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The Gigamap Interview with Birger Sevaldson

Sevaldson, Birger

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As an introduction to the official RSD10 systems map exhibition opening on Wednesday, November 03 at TU Delft, we invited Professor Birger Sevaldson to reflect on the practice of gigamapping and how it has evolved since its origination.

Gigamapping is a practice that has become well known in the RSD community. System mapping or synthesis mapping are similar practices that have also gained popularity in the past years. The practice originated at the Oslo School of Architecture and Design around 2006, with the work of Birger Sevaldson. Since then, the practice has been openly shared with other communities, and it has been adopted by many different groups.

In this year's RSD exhibition, there are 17 contributions from seven different institutes. There are maps from Carnegie Mellon University (US), the National Institute of Design (India,) Istanbul Technical University (Turkey), Delft University of Technology (NL), OCAD University (Canada), Cardiff University (UK), and Savannah College of Art and Design (US). This year's topics are diverse, from systems of responses to the recent pandemic, systems affected by climate change, to maps that take a critical look at the systems of designers (and students) themselves.

Transcript

Jotte: Hi Birger, thank you for joining us today. We wanted to ask you a few questions about the exhibition and gigamapping in general. Can you tell out of which necessity was the practice of gigamapping born?

Birger: Yeah, I think this practice emerged quite organically from a master studio I was teaching and what we were starting to address. I think we called the course "challenge of X complexity", in 2006 or 2007. And we experimented with making big posters to explain that complexity. Those posters were still quite linear and not so very much networked with relations. In the next run, we had quite a big class with almost 20 students. And I put aside a lot of energy into mapping because I had an intuition that was going more in that direction would be potentially very useful because designers are good at mapping. And designers like to think visually. And if designers should work with complexity, they need to be used their normal tools to do that –

not to import any external model or orthodoxy of cybernetics or whatever kind of systems theory – but to use designing as a way of addressing systems.
As Harold [Nelson] says, somewhere in his book, designers and design are inherently systemic, though that is correct. But on the other side, designers are not so very systemic from their tradition. And I found that designers are very object-oriented; they like objects, are far less concerned about relations and how things are interconnected. And when we had we had visitors in the studio, they immediately understood what we were doing, even if they had never seen anything like that before, even driving into realising that this was a very interesting and valuable development. So maybe around that time, or a bit later, I realised that we were actually working with systems and that there was; I was aware of systems theory, but I was not connected that early on. But realising that norm – no real mapping orthodoxy on modelling principle, can grasp the whole picture we wanted to see. We want to see the whole picture, spanning from cause-effect flows of materials, energy, etc., to emotions, culture, etc. The tool can bridge all these things. You could actually connect apples and oranges and not keep categories apart, but rather find the connections between those separate separated categories.

Jotte: Since you've introduced the practice of gigamapping, what has changed?
Birger: It's rare to see that this year doesn't have a single map from our school. I was thinking a bit about this. I think one tendency has been that we have become more project process-oriented. So the maps have become the maps that always have been process tools. They have been more consciously applied as process tools, and the urge to produce those communicative outputs, in the end, has sort of diminished. I think that is what's happened here.
Jotte: Are maps then more instrumental rather than final objects?
Birger: It's kind of a very interesting question because there are so many aspects to it. Yeah, I think maps are like design objects that are design artefacts. And they are. Gigamapping is a design process that is nested inside the design process. And we use designerly ways of building this kind of shared understanding of complex systems. So the important thing is the shared understanding and being actionable. And also having memory support by having those maps on the wall and rich design spaces, together with walking through those, or muddling through, those complexities. The synthesis maps, developed by Peter Jones and colleagues at OCADU, have, as far as I understand them, have a slightly different purpose than exploring and unfolding. Generating from the richness of the map, the purpose of the synthesis map is more to draw things together. To reach some kind of consensus or conclusion, not in the form of necessarily solving a problem, but searching for information.

Jotte: This year and the symposium, there's a theme of playing with tensions. I think throughout the years; you can see tensions are always part of systems. And in the process of gigamapping – actually, what is the role of tensions there?

Birger: Yeah, I think I like this theme of tensions because we have a bias towards harmony. And, and I think that's not always very productive. I think of social systems, which in the end, it is about social systems. Plus, of course, nature and other systems around us are our environments but seen from a human-centric or anthropocentric perspective, all those systems are human activity systems. And it's not very productive to rest in this conception, which is common and voiced, that we need to develop in a harmonic environment. We need social safety for people to talk loudly and to be honest about what they say. But that is not really the same as harmony. So I appreciate it. And in gigamapping, I think we try to do very extensive stakeholder or informants or experts mapping to see where is their natural evasions, what are the drivers, etc. But we also want to look at what somebody called "affected bystanders". I don't remember exactly the reference now, but I love that term. Because we need to remember that there are always entities that are not represented in our stakeholder groups, and they might be affected are human or non-human entities and all the state's future generations. So we try to represent those interests – and unearth conflicts or contradictions between those different operators in the system.

Jotte: I want to ask you a few more questions about this specific exhibition. But first, let me thank you for this very clear explanation of the practice of gigamapping, Professor Sevaldson. Let's move to the exhibition of this year. This is the website of the RSD Symposium, where you can find all maps. You go to "explore RSD formats" and find "system maps" and then all 17 maps. We would love for you to highlight a few of them and tell us a little bit more from your expertise.

Birger: Yes, I will clarify that I will comment on the maps not based on the content but on how they are built up and structured. I am commenting on principles of mapping more than and relating to their content.

Jotte: Start with this map [Synergetic Landscape].

Birger: It chooses a circular layout, which is a very strong graphic way of creating attention to the middle, where I understand that there's sort of ideal or, you could say, maybe the goal of the whole system. The intention here is centred. That sort of illustrates that a lot of different areas and sectors need to play into that central goal. Now, if we zoom in a little bit, this map is quite rich. When diving into those sectors, you have a lot of text organised in traditional network bubbles, like network diagrams depicted with entities and relations. But even inside them, you have another low level of interrelations and connections, which I find highly interesting. And you even have some grouping elements that bind some of those bubbles

together again. So, all in all, I think the map opens up levels of complexity. It uses text, images and relations, and is captured into relations; it can be referred to as systems and subsystems. It doesn't fall into the trap of trying to construct an artificial hierarchy out, which I also appreciate because I find those over-ordered. Maps that are overly ordered tend to be a bit disturbing because we all know it's probably not that simple when it comes to real life.

Jotte: Real-life is messy? ☺

Birger: Oh yes, I mean, we try to capture what we call "real life", but it's not that we have control; it's not so that we can order away real-life messiness or the fuzziness of what's happening all around us. So if we are not, we need to capture that if you want to work with it as a design material.

Jotte: Let's look at another map [Plastic Wave – Plastic pollution is a result of who we are].

Birger: What I like here are the different models. It tries to grasp the complexity. And it's a clever approach to not trying to do that with one illustration or one principle of mapping, but to combine several. It aligns very much with critical systems thinking. That part of the criticality in critical systems thinking says that we should look at system models critically and apply them to where they make sense and out of a practical approach. This map has at least four different systems maps online. There's a bubble diagram; there's something that looks more like system dynamics. And there's something that is based on asymmetric like mapping of sort of kind of a location. I like that approach. Also, this is a very rich map. It has quite a lot of text, which I normally think should be limited. As long as you can draw it, you should do it. I mean, getting lost in the complexity getting lost in the woods. It takes some courage, stubbornness, and stamina, but normally, you will always get out of it again. I think all these maps this year probably have been there. They have been lost in the rules. I'm not doubting that part of the process. I mean, dealing with complexity – there's no way of making that easy without simplifying it, and then then you're dealing with something else, not complexity. So I have no doubt that all of these maps have been there and suffering ☺ but coming out with some synthesis and some shared pictures.

I think a general comment is to bring more of that messiness or the richness of those places where you get lost in the process, bring it along with you, and explain the interconnectedness. Because I mean, my definition of systems thinking is this interconnectedness. And design is then the practice of interconnected systems thinking. To become a systems thinker, you have to turn your attention from the objects to the relations. So by mapping, we generate new objects. We have to keep our attention to the relations, try to describe them on a similar level as we describe the objects in them, tag them, and colour code them. So to dive into that part of the material.

One thing that is nice to see now is that there are so many contributions from new actors from schools that we haven't seen so many contributions from before. So that's encouraging to see. I'm not so concerned if this is done in the right way or not because, as you know, gigamapping is open source. It's a flexible strategy, and there's no way to do it, right. There's just better or worse ways of doing it. So what I'm really happy about is that more and more environments realise the power of designing as a tool to understand complexity.

This map [There Is a Me in Us and We: Understanding Selfishness in Transdisciplinary Collaborations Among Design Students to Facilitate Sustainability Outcomes]. What I like about it is that there are, again, several different models almost, we can discuss what the model is – and the difference between a model and a map. But you have at least some patterns substructures of interrelated layers. Interrelated entities are repeatedly interpreted in different ways here, packed into bigger parts of the environment. And these are seemingly very simple but then develop more and more into very complex interconnectedness. I might not be fair to this map, but I see the tendency to have those compartments in many of the maps. I think that's fine, but I would like to see a larger emphasis on relations and how those compartments are related to each other.

Jotte: Birger Sevaldson, thank you for this. This information, and this almost masterclass in gigamapping. Everyone is welcome to look at the maps online and here in Delft downstairs. Thank you.

Birger: Thank you very much. It was a pleasure. Thank you.

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