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25 May 2023

A very good morning dear colleagues, fellow knowledge seekers,

*Welcome*

Welcome to DS2BE the annual Doctoral Seminar on Sustainability Research in the Built Environment. This is already the ninth edition and is organized by Ahmed Kahn and Giulia Verga (of Université Libre de Bruxelles) and Niels De Temmerman and I, Waldo Galle (of Vrije Universiteit Brussel).

What is special about this edition, is that although we are here together with eight Belgian and some foreign universities, it is not organized at a university, and you'll find out in a minute why that is important. No, today I am happy to welcome you here at [perspective.brussels](https://perspective.brussels).

[perspective.brussels](https://perspective.brussels) is a public interest body and Brussels' multidisciplinary center of expertise on territorial development. It provides the Brussels Region with the means to better understand itself and so prepare its future. So here, we are amongst knowledge seekers.

It is under the WeKonekt program, that VUB and ULB collaborate with public and private actors like [perspective.brussels](https://perspective.brussels) to open our campuses and engage researchers and students for metropolitan challenges in and around Brussels.

On behalf of my fellow organisers, I want to thank the whole team of [perspective.brussels](https://perspective.brussels), [WeKonekt.brussels](https://wekonekt.brussels), VUB Architectural Engineering and ULB BATir to organize together these two days. Your teamwork is wonderful.

*Attention getter*

Speaking of wonder. Butterflies, pigeons, goldfish, shrimp, they all see more colors than humans do. Marvelous, isn't it?

It is through behavioral experiments as well as so-called electrophysiology, that other knowledge seekers found out that these animals can observe and distinguish a broader range of wavelengths than human can.

That is not only wonderful, but also useful. For example, to reduce the impact of light pollution on the biological environment, as much as to replace pesticides by invisible light.

But still, we can't see the world as butterflies do, do you? So, you might wonder, is it true what he's saying? Isn't he just making up a story? Honestly, I don't know. I have never trained butterflies to detect the difference between slightly different wavelengths.

What I do know, is that these claims have been made in a scientifically sound way.

### *Introduction of the central theme*

It's the rigorous process of conscious research development and empiric evidence collection, of truth-seeking and refutation that offers the best answer for creating reliable knowledge. But of course, it's just like building design; research is never done and can always be improved.

In our rapidly changing world, this scientific process provides perspective and guidance. It has undeniably shaped the course of human history, and still makes significant advancements – imagine at what would have been the cost of covid without vaccines.

At the same moment, we have witnessed a growing skepticism and even distrust towards science, fueled by misinformation and conspiracy. Or different, yet the same, you know the feeling when friends and family don't buy your scientific advice about their refurbishment, right?

That's where many of our colleagues have been shouting from rooftops, "We need more science communication!" And sure, communicating about science is crucial, but it doesn't quite hit the mark in meeting people's true needs, which is necessary to recreate that trust.

In other words, although we know that butterflies can see more colors, we still can't. And telling butterflies that we understand what they see, doesn't allow us to look through their eyes. Many good ideas have shown, not to be accepted. I'm afraid butterflies won't react to our nice ideas about lighting streets and fields, as we would predict them to do.

From our own research we've learned for example that designers and clients don't apply circular principles for circularity's sake. No, in each and every case, circular design choices were made because they responded to an actual need, for adaptability, for maintainability or temporality.

### *About urban engaged research*

That's why it seems to me and many others, relevant to rethink how we do research now and then. One compelling idea is urban engaged research. Since urban is more or less self-evident in our urbanized context, let me focus on the engaged.

The idea of urban engaged research breaks free from traditional desktop and lab research. It encourages us to step out of our labs and tackle the messy, wicked problems that nobody can solve alone.

It's not just about us researchers doing our thing out there; it's about collaborating with non-researchers. Imagine the fresh perspectives and knowledge that butterflies can bring in.

Engaged research also encourages us to work in an abductive way, and break free from the binary difference between inductive research (when you generalize specific observations) or deductive research (when you try to demonstrate a theory).

Honestly, I can say that none of the research I did or have seen, follows such a simple logic. In practice, science is more of skill than a procedure. Or like Timmermans and Tavory write: science is like cooking. You open your fridge and rely on your knowledge and experience to create a sound and tasteful dish with the ingredients you find – that might also explain why some things fail.

Yet, as we embark on this exciting journey, we must maintain a critical perspective – after all I don't believe in holy saviors too much, as you might know. Therefore, over the next two days, are our chance to explore the role of "urban engaged research" through our own work. Through two wonderful keynote speakers – which I'll introduce in a minute. And through a workshop and a site visit to experience engaged research firsthand.

Together, I hope we can get a step closer to addressing questions like: Which research questions lend themselves to an urban engaged approach? How does it reshape our research tasks? What does it demand from us as researchers, in terms of skills and freedom? And who are the butterflies of the built environment?

## *Conclusion*

Oh, and why you should bother with all this? Well, the way you see your own research today, shape the skills you develop. And that matters. Because the world needs more than just good researchers within university walls. We need knowledge seekers out there, making a difference in the real world. And as our keynotes will show you there are places where urban engaged research is crucial and celebrated.

## *Introduction to the program*

Before I give the word to our two keynote speakers, a few words about the program. I would highlight again that this year we chose to differentiate paper and poster sessions. While papers are presented using slides to the whole public, posters are pitched without a slide deck to half of the audience. It makes the posters useful, and invites you to give a real speech.

Each will be moderated by one or two senior researchers, each according to their own style of engagement of course.

The program can be downloaded from the website [ds2be.net](http://ds2be.net). [show internet]. Who wants to receive a certificate of presence, must scan the QR-code at the welcome table and enter your email address. Before we leave this afternoon for the site, Victor will give us here a nice introduction and some practical instructions – so no worries about that yet.

Lunches and drinks are kindly provided by [perspective.brussels](http://perspective.brussels); they are incredible hosts. So incredible that we forgot to make our reservation at the food court for tonight's dinner on time. So, depending on how many people want to join after the site visit, we will have to dive into the Brussels nightlife and find a spot in a restaurant, a guinguette, frieterie ... Therefore, add your name to the list at the reception, if you plan to stay for dinner. Do so before lunch please.

*So here we are.*

So, here we are, ready to expand our minds, challenge the norm, and unleash the potential of science in seeking sustainable answers to the wicked problems of our built environment.

As a first illustration of what science for the common good / urban engaged research could be, is our co-host [perspective.brussels](http://perspective.brussels). After working in Cairo, Basel, Oxford, Ticino and at VUB, Dalila Ghodbane is now project researcher in this house, and will give us an insight in what it means to do research from here.

As a second example, and inspiration I am happy to invite Lene De Vrieze. Lene has been working at Architecture Workroom Brussels since 2017. It is hard to say what Architecture Workroom Brussels is, but easy to understand if you'll see what they do. So Lena, we look forward to see how you are engaged for a sustainable living environment.