Appendix VIII – Full transcript of interview with Catalina Bustillo on the 26th of October 2021

This document is part of the Major Research Project report by D.T.M. Krekel (Utrecht University) titeled Ecosystem Services Delivery in the Built Environment.

The transcribed interview was conducted by D.T.M. Krekel.

Notes from the author: The transcript includes faulty placed sentence starting capital letters and sentence ending dots. The transcript does not include question marks. The audio of the interview can be obtained as a separate document via the author of this report.

Transcript

00:00:10 Speaker 1

Oh, it's working, thank you. So yeah, so.

00:00:14 Speaker 1

Continue.

00:00:15 Speaker 2

OK, so this so I'm just starting the...

00:00:18 Speaker 2

I've been playing with the idea for a while but I, yeah, it's not turning to anything like it.

00:00:24 Speaker 2

I still don't have it all solved yet, but the idea is that,

00:00:30 Speaker 2

ethos is going to be the wrapping of the whole thing.

00:00:33 Speaker 2

The ethos part, because that's the whole. And I,

00:00:36 Speaker 2

You know, like that's the whole create conditions conducive to life element of it.

00:00:41 Speaker 2

Like everything in nature, creates conditions for other lives to continue to thrive.

00:00:46 Speaker 2

So how do we.

00:00:47 Speaker 2

How do we make sure.

00:00:49 Speaker 2

That our designs are part of that same

00:00:52 Speaker 2

Rhythm, right, so, and and to me the way that I find that we can do that is the ecosystem services and the ecosystem services thought.

00:01:03 Speaker 2

Like yes, they serve us, but then how do we.

00:01:07 Speaker 2

How do we transform them.

00:01:09 Speaker 2

So that we understand that we also need to provide the ecosystem services.

00:01:15 Speaker 2

But the thing is, and it's related to the you know, your questions in a

00:01:19 Speaker 2

Way, is like,

00:01:20 Speaker 2

I feel like the way

00:01:24 Speaker 2

To get people sometimes into things, it's through the sides and not directly up, so so it's like how do you ask a set of questions

00:01:37 Speaker 2

That guide people.

00:01:40 Speaker 2

Like open the door for the party.

00:01:43 Speaker 2

Without, without maybe generating a first reaction or negative reaction.

00:01:50 Speaker 2

So anyway, so my hope is that in that bio mimicry thinking framework, when we are in the context part, when we're in the scoping part of the process, we figure out what ecosystem services

00:02:03 Speaker 2

Are being affected by whatever we're designing and we figure out what ecosystem services we're we wanna affect. Like, either,

00:02:13 Speaker 2

It's either because we are affecting them in a negative way or because we see a possibility of providing a positive effect.

00:02:21 Speaker 2

In an easy or fast way kind of thing, because you want to leverage the opportunities and then bringing the reconnect piece is just being,

00:02:33 Speaker 2

Just being very conscious and and creating activities that actually reconnect you to the place, because right now the discovery process and the, you know, it's ideal if you go out into nature and look,

00:02:51 Speaker 2

But it may not be ideal,

00:02:53 Speaker 2

It needs to be part of the bio mimicry thinking process, to go out and connect with nature.

00:02:59 Speaker 1

Oh yeah.

00:03:03 Speaker 1

Yeah, so yeah, that's your look.

00:03:06 Speaker 1

I agree, OK, thank you.

00:03:07 Speaker 1

I I want before I want I want to.

00:03:11 Speaker 1

To, uh.

00:03:13 Speaker 1

Before we continue, I want to ask you two questions.

00:03:15 Speaker 1

First of all, how much time do we want to spend on this.

00:03:24 Speaker 2

So ideally it would be an hour.

00:03:26 Speaker 2

I just got the vaccine yesterday and I'm not feeling my best so.

00:03:33 Speaker 1

But you got that.

00:03:34 Speaker 1

You said you got the vaccine yesterday.

00:03:37 Speaker 1

Congratulations, yeah, but I understand well.

00:03:40 Speaker 1

That's fine and all is fine for me.

00:03:42 Speaker 2

No, it it.

00:03:43 Speaker 2

It doesn't mean that we have to cut it completely short and then like, but we'll see how it goes and you know I can,

00:03:50 Speaker 2

probably 10-15 or more minutes.

00:03:52 Speaker 3

If needed or something like that.

00:03:54 Speaker 1

Yeah, but now I know which like.

00:03:56 Speaker 1

Yeah, how in depth

00:03:57 Speaker 1

I will ask questions, thank

00:03:59 Speaker 1

you. And and,

00:04:00 Speaker 1

I also was curious how you, like, how your interested in biomimicry developed.

00:04:06 Speaker 1

Once you had a background in architecture, or you sort of like.

00:04:10 Speaker 1

Is it a switch or an elongation.

00:04:14 Speaker 2

So, uhm, I come from a family of ranchers.

00:04:19 Speaker 1

Oh yeah, I saw that, yeah.

00:04:21 Speaker 2

So I grew up up with very close contact with nature. Ah, and our,

00:04:28 Speaker 2

You know it's a...

00:04:30 Speaker 2

I don't know the three or fourth generation of

00:04:34 Speaker 2

Connected to ranching and farming, so I but I live in the city and the farms. It's like 3 1/2 hours away from where I live, so it's not something that we go every day or we lived there, but we would spend there like every vacation every chance that my parents could take up there we would go there. So I always grew with that

00:04:55 Speaker 3

Very close relationship.

00:04:57 Speaker 2

So when I went to study architecture and

00:05:01 Speaker 2

At some point I had issues with the fact that we were those you know as architects, great contributors to climate,

00:05:10 Speaker 2

Uhm, problem and climate change and were, like,

00:05:16 Speaker 2

Responsible for a lot of the state of the planet. So that created,

00:05:22 Speaker 2

You know, that that was a conflict for me.

00:05:25 Speaker 2

I could also see it, uhm.

00:05:28 Speaker 2

I tried that when I was growing up.

00:05:30 Speaker 2

I would go to the farm and the way.

00:05:32 Speaker 2

Of living there.

00:05:33 Speaker 2

It's totally different than living in the city, so I always had like this.

00:05:37 Speaker 2

Like if there were two completely different sides of me and of of living that they they could not match, in

00:05:45 Speaker 2

A way.

00:05:45 Speaker 1

Two completely different rhythms I imagine.

00:05:49 Speaker 2

So, so when I was studying it, I was always interested in like Earth architecture, landscape architecture, bioclimatic architecture like all the everything that had to do with the environment somehow.

00:06:05 Speaker 2

Uhm, so I you know I finished, and then I went to an event and I

00:06:11 Speaker 2

Heard this talk about

00:06:13 Speaker 2

Bio mimicry and it was like

00:06:15 Speaker 2

I saw the light.

00:06:17 Speaker 2

And because I saw how,

00:06:22 Speaker 2

How I could finally integrate those two sides of of me but also of you know of doing things. And I thought and I sort of like made peace with the fact that

00:06:35 Speaker 2

As architects, we didn't have to destroy the planet, so we could contribute positively in a positive way.

00:06:42 Speaker 1

Yeah, you you both.

00:06:44 Speaker 1

You now found a concept that both sides could exist.

00:06:50 Speaker 1

That must be like yes.

00:06:52 Speaker 1

Relieved.

00:06:53 Speaker 2

Exactly.

00:06:54 Speaker 2

That was like oh, because it was also a lot of it.

00:06:57 Speaker 1

It's also tide to technology, like,

00:07:01 Speaker 2

Like the concept of you, if you are linked to nature or in contact with nature then that means that you have to sacrifice technology.

00:07:10 Speaker 2

And and you know, there you know there's a lot of ideas behind it, and and definitely bio mimicry wrapped everything that I did under one big umbrella, yeah.

00:07:21 Speaker 1

Yeah, and it allows the technology to also be there.

00:07:24 Speaker 1

It's like, yeah.

00:07:25 Speaker 1

OK.

00:07:26 Speaker 1

Yeah yeah, that gives a perspective.

00:07:29 Speaker 1

I was uhm, became curious by your...

00:07:34 Speaker 1

You know, you said something about.

00:07:38 Speaker 1

Uhm earlier before I started to ask about your background you talked about

00:07:45 Speaker 1

Also being interested in integrating ecosystem services and

00:07:49 Speaker 1

That you were thinking about

00:07:51 Speaker 1

A question you said the word questions and and.

00:07:58 Speaker 1

Can you elaborate on what you mean by questions and what their purpose would be.

00:08:06 Speaker 1

But like what, what.

00:08:07 Speaker 1

Wherefore did you start that story.

00:08:10 Speaker 2

So bio mimicry.

00:08:11 Speaker 2

It's not a simple process like actual practice of bio mimicry is very complex.

00:08:18 Speaker 2

Uh, in it's whole process, but it's also because of the research that goes into it, and translating that that nature knowledge into something that we can use in other disciplines.

00:08:35 Speaker 2

So the big question is,

00:08:39 Speaker 2

To me, is how do I how can I integrate the two other elements into that bio mimicry thinking process in a way that it doesn't become a burden for the process, but it's already hard.

00:08:54 Speaker 1

Oh yeah, yeah.

00:08:56 Speaker 2

Because, you know.

00:08:57 Speaker 2

We can do whatever we want, but it's like if people are going to look at

00:09:00 Speaker 2

It and be

00:09:01 Speaker 2

Like oh, then it's like it's not gonna work.

00:09:04 Speaker 1

No too much work.

00:09:06 Speaker 2

And and, uhm, and one of the things that's interesting to me is how how to make

00:09:14 Speaker 2

Bio mimicry accessible not only from the language perspective but also from the complexity perspective.

00:09:20 Speaker 2

Like how do we, how

00:09:22 Speaker 2

How can we make bio mimicry understandable to anybody.

00:09:28 Speaker 2

Anybody that it's not a you know client even if they don't get to

00:09:32 Speaker 2

That depth you could still.

00:09:33 Speaker 2

Practice bio mimicry.

00:09:35 Speaker 2

And I'm going to like deviate a little bit from.

00:09:38 Speaker 2

In my farm like

00:09:41 Speaker 2

People that work with us there a lot of them had very basic formal education.

00:09:47 Speaker 2

Exactly don't even know how to read or write.

00:09:50 Speaker 2

Some of them only know a little bit, yeah, but they and they don't go to college, they don't finish

00:09:56 Speaker 3

School blah blah blah.

00:09:58 Speaker 2

But these people have a lot of knowledge

00:10:00 Speaker 2

About the environment, because that's where they grew and it usually is at least here in Latin America, that the people

00:10:10 Speaker 2

That have less financial resources are more connected to nature.

00:10:20 Speaker 2

And I think I just went on a very big tangent.

00:10:26 Speaker 1

We have space for that.

00:10:27 Speaker 2

Sum it up, I'm gonna go back.

00:10:29 Speaker 2

But anyway the the whole thing is like I want those people to value the knowledge that they have and I want them to be able to transform that knowledge into a practice using bio mimicry into a practice that they can apply so.

00:10:45 Speaker 2

It's all about making bio mimicry simple and

00:10:48 Speaker 2

It's easy to

00:10:49 Speaker 2

Use. So like that's that's one side of the coin and the other side is OK,

00:10:54 Speaker 2

So how do we integrate the other two elements. And

00:10:59 Speaker 2

I think ecosystem services are the key to integrating the ethos or creating conditions conducive to life into the bio mimicry thinking framework and how to do that is

00:11:09 Speaker 2

The big question. So,

00:11:13 Speaker 2

What I'm trying to figure out is.

00:11:15 Speaker 2

Could could there be a set of questions.

00:11:20 Speaker 2

That are easy enough.

00:11:22 Speaker 2

For anybody that's doing a scoping process to fill out

00:11:29 Speaker 2

And have that

00:11:32 Speaker 2

Set off questions

00:11:34 Speaker 2

Show where the leverage points are

00:11:40 Speaker 2

In regards to the ecosystem service.

00:11:43 Speaker 2

So that those ecosystem services can be established as

00:11:50 Speaker 2

Intentions, or can be purposely, you know, incorporated into the design.

00:11:58 Speaker 1

Yeah, so yeah yeah interesting great.

00:12:03 Speaker 1

And what is your.

00:12:06 Speaker 1

A beautiful goal, nice goal and

00:12:11 Speaker 1

These do you also

00:12:12 Speaker 1

Have already a feeling of what kind of questions.

00:12:18 Speaker 1

This needs to be.

00:12:21 Speaker 1

To to you.

00:12:25 Speaker 1

You have all sorts

00:12:25 Speaker 1

Of, you have open questions you have very close and directed questions and

00:12:32 Speaker 1

And what kind of questions this needs to be too too.

00:12:36 Speaker 1

aanspreken,

00:12:39 Speaker 1

To be useful for these for the group you want to for your target group.

00:12:45 Speaker 2

So I I did some trial with more open questions.

00:12:52 Speaker 2

And it was funny because.

00:12:57 Speaker 2

When I ask a question, something like,

00:13:00 Speaker 2

I can't remember right now the exact question and I I don't have the document right now, but it was

00:13:05 Speaker 2

Something around, uhm,

00:13:07 Speaker 2

Having any effect on or any relationship to raw materials produced by nature.

00:13:16 Speaker 2

And then this person that I was interviewing

00:13:18 Speaker 2

He was like no I I don't have anything to do with raw material.

00:13:22 Speaker 2

I'm like OK.

00:13:23 Speaker 2

And then as we

00:13:24 Speaker 2

Continue through that through the questions,

00:13:27 Speaker 2

Uhm, he ends up talking about, you know, using a bunch of raw materials, and I'm like,

00:13:37 Speaker 2

They did it like,

00:13:38 Speaker 2

In his head he was not using raw materials.

00:13:41 Speaker 1

Oh yeah, yeah.

00:13:43 Speaker 1

But from your point of view, he was.

00:13:46 Speaker 2

Yeah, right.

00:13:47 Speaker 1

Completely involved in it.

00:13:48 Speaker 2

Exactly, so he's like, no, no, no.

00:13:50 Speaker 2

I don't have like

00:13:51 Speaker 2

Any effect on that.

00:13:51 Speaker 2

It's like like no way linked to that.

00:13:54 Speaker 2

My project is no way. So,

00:13:58 Speaker 2

And I think there's going to be

00:13:59 Speaker 2

Different levels of

00:14:00 Speaker 2

Questions depending on what your, for example, you know in architecture and the way that that Katharina and you are setting it up and is like very

00:14:11 Speaker 2

Deep and very linked to architecture I'm I'm trying to work on something a bit more general and what I want is for people...

00:14:22 Speaker 2

I find that a lot.

00:14:23 Speaker 2

Of it has

00:14:23 Speaker 2

To do with defense. Like personal like...

00:14:29 Speaker 2

People feel.

00:14:33 Speaker 2

People don't wanna feel bad or people don't wanna feel...

00:14:39 Speaker 2

People tend tend to feel defensive

00:14:42 Speaker 2

In the questions.

00:14:45 Speaker 1

Defensive by what.

00:14:47 Speaker 2

Like for example, if I if I ask you something like do you think you are

00:14:52 Speaker 2

Are you know contributing to climate change and destroying the environment.

00:14:58 Speaker 1

Like no, no.

00:15:00 Speaker 2

Yeah, not at all.

00:15:02 Speaker 2

I'm not doing that, so it it it can't be questions that somehow,

00:15:08 Speaker 2

Uh, make people defensive of their position. So,

00:15:14 Speaker 2

I think it needs to be things that are very easy to respond without having to explain what ecosystem services are, because many people are not interested in knowing what the ecosystem services are.

00:15:28 Speaker 1

So you're.

00:15:30 Speaker 1

So your opinion is that.

00:15:35 Speaker 1

You should be able to integrate that entire concept without ever needing to explain what the

00:15:41 Speaker 1

Concept is.

00:15:43 Speaker 2

Yes.

00:15:44 Speaker 1

OK, I I do agree with you on.

00:15:46 Speaker 1

That point, yeah, yeah.

00:15:51 Speaker 1

Uh, from the person answering "I have nothing to do with raw materials".

00:15:57 Speaker 1

Do you think that it's, uh,

00:16:02 Speaker 1

That he just doesn't understand that he does not understand the definition of raw materials,

00:16:08 Speaker 1

Or do you think that he looks at nature in our connection with nature, completely different.

00:16:16 Speaker 2

I think it's more about not even realizing it.

00:16:18 Speaker 2

It you know, like.

00:16:20 Speaker 2

Not even it's.

00:16:20 Speaker 2

Not that they don't know the definition.

00:16:22 Speaker 2

It's like they.

00:16:25 Speaker 2

Like they don't.

00:16:26 Speaker 2

They don't even see the connection.

00:16:29 Speaker 2

Like it's like.

00:16:31 Speaker 2

I don't know like.

00:16:33 Speaker 2

Like for example, you go to the supermarket and you pick up an apple.

00:16:36 Speaker 2

You have no connection, no idea where that apple

00:16:38 Speaker 2

Is coming from no.

00:16:39 Speaker 1

No, yeah, that's.

00:16:40 Speaker 2

True, there's no connection there, so it's not that they are purposely saying no.

00:16:45 Speaker 2

It's like they don't even see the connection.

00:16:48 Speaker 1

So you mean, uh.

00:16:52 Speaker 1

That person and and, like, uh, nature and that person works with wood but does not see the connection between the wood is taken out of nature, like does not see the process.

00:17:08 Speaker 2

It it depends on how far away from nature you are.

00:17:12 Speaker 2

Like I can easily say that anybody that works, for example in a farm business, it's going

00:17:17 Speaker 2

Know that they're completely...

00:17:21 Speaker 2

But it may be I work in the computer business.

00:17:25 Speaker 2

And I develop computer.

00:17:26 Speaker 2

I have no idea my connection to nature at that point, like or how materials are related to nature.

00:17:34 Speaker 2

Or raw material.

00:17:36 Speaker 1

Yeah, but OK.

00:17:37 Speaker 1

Just to make clear, the people know like the way of not knowing in

00:17:44 Speaker 1

This case is,

00:17:44 Speaker 1

This, or in general is the I do know about nature.

00:17:48 Speaker 1

I do know that I work with these products that I forget that they are how they are extracted or I'm not.

00:17:56 Speaker 1

I don't realize that how they

00:17:58 Speaker 1

Are extracted.

00:17:59 Speaker 2

Yeah, it's it's.

00:18:01 Speaker 2

It's a lot of of knowledge

00:18:03 Speaker 2

Maybe of you know, being aware and and that can be translated to

00:18:09 Speaker 2

You know. It's not only nature, it's like.

00:18:12 Speaker 2

I don't know it.

00:18:13 Speaker 2

It's even a personal thing.

00:18:14 Speaker 2

You may I make.

00:18:15 Speaker 2

Make a comment right now that it's offensive to you.

00:18:18 Speaker 2

And it's not because I want to be offensive.

00:18:20 Speaker 2

It's like I have no idea.

00:18:21 Speaker 2

You know, if you grew up with X or Y.

00:18:25 Speaker 2

You know and

00:18:26 Speaker 2

I made a comment and it hurt.

00:18:28 Speaker 2

Uhm, so I think it's the same thing.

00:18:31 Speaker 2

They may use a product and they may use, but they. It's so

00:18:37 Speaker 2

Far away.

00:18:40 Speaker 2

That there's no connection.

00:18:42 Speaker 1

I feel so relatable every time I eat like strawberries and like this

00:18:48 Speaker 1

this grew in plastic was like no

00:18:52 Speaker 1

It didn't, but you don't know anything else, yeah.

00:18:56 Speaker 2

And it's the comment that you you know you get a lot of kids that you ask them in school.

00:19:01 Speaker 2

Like where does the apple come from like from this so called supermarket, yeah.

00:19:05 Speaker 1

No, yeah no OK now.

00:19:10 Speaker 2

So it's like how can you ask questions to create that relationship to to.

00:19:15 Speaker 2

So my my goal what I want to do like I still don't know how but what I want to do is throughout the questions

00:19:25 Speaker 2

Create that bridge or that connection

00:19:29 Speaker 2

Without people being aware that we're creating the connection, yeah.

00:19:33 Speaker 2

So you start and it's sort of like it starts building the connection, building the connection. And

00:19:38 Speaker 2

At the end

00:19:39 Speaker 2

You you sort of transform the persons view just by

00:19:45 Speaker 3

Asking the questions.

00:19:48 Speaker 1

Great, OK, so this is exactly what we were brainstorming about in the context of architecture, so I think it's useful as we so so that our goal is that more specified think that if if we start

00:20:07 Speaker 1

Now brainstorming about it, I think that will

00:20:11 Speaker 1

Be useful, I think you're the right person for it.

00:20:15 Speaker 1

Go like listening to your background story.

00:20:20 Speaker 1

Umm, let's see which question is you show for this.

00:20:28 Speaker 1

Uhm, if you yeah if you would adapt so so you're you're trying to formulate questions for a broader context.

00:20:37 Speaker 1

To a more broader context. If you would narrow that down to a specific context,

00:20:45 Speaker 1

In this case architecture,

00:20:46 Speaker 1

Would you think about the questions at the shape of the questions which would change.

00:20:55 Speaker 2

What do you mean with the shape

00:20:56 Speaker 1

Of the question.

00:20:57 Speaker 1

So now, like of course questions will change because you will start using terms related to art...

00:21:05 Speaker 1

You will start using terms related to architecture.

00:21:09 Speaker 1

Uhm, but.

00:21:12 Speaker 1

Possibly the way you formulate the questions to guide that thinking process stays the same.

00:21:22 Speaker 1

So instead of, instead of saying how do we travel to school, you you change it to how...

00:21:29 Speaker 1

How do we cycle to school.

00:21:31 Speaker 1

That's the same question, but more specific specified on cycling.

00:21:35 Speaker 1

That's what I mean.

00:21:36 Speaker 2

Yes, I think.

00:21:39 Speaker 2

That ideally that shape would be the same as you were saying, like that shape.

00:21:45 Speaker 2

I think that there needs to be sort of like levels or stages like.

00:21:58 Speaker 2

I don't think that you can.

00:22:00 Speaker 2

I don't think it's.

00:22:05 Speaker 2

If you approach somebody like I feel like if I was approached with many questions with a lot of data

00:22:12 Speaker 2

And complex questions that are outside of my comfort zone.

00:22:16 Speaker 2

All of this.

00:22:17 Speaker 1

Nee, sorry, ik geef een interview.

00:22:21 Speaker 1

Sorry though I did not.

00:22:27 Speaker 2

It sort of creates, uh, rejection.

00:22:29 Speaker 2

So so I'm so I'm wondering if it could be like this

00:22:35 Speaker 2

Entry level questions that would give

00:22:40 Speaker 2

A first

00:22:42 Speaker 2

A first glimpse and then you can go into more in depth questions

00:22:50 Speaker 2

And sort of like guide the process.

00:22:52 Speaker 2

I think that another thing could be

00:22:56 Speaker 2

Asking questions like you have some of that indicator question.

00:23:02

You know.

00:23:05 Speaker 2

I would ask like instead of saying, for example, I'm seeing the Provision of Biomass, yeah.

00:23:11 Speaker 1

Yeah, way before like the approach was that we came up with a...

00:23:18 Speaker 1

We wanted to integrate ecosystem services and buildings and we came up with a theory of how that would look like in a building and with the question, the approach of the questions was like making sure that

00:23:33 Speaker 1

The theory is integrated, but that there's a freedom in in which shape, that's yeah, so that that's on

00:23:39 Speaker 2

OK.

00:23:43 Speaker 1

On basis on this reasoning, the level is chosen.

00:23:49 Speaker 2

OK.

00:23:50 Speaker 2

Uhm, so it's so, you know

00:23:53 Speaker 2

I am just question why.

00:23:54 Speaker 2

So I gave you

00:23:55 Speaker 2

Provisioning Biomass. You

00:23:56 Speaker 2

Say what is

00:23:57 Speaker 2

The size of the

00:23:58 Speaker 2

Area that is covered with vegetation

00:24:00 Speaker 2

And I can provide, you know, a number.

00:24:04 Speaker 2

Uh, but then you ask, is this area

00:24:06 Speaker 2

You equal to or larger

00:24:07 Speaker 1

Than the buildings parcel size.

00:24:09 Speaker 2

So instead of because,

00:24:13 Speaker 2

I feel like those type of questions,

00:24:16 Speaker 2

And it may be it's I'm saying it

00:24:17 Speaker 2

Only from my perspective I cannot speak.

00:24:19 Speaker 1

Yeah right, please do it.

00:24:21 Speaker 1

It's it's it's, it's a discussion.

00:24:22 Speaker 1

It's brainstorming.

00:24:24 Speaker 2

So I feel like this information you can get out without saying equal to or larger than the building's parcel side because there's a hidden message somehow in that collection, like,

00:24:36

OK.

00:24:37 Speaker 2

Is it good that it's

00:24:38 Speaker 2

Bigger, or is it

00:24:40 Speaker 2

Good that it's smaller like.

00:24:42 Speaker 2

So I would say only what is the building

00:24:44 Speaker 2

's parcel size.

00:24:47 Speaker 1

Look at yeah.

00:24:49 Speaker 2

Yeah, because you will get the same information.

00:24:52 Speaker 2

You would get like if you have

00:24:52 Speaker 1

OK.

00:24:54 Speaker 2

What is the area covered with the vegetation and what is the buildings parcel size

00:24:58 Speaker 2

Then you can figure out if it's easier if it's equal or or larger or smaller.

00:25:04 Speaker 1

Yeah, and if you want to nudge.

00:25:08 Speaker 1

Up into if you want to nudge people

00:25:14 Speaker 1

Creating a larger vegetation space than the building space.

00:25:19 Speaker 1

If you want to nudge in that direction.

00:25:25 Speaker 1

How would you add that.

00:25:29 Speaker 1

Because it's all like the questions are set up to nudge in a certain...

00:25:35 Speaker 2

So that's that's why I think that that's the tricky part, because do people feel nudged or do people feel this defensive and I.

00:25:44 Speaker 1

And you think it will become too offensive.

00:25:44 Speaker 2

The this is do people

00:25:47 Speaker 2

Feel defensive because that's the way that we are set up as humans.

00:25:52 Speaker 1

Oh, interesting.

00:25:54 Speaker 1

Good comment, good comment umso out of your head if.

00:26:06 Speaker 1

Yeah, would it be possible to nudge without being defensive.

00:26:12 Speaker 1

Like if there are requirements

00:26:15 Speaker 1

Necessary for, uh, if you want to make sure that the building

00:26:22 Speaker 1

Does integrate ecosystem services.

00:26:24 Speaker 1

Can you nudge.

00:26:26 Speaker 2

Well, I think you can nudge, but but I think it's when to nudge.

00:26:30 Speaker 1

Because it doesn't.

00:26:31 Speaker 2

When do you do it.

00:26:32 Speaker 2

It's a so it of course, that's the whole idea of nudging people, but.

00:26:33 Speaker 3

Oh yeah.

00:26:37 Speaker 2

When do you do it so so I like.

00:26:41 Speaker 2

So I had a question does this.

00:26:45 Speaker 2

When would I answer these questions.

00:26:47 Speaker 1

You would answer this when you are interested, if you want to integrate.

00:26:55 Speaker 1

If you want to develop a building that can perform ecological functions, but you do not have the sufficient background in ecosystem services.

00:27:06 Speaker 1

And that you can then design something without needing an entire

00:27:12 Speaker 1

Lecture about what is it.

00:27:15 Speaker 2

OK, and would I do this.

00:27:18 Speaker 2

At what stage of at.

00:27:20 Speaker 2

At what stage of the design would I do this.

00:27:23 Speaker 1

Yeah, can you.

00:27:24 Speaker 1

I wanted to for you to verify this which design stages are there. To check if I understood it correctly.

00:27:34 Speaker 2

Like do do.

00:27:35 Speaker 2

You like it, say like do I do it.

00:27:39 Speaker 2

Like if you're my client and you say.

00:27:41 Speaker 2

You know I wanna.

00:27:43 Speaker 3

You know I want I want.

00:27:44 Speaker 2

You to decide a house for me.

00:27:47 Speaker 2

Do I go ahead and answer those questions now before I start on the design.

00:27:52 Speaker 2

Or I'm like up, do I already have like a preliminary design.

00:27:57 Speaker 2

And then I try to integrate those ecosystem services into that preliminary design.

00:28:03 Speaker 2

So first.

00:28:04 Speaker 1

Of all I.

00:28:04 Speaker 1

see if I understood this correctly that there is first a phase that your client

00:28:08 Speaker 1

Some may state his wishes and then a phase that you design.

00:28:13 Speaker 1

And that phase on its own has like the first, the first design phase and the.

00:28:21 Speaker 1

Uhm further yeah OK.

00:28:25 Speaker 1

Yeah, yeah, that's an interesting one I.

00:28:30 Speaker 1

I would say you start with it in this like the like the first design.

00:28:36 Speaker 1

Uh, but I didn't, uh, no.

00:28:39 Speaker 1

Let's rephrase it.

00:28:43 Speaker 1

I imagine that you need it at the beginning of your design process, because otherwise you try to fit it in into something that already exists.

00:28:55 Speaker 1

But I was curious if you have the

00:28:57 Speaker 1

Same opinion about this.

00:28:59 Speaker 2

Well, I I think that ideally it would be at the beginning, but in reality.

00:29:04 Speaker 2

It would probably be

00:29:06 Speaker 2

Much farther into the process

00:29:07 Speaker 2

The problem, yeah, unless you know, unless for example if I'm gonna do it as an architect because I already am involved in this.

00:29:16 Speaker 2

You know in this world.

00:29:17 Speaker 1

Yeah, you are already in.

00:29:20 Speaker 2

So if but if I'm not and I'm

00:29:23 Speaker 2

Trying to, you know.

00:29:26 Speaker 2

Get you involved in it.

00:29:28 Speaker 2

I will do it.

00:29:29 Speaker 2

Probably when the design is already set, and if I already have a uh building like the like, the project that Katharina is in my understanding.

00:29:37 Speaker 2

So like it's already.

00:29:38 Speaker 2

An existing building.

00:29:38 Speaker 2

So how do you.

00:29:39 Speaker 2

How do you integrate it to an existing building.

00:29:42 Speaker 1

Yeah, and then you have the same problem that a parts already exists, yeah.

00:29:47 Speaker 2

So, so there are things that you you know.

00:29:51 Speaker 2

I think it's

00:29:52 Speaker 2

Important in these type of questions to identify

00:29:56 Speaker 2

What questions fit all parts of the process and what questions

00:30:03 Speaker 2

Are do not apply if the design is already underway and what questions don't design if don't apply.

00:30:10 Speaker 2

If the project already physically exists.

00:30:13 Speaker 1

OK good good.

00:30:18 Speaker 1

Great yeah, we we were.

00:30:20 Speaker 1

We are at this moment like brains would be.

00:30:25 Speaker 1

Uh, great yeah.

00:30:27 Speaker 1

At this moment we're brainstorming about, oh.

00:30:29 Speaker 3

Yeah, if we.

00:30:30 Speaker 1

Would like to communicate it like this is absolutely not our final product, but that's where you were just making prototypes of shapes of what would be cool and you're yeah, so this is really relevant.

00:30:45 Speaker 1

Uh, we suggest them that you cannot, that the different phases require.

00:30:53 Speaker 1

Uhm, not require, but like some questions do not face some faces because you already are limited bound to.

00:31:01 Speaker 1

Yeah, own sets, yeah.

00:31:03 Speaker 2

Be good to identify what those questions are.

00:31:07 Speaker 2

Just for you.

00:31:15 Speaker 1

Would the idea work.

00:31:17 Speaker 1

What would the idea work like.

00:31:20 Speaker 1

Or so we

00:31:24 Speaker 1

Came up with we made us like an idea of what is necessary, but we identified what needs to be inside a building for it to perform

00:31:36 Speaker 1

The ecological of the ecosystem services and we were like one of our first ideas was or you can communicate it this way.

00:31:44 Speaker 1

But Uhm, would that also be your first.

00:31:50 Speaker 1

Uhm, suggestion for communication.

00:31:54 Speaker 1

Or would you communicate it complete in a completely different way.

00:32:00 Speaker 2

So wait, because I'm not sure I

00:32:01 Speaker 2

Understand your question.

00:32:04 Speaker 1

It was first time formulating it.

00:32:06 Speaker 1

Let's make some time explaining it properly.

00:32:11 Speaker 1

So both our goal is that the ecosystem services are integrated in design.

00:32:19 Speaker 1

And for us

00:32:22 Speaker 1

If we want to integrate it into a building.

00:32:26 Speaker 1

We came up with with...

00:32:29 Speaker 1

Uhm, we identify certain elements.

00:32:35 Speaker 1

That if once you integrate that in a building, you have a building up that that generates these ecosystem services.

00:32:46 Speaker 1

And and now we were like, oh, we have.

00:32:49 Speaker 1

This list.

00:32:50 Speaker 1

And we want the architects to start doing this.

00:32:55 Speaker 1

But they might not have a background in ecosystem services.

00:32:58 Speaker 1

They might not fully understand the concept, but we still want to make that possible

00:33:04 Speaker 1

But they can integrate these elements.

00:33:08 Speaker 1

And then we were thinking, OK, how to communicate this.

00:33:11 Speaker 1

And this was like making set of questions like I just send you as our first

00:33:16 Speaker 1

Uh, my suggestion.

00:33:19 Speaker 1

Uh, would that also be your suggestion, or would you

00:33:25 Speaker 1

Start from a completely different angle.

00:33:29 Speaker 2

So can you give me an example of

00:33:31 Speaker 2

One of those.

00:33:35 Speaker 1

So OK, this is this is the easy one that already exists, and that's not really new, and that is if you want to make

00:33:45 Speaker 1

Your house, part of the water cycle, because that's a very important

00:33:51 Speaker 1

Uhm, cycle of functioning and then you want to make sure that first of all your building collects the water and it uses it, filters it, but also that is that the water gets infiltrated in soil again instead of flushed away in the sewage which is...

00:34:12 Speaker 1

Uhm.

00:34:15 Speaker 1

And there are like few requirements like collect it yourself and have it infiltrated into the soil.

00:34:24 Speaker 1

Uhm, yeah, and you want to.

00:34:29 Speaker 1

Without needing to explain.

00:34:30 Speaker 1

That then it's part of the water

00:34:32 Speaker 1

Cycle and you're creating the watercycle you need, and without saying you need this invention and this invention and you need to use this product from this buyer.

00:34:48 Speaker 1

Without restricting.

00:34:49 Speaker 2

OK, so here's my general thought.

00:34:54 Speaker 2

Yes, I agree that those things that are already easy to implement should be the thing that we start up.

00:35:02 Speaker 2

And because like everybody knows, solar panels and everybody.

00:35:06 Speaker 1

Oh no, no, no.

00:35:07 Speaker 1

That was like the easy.

00:35:08 Speaker 1

The first the easy example.

00:35:10 Speaker 1

There's no yeah.

00:35:12 Speaker 2

So so those things people already feel like.

00:35:16 Speaker 2

Yes, it's something that they do.

00:35:16 Speaker 1

Thank you.

00:35:18 Speaker 2

And so that I so.

00:35:20 Speaker 2

I think that's a lot of psychology in this question.

00:35:24 Speaker 2

So and my ...

00:35:28 Speaker 2

Side note, my suggestion is that if you can again somebody from, you can get a psychologist or somebody with experience in questions.

00:35:39 Speaker 2

It would be good.

00:35:40 Speaker 2

I love psychology.

00:35:43 Speaker 2

That's my.

00:35:46 Speaker 3

You know.

00:35:46 Speaker 2

Side of interest so.

00:35:48 Speaker 2

If people feel like if you say oh solar panels and people say yes and then you say what effect you know.

00:35:56 Speaker 2

Collect water, yes.

00:35:57 Speaker 2

Then people start feeling good and like, Oh yes, I'm we're generous.

00:36:01 Speaker 2

And then

00:36:01 Speaker 2

The other things.

00:36:13 Speaker 3

Yeah, yeah.

00:36:16 Speaker 2

So so you.

00:36:17 Speaker 2

Want to set.

00:36:17 Speaker 2

Up in a way that people are like happy, happy, happy and like I can do that.

00:36:23 Speaker 2

Yeah, like it doesn't feel like a long

00:36:25 Speaker 2

Stretch and I have to

00:36:27 Speaker 2

Do like this whole.

00:36:28 Speaker 2

Like I have to relearn how to do

00:36:30 Speaker 2

My whole process again.

00:36:33 Speaker 1

Oh yeah, so if you leave it to free you say you have all the design freedom in the world.

00:36:39 Speaker 1

It's like no, this is too difficult.

00:36:43 Speaker 2

Like if it's like.

00:36:44 Speaker 2

I don't know like if I say.

00:36:49 Speaker 2

For example.

00:36:52 Speaker 2

You have to.

00:36:54 Speaker 3

Let me see.

00:37:04 Speaker 2

I, I think that's.

00:37:06 Speaker 2

Do you have a question like does the I.

00:37:08 Speaker 2

I don't.

00:37:09

Know if it's.

00:37:09 Speaker 2

Coming, but the vegetation type and quantity provide all the building habitats required biochemical.

00:37:16 Speaker 2

And I'm gonna go like.

00:37:17 Speaker 2

Second question, I don't know what you're talking about, and I'm not sure like I'm ever going to provide that for my habit, like I have no idea if that's a question.

00:37:31 Speaker 2

The first question that I read, I'm gonna go like, no.

00:37:36 Speaker 1

It doubles that, yeah.

00:37:38 Speaker 2

But if I, you know but.

00:37:40 Speaker 2

If you ask me that,

00:37:43 Speaker 2

Uhm, after I already know that I'm putting solar panels that I'm gonna, you know, collect water and recycle the water and I'm going

00:37:51 Speaker 2

To do like.

00:37:52 Speaker 2

Have this vegetation incorporated and you know increase the vegetation inside the building and you know

00:37:59 Speaker 2

All other stuff.

00:38:01 Speaker 2

And then you ask me that and that.

00:38:03 Speaker 2

And then I'm.

00:38:03 Speaker 2

Gonna make a like.

00:38:04 Speaker 2

I'm not sure what.

00:38:05 Speaker 2

You mean but.

00:38:07 Speaker 1

I tackled all the other things, so this will.

00:38:09 Speaker 1

Work, it might work.

00:38:10 Speaker 2

Yeah, and you know I don't, you know, just tell me what this means and maybe I can

00:38:16 Speaker 2

Get it. So I feel like that's really important

00:38:19 Speaker 2

The order and you which you ask the questions

00:38:22 Speaker 2

Uhm, setting the questions so that there's not a judgment, which is the one that I feel with

00:38:28 Speaker 2

This is equal

00:38:29 Speaker 2

Or to larger because it's up to you to once you have the data like

00:38:36 Speaker 2

One thing is to ask the question and the other

00:38:38 Speaker 2

Thing is, what do you

00:38:39 Speaker 2

Do with the data.

00:38:40 Speaker 2

So if you ask the question and I can answer you truthfully and I can say no

00:38:44 Speaker 2

My my you know this is the size of my building parcel up and then you like after in the analysis page it says like OK greater that or

00:38:56 Speaker 2

Less than or equal then then.

00:38:59 Speaker 2

If it's equal then this.

00:39:00 Speaker 2

Is what you do.

00:39:01 Speaker 2

If it's the same, you know if.

00:39:03 Speaker 2

It's smaller then this is what you do.

00:39:04 Speaker 2

Like that becomes

00:39:05 Speaker 2

A strategy, it doesn't become a question at the beginning.

00:39:10 Speaker 1

Oh, and oh because you have scenarios for everything, you have an answer for, then it's like everything is OK.

00:39:18 Speaker 1

All your answers are OK and based on your answer.

00:39:21 Speaker 1

We do this, oh.

00:39:26 Speaker 2

And that way.

00:39:28 Speaker 1

You you you, you, you end up at.

00:39:31 Speaker 1

The same place.

00:39:33 Speaker 2

Yeah exactly, you end up.

00:39:37 Speaker 2

And and the effort may be bigger, but but you don't know that because like because I only found my answer like I'm giving you my answer, so I don't know what the other you know what the other road is.

00:39:50 Speaker 2

I'm giving you my ask.

00:39:50

Oh, that.

00:39:51 Speaker 1

Doesn't matter. Ignorance is bliss.

00:39:54 Speaker 2

So so and and at the end if I'm doing, if I'm incorporating and this is because technically I want to do it, so I just want you to tell me what to do.

00:40:05 Speaker 2

I don't and it's what we talk about.

00:40:06 Speaker 2

We are either they don't care or most people don't care to know about the ecosystem services.

00:40:12 Speaker 2

Just tell me what do I have

00:40:13 Speaker 2

To do OK I have.

00:40:14 Speaker 2

To you know

00:40:15 Speaker 2

Put more trees.

00:40:16 Speaker 2

OK, that's easy.

00:40:17 Speaker 2

I can put more trees.

00:40:17 Speaker 1

Oh, that's also because, yeah, you don't care.

00:40:21 Speaker 1

Just let me do something and then that type of questioning is.

00:40:25 Speaker 1

Also easier because then it's just based on the information you gave

00:40:29 Speaker 1

You should do this.

00:40:31 Speaker 2

Exactly give me a correction.

00:40:32 Speaker 1

So in fact actually take you tackle 2 problems.

00:40:35 Speaker 2

Yeah, and if you want to, do you know if you want to know more, there's always more to learn but but.

00:40:42 Speaker 2

It's like you.

00:40:42 Speaker 2

Said, you know people don't have the time to study ecosystem services and learn all of that, and you know, try a whole new thing so it's like, OK, just give me the answer.

00:40:53 Speaker 2

What do I do.

00:40:55 Speaker 2

And yeah, and then and then like the.

00:41:00 Speaker 2

The, uh, hot moment because I'm I'm looking for an Ah moment.

00:41:03 Speaker 2

Do you know.

00:41:04 Speaker 2

What an ah moment is.

00:41:05 Speaker 1

Yeah yeah yeah yeah.

00:41:07 Speaker 2

So the yaha moment is like.

00:41:10 Speaker 2

Once you tell once people say like, OK, I'm gonna I can do this, this, this and this and you start like OK you know you are providing this ecosystem service.

00:41:20 Speaker 2

This is how much you're giving.

00:41:22 Speaker 2

This is how much you're contributing.

00:41:24 Speaker 2

Then it's like, oh, like you know it's it's like.

00:41:28 Speaker 2

I'm doing it.

00:41:29 Speaker 2

And it's a instead of.

00:41:33 Speaker 2

I feel like if you go like.

00:41:36 Speaker 2

If it, if the if it is the goal is something that they see very big, it is like.

00:41:42 Speaker 2

Unachievable, but if you say only by doing these five things, you're gonna get here.

00:41:48 Speaker 2

People are gonna probably want to

00:41:49 Speaker 2

Get there and

00:41:50 Speaker 2

So then how can we get a little bit farther.

00:41:53 Speaker 2

You know, and then you give them the answer

00:41:56 Speaker 2

For that, it's it's.

00:41:59 Speaker 2

It's a positive reinforcement positive feedback loop.

00:42:03 Speaker 1

Yeah, I yeah I can see it work working better then I have two questions based on what you

00:42:10 Speaker 1

Just said, uh.

00:42:13 Speaker 1

Uh, maybe, maybe maybe a little bit too broad a question, uh.

00:42:19 Speaker 1

For which

00:42:21 Speaker 1

People, would this approach be relevant like only the architecture architect in the whole process, or are there more people interested with that or need to deal with it.

00:42:39 Speaker 2

I think that everybody that is involved in the building.

00:42:43 Speaker 2

Design and indeed should be involved in this.

00:42:47 Speaker 2

Because yeah, yeah, I think it's something that but the whole team should know in order to be aligned.

00:42:47 Speaker 1

OK.

00:42:56 Speaker 1

And uh, for my understanding, which people are involved in such a team.

00:43:02 Speaker 2

So the engineer.

00:43:04 Speaker 2

The you know engineer, meaning the the structural engineer, the engineer, the landscape.

00:43:12 Speaker 2

Uhm architect the I don't know if one can be the designer and the other can be the construction constructor so if they're different then both of them need to be involved.

00:43:27 Speaker 1

So basically, everyone in the phase of of the, like the design phase.

00:43:35 Speaker 2

Yeah, yeah.

00:43:36 Speaker 1

OK, makes sense.

00:43:37 Speaker 1

Yeah, because they're all trying to integrate it in the working on the same project, yeah.

00:43:42 Speaker 2

Because the building doesn't work otherwise, like even for you know I as an architect, I can design whatever I want, but if I if I don't integrate the electrical engineer needs then my design is not gonna work, yeah.

00:43:58 Speaker 2

And the same for every other.

00:44:00 Speaker 2

You know person involved.

00:44:02 Speaker 2

So, so because this becomes a unifying

00:44:07 Speaker 2

Thing. Everybody needs to be involved in the

00:44:13 Speaker 2

Process some more than.

00:44:14 Speaker 2

Others, but it's something that.

00:44:16 Speaker 2

And maybe you know, I don't know.

00:44:18 Speaker 2

Maybe not all of them need to know everything but but I do think that more people get need

00:44:24 Speaker 2

To be involved.

00:44:26 Speaker 1

Would, uh, would you if you would.

00:44:28 Speaker 1

That be like.

00:44:30 Speaker 1

Different guides for everyone or just like a meeting together and then discussing about it together and.

00:44:40 Speaker 2

So for example.

00:44:41 Speaker 2

I've worked with, uh, bioclimatic architect.

00:44:45 Speaker 2

Yeah, it's it's.

00:44:46 Speaker 1

It's a consultancy.

00:44:48 Speaker 2

And the the architect is another person,

00:44:52 Speaker 2

The engineer is another like it it he does becomes a consultant.

00:44:56 Speaker 2

Uhm, and the way.

00:44:57 Speaker 2

That that it's set up is

00:45:00 Speaker 2

With data.

00:45:01 Speaker 2

Yeah, like this is the size of the building and this is a you know the use of the building.

00:45:10 Speaker 2

The established requirements.

00:45:12 Speaker 2

Oh, what would be the ideal scenario this person needs to work with the,

00:45:18 Speaker 2

For example, the mechanical engineer that it's figuring out how the buildings got cool.

00:45:26 Speaker 2

And then that is something that.

00:45:30 Speaker 2

Requires an initial team meeting, but then it also requires participation in other.

00:45:37 Speaker 2

Meetings, additional meetings.

00:45:39 Speaker 2

Depending because it's not like OK, here's what you have to do and bye.

00:45:46 Speaker 3

Makes change like.

00:45:50 Speaker 2

Maybe as an architect, who comes from the space

00:45:55 Speaker 2

Perspective I wanna have like a very open space and you know clear I don't want to have any structure, but then the structural engineer is going

00:46:05 Speaker 2

To say.

00:46:06 Speaker 3

Well, that's not gonna.

00:46:07 Speaker 2

Work, or if you got to.

00:46:08 Speaker 2

Work then I'm gonna need

00:46:11 Speaker 2

To build a bigger structure on this part.

00:46:14 Speaker 2

But then the mechanical engineer may say, but that you know you're taking space from where I'm gonna put my measurements and my readings are this size and now they're not gonna fit here, so it's.

00:46:26 Speaker 1

So everybody needs to continue talking with each other all the time, yeah, so it's a combined process.

00:46:32 Speaker 1

Combined meetings.

00:46:34 Speaker 1

To, uh, attune.

00:46:38 Speaker 1

OK.

00:46:39 Speaker 1

So that was a little a side and so.

00:46:41 Speaker 2

They need certain areas of the.

00:46:46 Speaker 2

Of the UM.

00:46:49 Speaker 2

Of the project.

00:46:50 Speaker 2

You know of the of the ecosystem services, so.

00:47:01 Speaker 2

For example, if you're talking about water cycling

00:47:05 Speaker 2

Then the hydraulic engineer may lead that part of the of the project, but everybody else is still involved.

00:47:14 Speaker 1

OK OK OK.

00:47:25 Speaker 1

Yeah, so I spoke with, uh, last week.

00:47:30 Speaker 1

I spoke with an architect.

00:47:31 Speaker 1

Who was like we need to integrate ecosystem services, AAH!

00:47:35 Speaker 1

And, uh, she.

00:47:37 Speaker 1

But she also said that she.

00:47:40 Speaker 1

From her perspective, she needed a comparison with the natural world, or saying,

00:47:47 Speaker 1

Is it functioning as well as an equal, a natural side.

00:47:57 Speaker 1

Would you feel that's like a necessary desire or like.

00:48:02 Speaker 1

You know we face it.

00:48:07 Speaker 1

Uh, in order to.

00:48:14 Speaker 2

A requirement.

00:48:15 Speaker 1

Yeah yeah, yeah.

00:48:19 Speaker 1

If you want to convince

00:48:21 Speaker 1

People that this has an effect.

00:48:26 Speaker 1

Uhm, yeah.

00:48:28 Speaker 1

If you want to convince people that integrating ecological functioning into a building works.

00:48:36 Speaker 1

Uh, would you agree with her that you then need to compare it to a natural side.

00:48:42 Speaker 1

Or is there other way to.

00:48:45 Speaker 1

Would there be other ways to show that it has an effect.

00:48:48 Speaker 1

That we should do it.

00:48:52 Speaker 2

Have you heard about project positive from Bio Mimicry 3.8.

00:48:57 Speaker 2

Project positive. Yeah no I haven't.

00:49:00 Speaker 2

So do you know what Biomimicry 3.8 is.

00:49:02 Speaker 2

Yeah, OK, they have a project called Project positive.

00:49:07 Speaker 2

If you wanna look it up, it's online in their website and

00:49:10 Speaker 2

You can search.

00:49:12 Speaker 2

Everybody project positive so that project is that they're working with different companies like Ford, Microsoft

00:49:19 Speaker 2

Interface and they are doing what they call project positive and what it's called

00:49:26 Speaker 2

They also call it like factory at the forest, which means taking the ecological performance standards from the ecosystem close to the site and using them as

00:49:38 Speaker 2

Standards for

00:49:40 Speaker 2

What they're doing.

00:49:41 Speaker 1

Yeah, Oh yeah, that's exactly the same approach, yes.

00:49:46 Speaker 2

So what I think about that approach is,

00:49:50 Speaker 2

Yes, it makes sense to set to set a

00:49:53 Speaker 2

Standard, you know it, it makes sense.

00:49:57 Speaker 3

Uhm, because

00:50:01 Speaker 2

I have a goal and then I can try to achieve that goal.

00:50:05 Speaker 2

Uh, it's also.

00:50:11 Speaker 2

And I also believe that there's a.

00:50:21 Speaker 2

Uh, like an ethical but not ethical ecological part, which is like.

00:50:29 Speaker 2

You want the ecosystem to provide guidance on what and how it should happen, right.

00:50:36 Speaker 2

Because if.

00:50:38 Speaker 2

If you don't have that guidance, then we may end up transforming the ecosystem into something that it's not

00:50:47 Speaker 2

Naturally what it is.

00:50:50 Speaker 2

So let me give you an example.

00:50:53 Speaker 2

Let's say that.

00:50:54 Speaker 2

My so for example, the ecosystem that I am right now, it's a.

00:50:59 Speaker 2

Tropical dry forest.

00:51:01 Speaker 2

That means that half of the

00:51:03 Speaker 2

Year there's no water.

00:51:06 Speaker 2

Uhm, if I create if it ethical and that's a question and ecological that, let's say that I create a building and it's not a building, I create a whole city that

00:51:23 Speaker 3

Uhm source water.

00:51:25 Speaker 2

And I have water available all year, so my.

00:51:31 Speaker 2

Plants and all the.

00:51:33 Speaker 3

You know the.

00:51:33 Speaker 2

Biodiversity now does not suffer for six years, six months of no water because I always have water, and so I've changed the ecosystem from its natural setting.

00:51:47 Speaker 2

And I artificially created because I went beyond the standards of the ecosystem that I am in.

00:52:00 Speaker 2

I think that we as humans have a tendency.

00:52:02 Speaker 2

To do that to the like.

00:52:05 Speaker 2

I'm kind of like we go from.

00:52:09 Speaker 2

Like we cannot do it to.

00:52:12 Speaker 2

If you do that, I'm gonna go.

00:52:14 Speaker 2

You know, I'm gonna.

00:52:14 Speaker 2

Beat you.

00:52:16 Speaker 1

So, so we have to Tennessee instead of making like the six month dry period also in the

00:52:21 Speaker 1

City to

00:52:22 Speaker 1

Move to we have never water shortage.

00:52:25 Speaker 2

And we are better than nature.

00:52:27 Speaker 1

The overpowered yeah.

00:52:29 Speaker 2

So, so that's where I'm going like if we don't have any standards to measure ourselves or to serve as as guidance then.

00:52:41 Speaker 2

It may it may not work. Now from the logistics perspective

00:52:49 Speaker 2

Having those ecosystem like political performance standards, it's not easy like.

00:52:54 Speaker 2

It's a whole process.

00:52:56 Speaker 2

It's a whole research.

00:52:58 Speaker 2

Yeah, you need.

00:53:00 Speaker 2

To you know, hire A

00:53:01 Speaker 2

A huge team and do a huge project, that's why

00:53:04 Speaker 3

You know it's

00:53:05 Speaker 2

Ford, it's Microsoft,

00:53:06 Speaker 2

It's those kind of companies that can actually

00:53:08 Speaker 2

Do it so and and.

00:53:13 Speaker 2

So it's either.

00:53:14 Speaker 2

Like we create standards for every place in the world, and then people can just go and see a graph and say hey, this is what I have to do here.

00:53:24 Speaker 2

But if we don't have that then

00:53:28 Speaker 2

What do we use.

00:53:30 Speaker 1

The standard.

00:53:31 Speaker 2

Like if I'm gonna do a project right now and you know you're going to hire me to do your house.

00:53:35 Speaker 2

Like you're not gonna have the money to go heir some.

00:53:39 Speaker 1

No, let's do an ecologist measuring it all.

00:53:43 Speaker 2

And you know, gather all this.

00:53:45 Speaker 2

Plus there's a lot of this.

00:53:47 Speaker 2

Some softwares that do it in the

00:53:50 Speaker 2

US

00:53:51 Speaker 2

UM, every [...] as a sort thing that can help you

00:53:55 Speaker 2

With that, but

00:53:56 Speaker 2

If I don't have anything and that you're not, you don't have the money.

00:53:59 Speaker 2

I don't have the money, so it's like, but you still want to have regenerative design.

00:54:03 Speaker 2

How do we make sure that we integrate that and how

00:54:05 Speaker 2

Do we make sure that.

00:54:08 Speaker 2

We use the ecosystem next door so.

00:54:12 Speaker 2

So I feel like.

00:54:15 Speaker 2

At this point, anything is better than nothing like whatever we can accomplish in our building.

00:54:21 Speaker 2

I'm sure it's gonna because the rest of the of the place it's not doing anything.

00:54:26 Speaker 2

Anything that we can do, it's going to be a huge contribution, right.

00:54:30 Speaker 2

But if that becomes a common thing and maybe with time.

00:54:34 Speaker 2

Then yes, we should have some kind of standard to follow or.

00:54:39 Speaker 2

Or sometime kind of data that is like OK, like sort of like law like you know like we want data.

00:54:48 Speaker 2

So yes, you know the whole city needs to store this amount of water.

00:54:55 Speaker 2

OK, this is my contribution.

00:54:58 Speaker 2

What's your contribution then.

00:54:59 Speaker 2

All contribution OK, we reach that level then we don't need to store more kind of thing, but it's a but I feel like we are

00:55:06 Speaker 2

Far away from that.

00:55:09 Speaker 1

Yeah, so we're far.

00:55:10 Speaker 1

Away from that because we do not have the data yet, we do not collect it yet, OK.

00:55:15 Speaker 2

Yeah, so so short long answer to your question.

00:55:20 Speaker 2

Short version, it's like.

00:55:22 Speaker 2

Ideally we would have the logical performance standard from the ecosystem next or in reality.

00:55:27 Speaker 2

Right now.

00:55:28 Speaker 2

For this time we need to work with alpha.

00:55:32 Speaker 2

Then maybe have maybe just have a general guide of what it means, like because something very easy.

00:55:39 Speaker 2

What Biome are you like.

00:55:40 Speaker 2

What then OK or what ecosystem are you OK.

00:55:44 Speaker 2

I'm a tropical dry forest, yes, so these are the main characteristic that that means translate that into your building.

00:55:52 Speaker 1

But like the but in in like ecological units, measurement units, but.

00:55:57

Or just or.

00:55:58 Speaker 2

Just context units, you know.

00:56:00 Speaker 2

OK, even even as architects we sometimes forget to understand that we are in a place.

00:56:08 Speaker 2

So you need to understand that place and understanding that place means what are the environmental conditions of that place.

00:56:15 Speaker 2

So you know, play with that.

00:56:20 Speaker 2

With those conditions, instead of using them as standard, just understand those conditions and try to.

00:56:28 Speaker 2

Try to.

00:56:30 Speaker 3

Match them in a way.

00:56:33 Speaker 1

But I have two last questions.

00:56:39 Speaker 1

Isn't so you say we would need like if we want if we want to do that, we need ecologists.

00:56:47 Speaker 1

We would need a lot of work to define these guides.

00:56:54 Speaker 1

You started your story like for the for the guidelines for like the general topic, not the architecture topic, but your work in general that you said oh I'm trying to set up questions that

00:57:10 Speaker 1

Uhm, with which we can define lever points.

00:57:18 Speaker 1

Don't you think that's like exactly the same work that you're searching for.

00:57:24 Speaker 1

If you search it for lever points that you're also so just looking at the searching for the ecological performance.

00:57:34 Speaker 1

No, let's say differently I, it's just.

00:57:38 Speaker 1

It reminded me a

00:57:39 Speaker 1

Lot of your you know you say what what I would.

00:57:48 Speaker 1

Ah, and I see to wait.

00:57:50 Speaker 1

We just described a situation where you need the ecologist and we say that's a

00:57:54 Speaker 2

Lot of work, yeah.

00:57:56 Speaker 1

But it reminded me of your remark of oh, I want guidelines that that with which you will find

00:58:02 Speaker 1

The lever points.

00:58:04 Speaker 1

And I was like, is this the same situation.

00:58:08 Speaker 1

And didn't we find it

00:58:09 Speaker 1

Did we find it easy beforehand, then difficult now

00:58:12 Speaker 1

Or is it different.

00:58:14 Speaker 2

How is the same situation for you.

00:58:16 Speaker 2

How do you think it's the same situation.

00:58:21 Speaker 1

Because for finding lever points, I think you to find.

00:58:27 Speaker 2

One, what is the word that you're saying for finding one.

00:58:30 Speaker 1

Lever points.

00:58:31 Speaker 2

Leverage point.

00:58:32 Speaker 1

Never, oh sorry leverage.

00:58:33 Speaker 1

Points, yeah, leverage points.

00:58:36 Speaker 1

Thank you for my English.

00:58:40 Speaker 1

To finding leverage points, I would say if you found them, you create created a certain understanding of your ecological environment.

00:58:55 Speaker 2

Yes, well.

00:58:58 Speaker 2

And no, you created a certain understanding of where you could easily act upon.

00:59:07 Speaker 2

And that implies.

00:59:12 Speaker 2

Certain amount of knowledge of what is going on in the environment but.

00:59:18 Speaker 1

Not a complete reference story.

00:59:22 Speaker 1

OK, yeah, that's the difference, yeah.

00:59:24 Speaker 2

Yeah, and not the whole.

00:59:27 Speaker 2

It it it shows you where you can act, but it doesn't show you what the ideal or what the standard is.

00:59:37 Speaker 1

So just finding your place to act, the point where you can start acting.

00:59:43 Speaker 2

Yeah, so for example, I can identify that an easy point of entrance for me is water cycle.

00:59:50 Speaker 2

That doesn't mean.

00:59:52 Speaker 2

That I know anything about the amount or that characteristic of how that cycle is and how should I do it, you know or how nature does it, how the ecosystem next door does it.

01:00:06 Speaker 1

Or not.

01:00:06 Speaker 2

It just means that it's easy for me to

01:00:11 Speaker 2

Play a role in

01:00:12 Speaker 2

That system, how do I do it.

01:00:14 Speaker 2

And what's the standard that's to be determined.

01:00:17 Speaker 1

Yeah, no standard, no reference point yet.

01:00:20 Speaker 1

Only a starting point.

01:00:20 Speaker 2

Yeah, yeah yeah sorry, and that's where at this point in time

01:00:26 Speaker 2

The starting point is enough because anything at this point anything that we can contribute because the amount of people that are contributing is so small than anything that we can contribute, it's.

01:00:37 Speaker 1

Huge already.

01:00:38 Speaker 2

Yeah, it's it's relevant, it's needed.

01:00:40 Speaker 2

He did, but they're gonna there.

01:00:43 Speaker 2

Has, you know, in the future I see that there needs to come a point where we can no longer act without having all that knowledge.

01:00:54 Speaker 1

And you say like it's relevant now.

01:00:56 Speaker 1

Now, because is it because of climate change that we just need fast action.

01:01:03 Speaker 1

Uh, or.

01:01:03 Speaker 2

All right.

01:01:05 Speaker 2

Because nobody is doing anything.

01:01:07 Speaker 2

So it's not whether we had climate change like take away climate change that we're still we're still taking over the environment, and we are not doing anything we are not contributing.

01:01:18 Speaker 2

We are not.

01:01:19 Speaker 2

We are not contributing in a positive way.

01:01:21 Speaker 2

We are only generating negative effects, so that's not.

01:01:27 Speaker 2

You know that's not a way of being a good team player.

01:01:32 Speaker 1

And to become a better team player, like in the quickest way at this moment is just do it in this first step and then if if we have made Oh no yeah.

01:01:47 Speaker 1

We're not a good team player.

01:01:49 Speaker 1

And to become a better team player fast, start with finding starting points.

01:01:55 Speaker 1

And once that is happening, we can make it better and and create a deeper understanding.

01:02:02 Speaker 1

But now we can at least start somewhere.

01:02:06 Speaker 2

Yeah, so yeah I'm gonna do a metaphor.

01:02:09 Speaker 2

Like if we are working together and there's a team here just starting and and you know people don't know each other and they have to work together then I you know I come up and I invite everybody for dinner.

01:02:23 Speaker 2

That's my, you know it.

01:02:25 Speaker 2

It doesn't mean maybe I don't know.

01:02:26 Speaker 2

Maybe you're I invite for dinner and then there is like a good steak and it's like you don't you're vegetarian.

01:02:34 Speaker 2

That's, uh, work doesn't work.

01:02:37 Speaker 2

But I at least you know I tried and maybe that generated a conversation where you say I'm a vegetarian.

01:02:43 Speaker 2

Then somebody else says I'm a vegetarian.

01:02:45 Speaker 2

Then people start connecting and then we

01:02:47 Speaker 2

Create, you know.

01:02:48 Speaker 2

But we start moving in the right direction, so so that a lot of that has you know that comes up a lot in bio mimicry, because ideally we would be doing this wonderful thing that you know would do.

01:03:02 Speaker 2

It would be perfect and it will be exactly like nature, but we are not there yet so any.

01:03:09 Speaker 2

Any step forward is a game.

01:03:12 Speaker 1

It's great. Cool.

01:03:14 Speaker 2

And I have a comment that of something that you said before.

01:03:19 Speaker 2

Where that it doesn't have to do with this, but you were saying something like you don't wanna

01:03:25 Speaker 2

Tell people what products to use or what.

01:03:31 Speaker 2

Yeah, but it's always good to have.

01:03:35 Speaker 1

Suggestions reference.

01:03:35 Speaker 2

Correct, yes, yes that [...].

01:03:39 Speaker 2

Yeah, like bro like it's easier for me if you say you know if you say.

01:03:44 Speaker 2

I don't know.

01:03:45 Speaker 2

Like if I.

01:03:45 Speaker 2

I OK I have to do I.

01:03:48 Speaker 2

I have to find my logical performance standards.

01:03:50 Speaker 2

I'm like.

01:03:51 Speaker 2

I have no idea where.

01:03:52 Speaker 2

I'm going to get the information.

01:03:54 Speaker 2

But if you say you know this and this company does that and I'm like OK, now I can talk to them.

01:03:59 Speaker 2

They can say.

01:04:00 Speaker 2

I buy, you know.

01:04:01 Speaker 2

This is how much I charge this is.

01:04:03 Speaker 2

What I do.

01:04:04 Speaker 2

And then I know that the companies that do that are

01:04:09 Speaker 2

These type of companies then I can search on my own or other type of companies that are like like those and maybe I can work with the ones that you suggested.

01:04:19 Speaker 2

Or maybe I can.

01:04:19 Speaker 2

Find another one, but it's a first.

01:04:22 Speaker 2

Because people want some kind of guidance.

01:04:25 Speaker 2

Just tell me.

01:04:25 Speaker 1

Because otherwise you don't even know what to look for.

01:04:27 Speaker 1

Like you know, I'd want to look for yourself, but like what I'm what am I searching for, yeah.

01:04:34 Speaker 2

You say what.

01:04:35 Speaker 2

A product that those kids and this and

01:04:36 Speaker 2

This and I'm like I have no idea

01:04:39 Speaker 2

Those product exist but you do.

01:04:41 Speaker 3

OK.

01:04:43 Speaker 1

Nice comment, OK, my last question, my last real question.

01:04:48 Speaker 1

Uh, you you said

01:04:52 Speaker 1

You mentioned the term regenerative.

01:04:55 Speaker 1

Uhm, what would.

01:04:57 Speaker 1

Be your definition of a regenerative building.

01:05:03 Speaker 2

Of a regenerative building.

01:05:18 Speaker 2

So the simple definition let me I'm gonna

01:05:22 Speaker 2

Play with that.

01:05:23 Speaker 1

We are brainstorming.

01:05:26 Speaker 2

So it would be something allowed along the lines of.

01:05:36 Speaker 2

Does it contribute positively

01:05:43 Speaker 2

To other species besides humans.

01:05:49 Speaker 2

And maybe the environment.

01:05:51 Speaker 2

But I would say others because it contributes possibly.

01:05:57 Speaker 2

An other sort of definition would be sort of like does it.

01:06:03 Speaker 2

To me it's all about the role.

01:06:05 Speaker 2

Does it play a positive role.

01:06:09 Speaker 2

In the environment.

01:06:11 Speaker 1

And does positive mean extra or not not deplete not destructive.

01:06:22 Speaker 2

Positive is beyond beyond zero, like it's not not destructive, it means purposely contributing, contributing.

01:06:27 Speaker 2

Like to me we what ever means purpose.

01:06:30 Speaker 2

Is purposefull and it's positive.

01:06:34 Speaker 1

And in the context of

01:06:35 Speaker 1

Of you're in a tropical dry climate.

01:06:40 Speaker 1

Uh, but you said you did not want.

01:06:43 Speaker 1

We should not make the urban environment wet the entire year.

01:06:48 Speaker 1

How then, can be positive without saying but

01:06:52 Speaker 1

What, the entire year extra water, that's positive, right.

01:06:56 Speaker 2

Because it's not.

01:06:58 Speaker 2

It's not only about having

01:07:00 Speaker 2

Water well, first of all it's.

01:07:02 Speaker 2

This it's that.

01:07:03 Speaker 2

There's one or one thing is, in fact is that there's no.

01:07:10 Speaker 2

OK, so here's

01:07:12 Speaker 2

Here's an example.

01:07:12 Speaker 2

The city where I live.

01:07:14 Speaker 2

So we are by the ocean and we are by the river, so that's our our.

01:07:19 Speaker 2

Our limits are one side of the ocean, the other side is the river.

01:07:24 Speaker 2

It's a very generally flat

01:07:28 Speaker 2

Place with

01:07:30 Speaker 2

Some curves.

01:07:33 Speaker 2

When they build we have huge like when it rains, it rains a lot.

01:07:39 Speaker 1

OK, yeah.

01:07:40 Speaker 2

And when we designed the city, or when we we didn't design the city, when we build the city without design.

01:07:49 Speaker 2

We did not let we closed up the different water channels like very small water channels that were along the whole territory.

01:08:01 Speaker 2

So when it rains.

01:08:03 Speaker 2

There's a river going through the city.

01:08:06 Speaker 2

And it when I say a river is like a river, it like it takes busses.

01:08:09 Speaker 1

A river.

01:08:11 Speaker 2

This it takes cars.

01:08:13 Speaker 2

It takes people.

01:08:14 Speaker 2

It takes you know. And it.

01:08:22 Speaker 2

So understanding

01:08:25 Speaker 2

That even though it doesn't rain here

01:08:29 Speaker 2

Every, like the whole year.

01:08:32 Speaker 2

It's a it's, you know it's strong

01:08:34 Speaker 2

Weather conditions that you need to

01:08:38 Speaker 2

Be prepared for both for that strong water and how does nature manage that strong water.

01:08:44 Speaker 2

Uhm, and that means like a very simple thing, as letting water permeate, and so how if I combine that contribute positively, I need to find I need to create my contribution

01:08:57 Speaker 2

It's how can I create more more places for water to permeate.

01:09:02 Speaker 2

Because it's this water [...] and you know, generates.

01:09:09 Speaker 1

So like positive in the sense of

01:09:13 Speaker 1

The processes that need to be there that.

01:09:17 Speaker 1

That that it's that it's that.

01:09:19 Speaker 2

Yeah.

01:09:19 Speaker 1

There are more. So I don't know

01:09:22 Speaker 1

Why my English proficiency went out of the window.

01:09:28 Speaker 1

So so that the processes that are needed that they that you contribute to that and not just more water, yeah.

01:09:38 Speaker 2

So, and I think a lot of it.

01:09:42 Speaker 2

With us like.

01:09:45 Speaker 2

We don't need to do much like, we just need to allow nature to do it.

01:09:51 Speaker 1

Yeah, let me.

01:09:52 Speaker 2

You know what I mean.

01:09:54 Speaker 1

So yeah, they're disrupting.

01:09:55 Speaker 1

Yeah, we don't need to create.

01:09:57 Speaker 1

Yeah, we don't need to make make a lot, we just need to give major space to continue again

01:10:04 Speaker 1

What it has been doing.

01:10:06 Speaker 2

Yeah, we we need yeah not stop those processes.

01:10:09 Speaker 2

So I think a way to contribute and to be regenerative is to generate the conditions for nature to be able to do its normal processes.

01:10:20 Speaker 1

Yeah, so it's focus.

01:10:21 Speaker 1

Yeah, more focus on processes allowing the processes.

01:10:24 Speaker 2

Yeah, that's one way and another way it, well, I think that's the only way.

01:10:32 Speaker 2

And of course, uhm and well, no, there's another.

01:10:35 Speaker 2

Way is that just.

01:10:41 Speaker 2

Being self sufficient or as much as self sufficient as you can without so that you don't extract more from nature, right.

01:10:50 Speaker 2

And that and that, uhm.

01:10:57 Speaker 2

Is I think there's very different perspectives like like one is allowing for the processes we talk about.

01:11:02 Speaker 2

Let let's give space, don't interrupt the process.

01:11:05 Speaker 2

Let them flow.

01:11:06 Speaker 2

That's one, then the other one is OK

01:11:08 Speaker 2

I have needs and I've been getting those needs from nature like energy OK, is there a way that I cannot like

01:11:16 Speaker 2

I don't get them from nature

01:11:17 Speaker 2

And I get them from another source.

01:11:20 Speaker 2

Solar panel, that's another option.

01:11:22 Speaker 2

Uhm, then

01:11:26 Speaker 2

The other one is, uhm.

01:11:29 Speaker 2

And and in that one it's not another one, but in that one is...

01:11:34 Speaker 2

What is my. What is that building's role.

01:11:37 Speaker 2

In those in those.

01:11:42 Speaker 2

In that production, or that or those services, because I may have the conditions to produce a lot of energy that it's beyond what I need.

01:11:52 Speaker 2

So if I'm if I'm

01:11:55 Speaker 2

Extrapolating like if I'm if I'm being more metaphorical about that ecosystem, it's.

01:12:01 Speaker 2

My ecosystem is the other or my system

01:12:05 Speaker 2

Is the other buildings around me and maybe I'm a great generator of energy, so I provide that to myself and to the other one you know to the building next door, but I'm really bad at the water cycle

01:12:20 Speaker 2

And then that other building helped me out.

01:12:23 Speaker 2

With the water cycle.

01:12:24 Speaker 2

Or a third building helped me out

01:12:26 Speaker 2

With the water cycle because.

01:12:27 Speaker 1

So understanding you're part of the system.

01:12:29 Speaker 2

Understanding your part

01:12:30 Speaker 2

Of the system, yes, and contributing to it because it's a way that nature works like not one Organism does all the jobs like they they are spread and they.

01:12:41 Speaker 2

Each contribute in a different way.

01:12:43 Speaker 2

So it's like we all need

01:12:45 Speaker 2

To contribute in a different way, we don't have to contribute in

01:12:47 Speaker 2

The same way, yeah.

01:12:49 Speaker 1

So OK, so and the first two things you mentioned are actually two sides of the same coin being

01:12:58 Speaker 1

Give space through processes and extracting is destroying the processes.

01:13:02 Speaker 1

So if you stop that, if you become self sufficient you

01:13:06 Speaker 1

Also give space through the processes.

01:13:08 Speaker 2

But it, but also, yeah, and I.

01:13:10 Speaker 2

And yes, exactly how you say.

01:13:12 Speaker 2

But at the relationship part, like you, it's not an isolated building cannot be seen at.

01:13:17 Speaker 1

The no yeah and then you have

01:13:18 Speaker 1

Mentioned the, you're part of a.

01:13:21 Speaker 2

Yeah, and then yeah, and and.

01:13:27 Speaker 2

And I think a question that I'm using a lot is like

01:13:33 Speaker 2

What other Organism can I have an effect on.

01:13:38 Speaker 2

Like what other Organism can I help out.

01:13:42 Speaker 1

Because the ecosystems framework is very human or anthropocentric like human centered.

01:13:48 Speaker 1

Yeah, yeah, but you're you also let that go.

01:13:52 Speaker 1

You're like no.

01:13:54 Speaker 2

Yeah, so I yeah I just gave my talk yesterday and that was my whole point was like ecosystem services are seen as in service of man and it's not a different perspective and we are just one element

01:14:08 Speaker 2

On the whole piece, so that means that, uhm.

01:14:14 Speaker 2

I may.

01:14:17 Speaker 2

I can share a couple of slides that I have.

01:14:26 Speaker 2

Because like my whole theory in the whole thing, is that and.

01:14:35 Speaker 2

And I'm gonna.

01:14:36 Speaker 2

Let me.

01:14:38 Speaker 3

Can I share my screen.

01:14:48 Speaker 2

And I'm gonna go really fast.

01:14:51 Speaker 1

Yeah, yeah fine.

01:14:53 Speaker 2

Can you see it.

01:14:55 Speaker 2

So my whole conversation was around the other element and I was just trying to get people to understand like so.

01:15:02 Speaker 2

I just mentioned how we relate to nature, so I was just talking about I.

01:15:06 Speaker 2

I use all the ecosystem service in our relation to nature without talking about the ecosystem services.

01:15:12 Speaker 2

I just said this is the way that we relate to nature.

01:15:17 Speaker 2

And that.

01:15:19 Speaker 2

And then here I'm just talking about using Nature's model mentor and and then I'm talking about here.

01:15:27 Speaker 2

Like the other ecosystem services that we use and I just mentioned a couple and this and I'm saying here like we know we have related to nature in this way because we know that nature

01:15:39 Speaker 2

Has given us like resources, raw materials

01:15:42 Speaker 2

It helped in the air quality.

01:15:44 Speaker 2

That's something that everybody knows.

01:15:47

Can you.

01:15:48 Speaker 1

And what did you say within concerning the erosion slide.

01:15:55 Speaker 2

But that it help control erosion.

01:15:58 Speaker 2

Yeah, so so.

01:16:01 Speaker 2

Because these are all things that everybody knows that nature does.

01:16:04 Speaker 2

So I'm just saying the way that we have regulated so far and then I say these are.

01:16:10 Speaker 3

All you know.

01:16:10 Speaker 2

Part of the ecosystem services, but they are all in service of men.

01:16:15 Speaker 2

Oh yeah, uh, and it's saying, have you seen this image before of the pyramid.

01:16:24 Speaker 1

It's like a food chain, right.

01:16:27 Speaker 2

It this is Christopher Chase, he has so it's he uses the have the first one no no.

01:16:37 Speaker 2

So yeah so we have this one and then this is the other one.

01:16:41 Speaker 2

So he says this one is ego-logic and this one is eco-logic.

01:16:46 Speaker 2

I added, yeah.

01:16:48 Speaker 2

It doesn't have it.

01:16:49 Speaker 2

I added that one.

01:16:52 Speaker 1

So yes, because this shows us as part of.

01:16:56 Speaker 2

Yeah, yeah, so this this shows us like these are all and this is the same.

01:17:02 Speaker 2

You know mindset man on top and everybody else on the bottom.

01:17:07 Speaker 2

And what I'm saying is.

01:17:10 Speaker 2

We cannot see each other this way because we also play a role

01:17:14 Speaker 2

In the system, so we

01:17:15 Speaker 2

Are contributing... This is a nest.

01:17:18 Speaker 2

So we are contributors of raw materials for other species, so that's it.

01:17:23 Speaker 2

This is what I'm saying.

01:17:23 Speaker 2

We contributed raw materials to these species and this is what they build.

01:17:28 Speaker 2

You know we play a role.

01:17:30 Speaker 1

Oh yeah.

01:17:32 Speaker 2

We play a role in water quality.

01:17:35 Speaker 2

We play a role in climate regulation and we are not the only ones affected by extreme events.

01:17:42 Speaker 1

So do you think that we that the ecosystem services framework needs to be adjusted or just our perspective on it, just.

01:17:52 Speaker 1

Look at the framework through the lens of we are part of the system and then interpret the framework differently.

01:18:00 Speaker 2

Yeah, and I don't I do

01:18:03 Speaker 2

Have enough ecological knowledge to know if it should change, but I know that it should.

01:18:09 Speaker 2

The lens by with which we see it needs.

01:18:14 Speaker 2

Yes I I I see it differently so.

01:18:17 Speaker 1

OK, then I would say.

01:18:18 Speaker 1

Yeah, from my like ecological background, I would say the the framework is nice and just the lens needs to change, yeah.

01:18:27 Speaker 2

OK.

01:18:28 Speaker 2

OK, good to know, thank you.

01:18:30 Speaker 1

Yeah, exactly, your last slides like the moderation of extreme events,

01:18:35 Speaker 1

And that that does apply also through a dog.

01:18:38 Speaker 1

And that's like a services that also a dog

01:18:42 Speaker 1

undergoes and the nest building, indeed that we provide raw materials and then the framework is still the same and just our lens is different and I would say,

01:18:55 Speaker 1

That's my point of view, I would agree.

01:18:57 Speaker 1

With that, yeah.

01:18:59 Speaker 2

Yeah, so so this is what I'm saying.

01:19:01 Speaker 2

We are all part of this whole system.

01:19:05 Speaker 2

That has to do with the ecosystem services so so.

01:19:12 Speaker 2

So I come back to my initial conversation with you and this is the thing it's like OK.

01:19:18 Speaker 2

If we establish that our design.

01:19:21 Speaker 2

Uh may have an effect on, you know, the quality of

01:19:25 Speaker 1

Oh yeah.

01:19:29 Speaker 2

Uhm, is that an entry point.

01:19:32 Speaker 2

To help the quality of air for any of these species, or maybe we have an effect on this, but then I find it that it's very easy to create conditions for colonization because I'm looking at the whole system and I'm not looking at the whole.

01:19:48 Speaker 2

You know at one isolated thing.

01:19:51 Speaker 1

I think that's that's why you need to say a building is part is connected to all the other buildings and everything else and not isolated.

01:20:00 Speaker 1

Yeah, correct.

01:20:02 Speaker 2

Yeah, yeah.

01:20:04 Speaker 2

Yeah, and then.

01:20:06 Speaker 2

And so then that and then the way that I use it, the simple question is.

01:20:13 Speaker 2

What other species can my design have a positive effect on.

01:20:19 Speaker 2

Who can I help out.

01:20:21 Speaker 2

Who can I contribute to.

01:20:25 Speaker 2

And then, uhm.

01:20:28 Speaker 2

And it may be simple stuff you know, like I had.

01:20:32 Speaker 2

I had another you know.

01:20:34 Speaker 2

For example birds have like if we take away trees, birds need to build nests somewhere.

01:20:40 Speaker 2

Can I create conditions for that.

01:20:42 Speaker 2

Make it easy for birds to make their nest on a building.

01:20:48 Speaker 2

And I'm just saying a very little example.

01:20:50 Speaker 3

But it's like.

01:20:51 Speaker 2

Can I do it, uhm.

01:20:54 Speaker 2

Can I I if if I have a car.

01:20:59 Speaker 2

And the car.

01:21:00 Speaker 2

It's some,

01:21:00 Speaker 2

It's something that moves

01:21:02 Speaker 2

Through different spaces.

01:21:07 Speaker 2

I don't know.

01:21:07 Speaker 2

What is there a resource that needs to be

01:21:10 Speaker 2

Moved from one point to another and can the

01:21:12 Speaker 2

Car contribute to that.

01:21:15 Speaker 1

Well, yeah, do you think that the perspective of the Biomimicry 3.8 institute is ecocentric or anthropocentric. Like creating conditions conducive to life, Is that human conditions or human life or.

01:21:30 Speaker 2

I think that the 3.8 perspective is

01:21:36 Speaker 2

Ecocentric in its roots.

01:21:40 Speaker 2

I think that in the practice

01:21:47 Speaker 2

It's still far

01:21:48 Speaker 2

From it, it tends to be attributes.

01:21:51 Speaker 1

Yeah, so the yeah the it's eco centric in its roots but we're so used to working anthropocentric, that we sort of automatically start

01:22:01 Speaker 1

Sort of doing that.

01:22:02 Speaker 2

And it's because

01:22:06 Speaker 2

You know, that's why I want to integrate the other elements in a very visible way in the framework because.

01:22:17 Speaker 2

It's not like.

01:22:19 Speaker 2

Yes, if we create a design that it's.

01:22:23 Speaker 2

Closer to the way that nature designs, then it's going to be more efficient than in a way we are contributing to the environment, right.

01:22:37 Speaker 2

We could do more.

01:22:41 Speaker 2

So, so it's it's so it to me it's like we generate bio mimicry.

01:22:48 Speaker 2

Like we need regenerative biometric, not only biomimicry, and then there's a.

01:22:52 Speaker 2

There's a guy, Victor.

01:22:55 Speaker 2

Do you know this guy, Victor, yes.

01:22:57 Speaker 1

There are many Victors.

01:23:02 Speaker 2

You know many Victors in your life.

01:23:04 Speaker 2

Uh, I I saw.

01:23:07 Speaker 2

A talk and I've been meaning to.

01:23:10 Speaker 2

Reach out to him because he's something I think he's from the Netherlands.

01:23:15 Speaker 3

Uhm, and I think his name is like Victor Block or something like that.

01:23:21 Speaker 1

It's a very Dutch name.

01:23:23 Speaker 2

That is...

01:23:26 Speaker 2

And and he has a

01:23:29 Speaker 2

Research article

01:23:35 Speaker 2

On the theory of bio mimicry being anthropocentric

01:23:38 Speaker 2

Versus or like not like that, but.

01:23:44 Speaker 1

May I give you my perspective on that.

01:23:48 Speaker 1

Sometimes I think like, uh.

01:23:53 Speaker 1

Say we're copying.

01:23:57 Speaker 1

I'm just gonna rattle we're copying the shapes.

01:24:01 Speaker 1

Are mimicking the shapes of nature instead of its processes, and sometimes I think to reach regeneratively because we in our conversation we mentioned processes, processes, processes that to become regenerative

01:24:15 Speaker 1

If you start mimicking the processes

01:24:18 Speaker 1

You would you would become get closer to regenerative practices than only mimicking shapes.

01:24:26 Speaker 2

I I think you make a really good point and for example bio mimics like me that have been like for a long time in bio mimicry, we've been taught that we can mimic

01:24:39 Speaker 2

Forms profit or systems.

01:24:45 Speaker 2

Commercially bio mimicry is known for forms.

01:24:48 Speaker 1

Yeah, it's a it's only.

01:24:51 Speaker 2

So yeah, so that's why I say the root yes, because the way that that we are being taught and the way that we have been thaught.

01:24:58 Speaker 2

You know it has to do with processing systems too and form is like the shallow level of application of bio

01:25:06 Speaker 2

Mimicry, but that is what

01:25:08 Speaker 2

How it's commercially.

01:25:10 Speaker 1

Yeah, and that's what I

01:25:11 Speaker 1

That is what I learned that I've been taught in my during my masters, and I was like

01:25:19 Speaker 1

Does this work.

01:25:20 Speaker 1

No, I don't think so.

01:25:22 Speaker 1

So I just wanted to have your reflection on it.

01:25:27 Speaker 2

Yeah so.

01:25:28 Speaker 1

So in the so in the basics they do say could be also process and and system, but it's just not commercialized.

01:25:35 Speaker 1

OK yeah yeah.

01:25:36 Speaker 2

Because process and system is harder to do

01:25:40 Speaker 1

Yeah, yes.

01:25:41 Speaker 2

We're trying to do more like for example, uh, from the the cement concrete, but it's made that it's mimicking the way that coral reefs like.

01:25:56 Speaker 2

There's a couple of examples of processes, processes, and.

01:26:01 Speaker 2

And even like the vaccines inspired by the target grad or stuff like that, they are like process base emulations, UM.

01:26:11 Speaker 2

That's the second

01:26:12 Speaker 2

Level we have to go, you know system level, yeah.

01:26:16 Speaker 3

Uhm, and I'm trying to find I want.

01:26:21 Speaker 2

I think it would be interesting.

01:26:24 Speaker 3

For you to

01:26:24 Speaker 3

Reat that other article.

01:26:26 Speaker 2

If I if I find it I well I.

01:26:28 Speaker 2

Haven't been able to.

01:26:29 Speaker 2

Yeah, I'll send.

01:26:30 Speaker 1

It oh, I want to inform you that.

01:26:32 Speaker 1

I I I ask you all the questions I wanted to, I gained all the information I needed or wanted so I asked all the questions

01:26:41 Speaker 1

I have prepared.

01:26:45 Speaker 1

Do you.

01:26:45 Speaker 1

Was there something during the conversation

01:26:47 Speaker 1

You were like

01:26:48 Speaker 1

Oh, I still want to tell you this.

01:26:55 Speaker 2

No, I think that I I

01:26:56 Speaker 2

Like that you're doing this.

01:26:57 Speaker 2

Project I love them.

01:26:59 Speaker 2

You know, so my only thing would be I.

01:27:04 Speaker 2

I would love to know more if you go on like learn more and and.

01:27:08 Speaker 2

And I can't thank you guys and I've talked to concerning about it and when I when I have my questions I can share them with.

01:27:15 Speaker 2

You guys.

01:27:16 Speaker 2

Well, we can play around with that a bit.

01:27:23 Speaker 2

I would say.

01:27:28 Speaker 2

Trying and use

01:27:32 Speaker 2

Bio mimicry or the life principles in the design of the questions, not as a

01:27:40 Speaker 2

Not as

01:27:41 Speaker 2

A theory, in a way, but as a practice.

01:27:45 Speaker 2

In the way that.

01:27:56 Speaker 2

Like try to see like if you take a life principle and see how that principle can play out

01:28:03 Speaker 2

Into the questions.

01:28:05 Speaker 2

In a way.

01:28:06 Speaker 2

Umso, for example, adapt to changing conditions.

01:28:11 Speaker 2

Uhm, so yes, you can talk about adapting to changing conditions in your questions, but but it's more about.

01:28:19 Speaker 2

What we talked about OK.

01:28:22 Speaker 2

How can I make my

01:28:25 Speaker 2

My questions adapt to changing conditions.

01:28:28 Speaker 2

Is it easy to design my questions and that's when we go to depending on what part of the process

01:28:36 Speaker 2

This question is work and this question is done so.

01:28:41 Speaker 2

And I'm putting on another completely whole different level to your questions, but I'm just saying like.

01:28:47 Speaker 1

Hit hit me with.

01:28:48 Speaker 2

It like see if your questions can be designed or your whole thing can be designed in a way that adapts to the different conditions.

01:29:01 Speaker 1

So it's not a.

01:29:05 Speaker 1

Do the questions embody the life principles.

01:29:09 Speaker 1

Not saying you should integrate life principles, but do they by themselves

01:29:16 Speaker 1

Already fulfill the life principles.

01:29:18 Speaker 2

Yes, that I'm telling you that because that sort of

01:29:25 Speaker 2

Adds a little bit extra to the questions and sort of helps out in a way

01:29:35 Speaker 2

To make them work out.

01:29:38 Speaker 1

I'm here, I will give this my thoughts.

01:29:42 Speaker 1

What I will yeah

01:29:45 Speaker 1

Reflect on this.

01:29:46 Speaker 2

Yeah, even and and maybe not like there's some that definitely don't work, but you know some may help

01:29:55 Speaker 2

Guide a little bit of the design, UM.

01:29:59 Speaker 2

What else, uhm, no.

01:30:02 Speaker 2

I love your project.

01:30:03 Speaker 2

I think it's great.

01:30:04 Speaker 2

Uhm, you're doing a great job.

01:30:06 Speaker 1

Thank you, thank you.

01:30:08 Speaker 2

And I don't know any in your list do

01:30:10 Speaker 2

You have a guy named Jamie Miller.

01:30:14 Speaker 2

He's not.

01:30:17 Speaker 1

Well, James, sorry the Internet connection.

01:30:24 Speaker 2

He is a bio mimic.

01:30:31 Speaker 2

And I would also suggest so there's this guy, he he.

01:30:35 Speaker 2

He's part of my cohort.

01:30:37 Speaker 2

He's called his name is Shahram Nadadur.

01:30:42 Speaker 3

I'm gonna write them here on the chat me.

01:30:47 Speaker 2

Well, he

01:30:50 Speaker 2

Business person.

01:30:53 Speaker 2

But he is a biomimicry.

01:30:56 Speaker 2

And he's a in his words like A-wanna-be architect.

01:31:06 Speaker 2

So my suggestion, so he

01:31:09 Speaker 2

Would be

01:31:13 Speaker 2

A client.

01:31:18 Speaker 2

So he will be.

01:31:20 Speaker 2

So he would demand his architect to design using the ecosystem services.

01:31:28 Speaker 2

So he brings in a different perspective of how those can be approached.

01:31:36 Speaker 1

Yeah Oh yeah.

01:31:38 Speaker 2

Because he's the client.

01:31:41 Speaker 2

So he's not the architect, and he already signed.

01:31:45 Speaker 2

So Jamie worked with him in the design of that of his house.

01:31:49 Speaker 2

It's it's not in construction yet.

01:31:52 Speaker 3

But uhm.

01:31:55 Speaker 2

So for example, they say that's it they have.

01:32:00 Speaker 2

Like gardens all over the house and they set it up in a way that the roots of the plants throughout the whole house connect.

01:32:13

The roots.

01:32:17 Speaker 2

OK, because you know to promote mycelium networks so they did not do isolated pots.

01:32:25 Speaker 2

You know, but yeah, it's a whole connected system.

01:32:29 Speaker 2

It's a completely different way of designing with that very simple act.

01:32:34 Speaker 2

That's what I mean of creating the conditions for nature

01:32:37 Speaker 3

To do its work.

01:32:39 Speaker 1

Great, I will look into them.

01:32:42 Speaker 1

Thank you.

01:32:42 Speaker 1

This is really nice.

01:32:44 Speaker 1

Also the person with the different like from a different perspective

01:32:47 Speaker 1

Of course that's also always which you need.

01:32:51 Speaker 1

Ah, thank you a lot.

01:32:53 Speaker 1

I gained so much information I was looking for her and just this this being able to discuss with someone who both knows about architecture and bio mimicry

01:33:04 Speaker 1

And ecosystem services.

01:33:06 Speaker 1

It was lovely.

01:33:07 Speaker 1

Thank you.

01:33:08 Speaker 1

I would suggest if you want to brainstorm about your questions just email me or Katharina and we can do like the same sort of thing, but the.

01:33:17 Speaker 1

Other way around.

01:33:18 Speaker 2

OK great, great thank you.

01:33:21 Speaker 1

Yeah, with our more like ecological backgrounds.

01:33:24 Speaker 2

OK, that's great.

01:33:25 Speaker 2

Yes, thank you.

01:33:26 Speaker 1

Help yeah yeah yeah.

01:33:31 Speaker 1

Yeah, thank you.

01:33:32 Speaker 1

I would say we keep in touch.

01:33:34 Speaker 1

I will send you.

01:33:36 Speaker 1

Would you like me to send my my report if it's.

01:33:40 Speaker 2

Finished yeah here yeah.

01:33:43 Speaker 1

Yeah, I will do that and then then.

01:33:47 Speaker 1

Just say thank you.

01:33:51 Speaker 2

Thank you.

01:33:52 Speaker 2

Good luck with your interview.

01:33:55 Speaker 1

Yes, yes.

01:33:57 Speaker 1

If they are getting better.

01:34:00 Speaker 1

I had to learn how to do it.

01:34:03 Speaker 1

But it's, uh, I'm getting more.

01:34:06 Speaker 1

Out of it now, so that's cool.

01:34:09 Speaker 1

Thank you thanks bye bye bye.

01:34:12 Speaker 1

Bye, have a nice day.

01:34:13 Speaker 3

Hey you too bye bye bye.

01:34:14 Speaker 2

Bye.