginning. It's not only implementing biodiversity in the facades, but it's working with these elements as nests, bird nests, and insect hotels in the composition of the facade.

The biggest challenge for us here was to choose the right building system, building method, because we started dreaming of Common Woods as if it is a modular neighborhood. Modules, they do come from the factory ready-made, so you can control the quality, that's very attractive. They can come even together right away with interior, and they are very fast assembled at the site, so neighbors are not bothered by the whole construction process. But at the same time, you do transport a lot of air with every single module. You also double floors and walls while putting them together, and they do have a spacious limitation. So for such a diverse neighborhood as Common Woods, it was not the way to go. So we chose for a flat-pack. It was an economical, circular, and architectural decision.

I think the major opportunity I would like to highlight here is the sky-high ambitions of the project that were there at the beginning and that stayed with the project until its very end. Unfortunately, it's not very common in the built environment due to a lot of challenges that we encounter along the way, but fortunately for *Common Woods*, that was the case.

The lesson that we learned, I would say, is the lesson that we will learn in some years from now, because we tend to think and design for long-lasting impact. And I would love to see the neighborhood already with the residents living there, with nature incorporating the neighborhood in its forest-ish environment. This is the lesson I'm looking for.

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

The shift towards circularity challenges not only architects, but the whole building industry. We have to think of new building materials, new building methods, flexible spaces, and also incorporate endusers in the design process. At Space&Matter, we actually use these principles already in our design for a decade, and we do believe that these are the right questions to ask, so the outcome is really circular.

We need to, of course, develop the skills. For Space&Matter what really works the best is systematic thinking. We innovate, we implement, we test again, we evaluate, we grow the ideas, and this method of prototyping, we use a lot in our projects in this way by using it again and again and again, and growing it from one project to another project, concepts and innovations, they do become stronger, and this is our way to bring a positive change into the circular building environment.