Case study: Restaurant Moment

Introduction

Restaurant Moment is a new sustainable restaurant in Denmark. Anne Fox interviewed the owner, Morten Storm Overgaard, to find out some of the thinking behind it. The full interview can be found at XXX. This case study focuses on Morten Storm Overgaard's description of the concept behind the restaurant. Hear this extract of the interview here:

Interview transcript

AF: Okay so can you tell us what the concept is behind the restaurant because there are many restaurants in Aarhus and the area around Aarhus. What's special about this one?

MSO: This one is probably different from all other restaurants. It's not just a restaurant. The attempt is to take this concept of sustainability and take it to the edge, you can say or bring it to its maximum in different directions. So the building that the restaurant is situated in is a building that is trying to demonstrate different new, relatively simple sustainable building techniques.

Figure 1 Building a straw bale house

So the walls have been made from prefabricated straw bale elements with clay on the inside and chalk on the outside so the walls can be composted in the garden. And because we try not just to do stuff but also to test out and do research on what we do, we have shown, together with Aalborg university, that the strength of these walls are such that they can in fact replace concrete elements so you can make very tall buildings this way.

There's a heating system which is a kind of development from the Finnish mass oven [masonry stove] with a burning temperature of one thousand degrees. Uh there is no chimney in the system but instead of that there is like a pipe underneath the floor that ends up in a smoke cleaner and the idea is that we try to uh emit pure CO2. And hold back all particles. And then in principle you could build a greenhouse at the end of your floor chimney and use the CO2 and the held back particles, that essentially have the same characteristics as fertilizer, so we can water the garden with what would otherwise have been air pollution.

Figure 2 A masonry stove

And perhaps the most innovative element of the building, at least in my own mind, is the greenhouse that is placed next to the building. So all waste water from the building, from the toilets, from the kitchen ends up in a closed container underneath the greenhouse so the plants only live from that. Uh so we've shown in a prior project that the waste water of one person completely waters and fertilises five hundred kilos of produce per year, without you having to do anything. So in this way it not only saves time and money but also there can be no fertilizer leaking out in the environment and even in organic farming you cannot do that. If you speak to biologists they can tell you that this is a highly hygienic system because uhm you never fertilise on top of the soil. You never put fertiliser on top of the soil as you do in typical farming so that means there is no way of contaminating the plant.

Figure 3 The greenhouse by the restaurant

AF: So how does the water get from underneath this building into the greenhouse?

MSO: Very much like you would have done if you had made like a classical, I don't know the English word for this I'm sorry but typically when you have a house in the country you are not connected to some, you have a septic tank yeah yeah it could have been a septic tank. But instead of the septic tank there is this closed container with plants growing in them And actually this system already exists but never with vegetables meant for eating and already you know typically it is willow trees or something that you plant in these things. This is very much the same logic behind it The idea is just instead of having waste, because it's not actually waste water in our minds, it's just a new resource. It's just a matter of figuring out how to use the stuff. So that's the idea. The underlying idea in the building is to try to, to protest against the concept of garbage and say there is no such thing as garbage, there is only stuff you don't know where to put. When you know exactly where to put it, how to put it back into the system then there is no waste, there is no garbage there are just resources.

AF: So have you achieved zero waste?

MSO: No we haven't we haven't. Uh but I think we are on that track and like any research project, you know you simply just have to start somewhere and think that you continue to improve based on the experiences that you make. So I mean it's easy to criticize us or anyone else for not being perfect. But that's not, I think a reasonable or even interesting kind of criticism. The point is just, is not I think where you are but where you are set to, the direction that you are headed. Um so yeah so these are, these are some of the primary elements of the building. Uh we use more or less no energy in heating. Our heating budget for the last winter season was less than three hundred Danish kroner and you can convert that in other currencies which is pretty good in Denmark that tends to be cold so we make very little fertiliser That's the drawback! So we showed with the institute of Bioscience at Aarhus University that these plants are completely free of any contamination which we knew already but now we have shown it. And we try to reach out with these technologies. So the princess of Jordan visited us with her staff and they now consider to use this technology in the formation of Jordan when for growing in the gardening systems and such because you save a lot of water. You use the same water twice. You use it in the kitchen and and watering the plants.

Transcribed at https://speech-to-text-demo.mybluemix.net/

Possible exercises

- Ask students to depict the system described in this interview. They can make hand drawings or use a tool such as LOOPY.

- Ask students to arrange their own interviews with similar organisations that are working towards sustainability.

How else could you use this case study?