

Change the Model

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Abstract

Dan Hill is Director of Strategic Design at Vinnova, the Swedish government's innovation agency. He has previously held design leadership roles at Arup Digital Studio, Future Cities Catapult, Fabrica, Sitra, and the BBC.

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Stuart Candy: How do you see your work in relation to design and futures?

Dan Hill: All design work is by definition to do with the future. In terms of the types of design that I do, there's three sort of ambits of design, and I imagine it like the futures cone, but... without the futures cone!

So in the pointy end there is interaction design, which is the touchpoint. How do I unlock a MoBike? Hold a phone over a QR code. (Figure 1)

Service design broadens that out slightly. That's the business model, how it operates, who maintains it, how the transaction works; do I pay by credit card or through Apple Pay; does the Apple Pay API talk to MoBike API? It's all to do with arranging touchpoints. It's still in the *matter* world a bit more, as there's physical things, it's just orchestrating those into something that feels coherent, ideally.

And then going a bit further again is strategic design, which is when we get more *dark matter-y*: What conditions do we need to put in place for that to thrive? Can we legally do this thing in this country? How does it relate to other services you might use in the city? That needs to be organised, or thought about at least.

So you've got interaction design, service design, strategic design, up and down this scale.

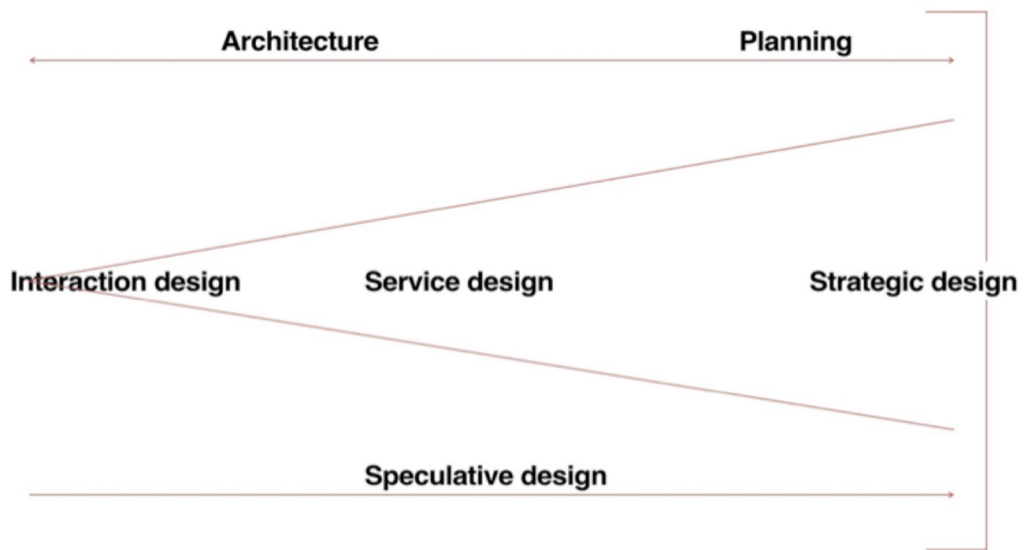


Figure 1. Scales of design. Diagram by Dan Hill

And then I think of speculative design, if we were to use that phrase, it's a time slider. So we could look at interaction design, if we're doing MoBike, and it's for right now, or maybe next year. But we could do a speculative design / interaction design piece about what's it going to be in five years' time. Maybe I'm paying with my glasses, or unlocking it with my shoes! But it's still about the touchpoint. We can do speculation about the service design layer and speculation about the strategic design layer — so, let's ratchet up the speculative design dial.

SC: So what's broadening out, if it's a cone diagram of something widening?

DH: It's trying to take into account both *matter* and *dark matter*. The dark matter being the organisational model, the legal model, or the political situation.

SC: It's more of the world.

DH: Yeah, that's maybe the simplest way of saying it. And the reason that's important to me is because working in cities, you're trying to make systems, and systems that change systems, one way or another. I don't think you do that at the interaction design scale stage much. You're just concentrating on the latency of the QR code reader and is that going to be fast enough communicating with the bike hardware. Those are really material concerns. Whereas the strategic design layer is really the systemic change possibility.

One thing I would say about this, almost the unspoken thing in the world of government policy: It *depends what you do*, and that is an active choice. So when people say, tell us what the train station concourse is going to be like in the future, I say, it depends what you do. So if we design it *without* gates, there won't be gates, and it'll look like this. We design it *with* gates, it'll look like this. But they're looking for some kind of implicit answer. There is no implicit answer; it depends what you do.

SC: Right.

DH: With some foresight work, one produces a series of scenarios, and we're trying to pick the most likely or something, and I'm saying, *intent* matters hugely here, and if you're a policymaker, *you're in charge*. But the policymakers I often work with in government, they've been so battered into a position of not having agency, or not believing they have agency, that — for instance, transport is a good example — they'll just kind of go with some sort of abstract model. "Well, we fed these numbers into the model that we've been using since the mid '90s, and it shows a marginal increase in cycling with a steady increase in car use."

There wouldn't be, if you changed the policy. Then the model would change. But they're using the model to drive the policy, as opposed to saying, "What do we want to happen in the first place?"

SC: It's a disavowal of their capacity to design strategically.

DH: Their entire *raison d'être*. Because ultimately, if you follow that line of logic, then you just say, well, we'll just have some super smart model at some point. We can feed some assumptions into that, and then crank the handle, and some policy will pop out. If it was that simple then we wouldn't need policymakers. So you're kind of arguing yourself out of existing at some point... which is possibly what some are thinking!

I was working with a guy the other day from the infrastructure department. He represented this one mode of discourse, few other ways of thinking, or imagining, or visualising, or whatever. I was talking about road use and cities, and how we could shift the way that's happening. And he just said, "Well, all of the economic models we use show that road use is always central to the way the economy works." I said "Change the model. Can you change the model?" Of course you can change the model — it's a model. Feed in some different data, or tweak the algorithm, to increase bike use and and decrease car use. Then you'll have a model that shows *decreased car use*.

Design is about making something happen, one way or another. You have to take it with a huge amount of humility, because I can say there *ought to be* this level of bike use, and put these schemes in place, but I don't really know how that would play out. So I suggest, well, make things adaptive, malleable, and stay in the project, learning, and pivot accordingly, and work your way through it.

That's not policy as a "predict, fire and forget" thing; it's an ongoing process. That'd be my actual answer to how you'd design for the future: make it adaptable, and keep adapting it from real-world interactions. But one can still have an intent, a direction, a trajectory — ideally, a positive outcome. It's amazing how infrequent that thought is, particularly in this world of the strategic design layer, which concerns the much harder policy objectives and systems change.

SC: Let's grant your observation, kind of a Herbert Simon-type observation, and something that a lot of designers intuit if not espouse explicitly, that what they're doing is future-making, no matter what or at what scale they're designing. If all design is future-making, but some cases are further future-making than others, what do you do differently when you're working in a more speculative or longer-range mode? I realise you have a sort of magpie's grab bag of tools; things that you've developed yourself, things that you've picked up from mentors, and developed on projects...

DH: As you say, magpie-like is a good way of thinking about it, because we're trying to find the right tool for the right question. If the question is mobility, and I'm a car guy, the answer looks like a car. But the question is mobility, not necessarily cars at all, so let's just open up to a full range of possibilities, including people moving less, or moving more slowly.

Let's look at how's it's actually going to work, in a low-carbon, sustainable, safe, zero road deaths, accessible, and healthy kind of way. If we plug all of those in as outcomes, I reckon it's probably going to involve things moving less, and people slowing down.

But I can't start with that, with the government in the room, because that's not seen as acceptable politically. I think the Overton Window concept is quite a useful one; what's politically acceptable at any one time. The window can move, and I'm trying to find ways of moving the window.

SC: How and when do you use experiential scenarios or design fiction mockups to address the Overton Window challenge?

DH: Well, we use them all the time. We're using them to flesh things out, to ask unspoken questions, to flush out assumptions. (Figure 2) We're also trying to get people motivated, frankly. Then we can say, "In that film, three people get into one vehicle, instead of three people getting into three vehicles; that's better for the city, isn't it?"

I'm trying to get them interested in those things, rather than the status quo. I'm gently pushing people beyond the bounds of what they're actually comfortable with, quite often, because I'm working with, let's say, a bunch of urban planners and the City Council, who are looking at models from yesterday around things like car use and ownership, or mobility generally, or the way that people live in houses, or energy, or whatever it might be.

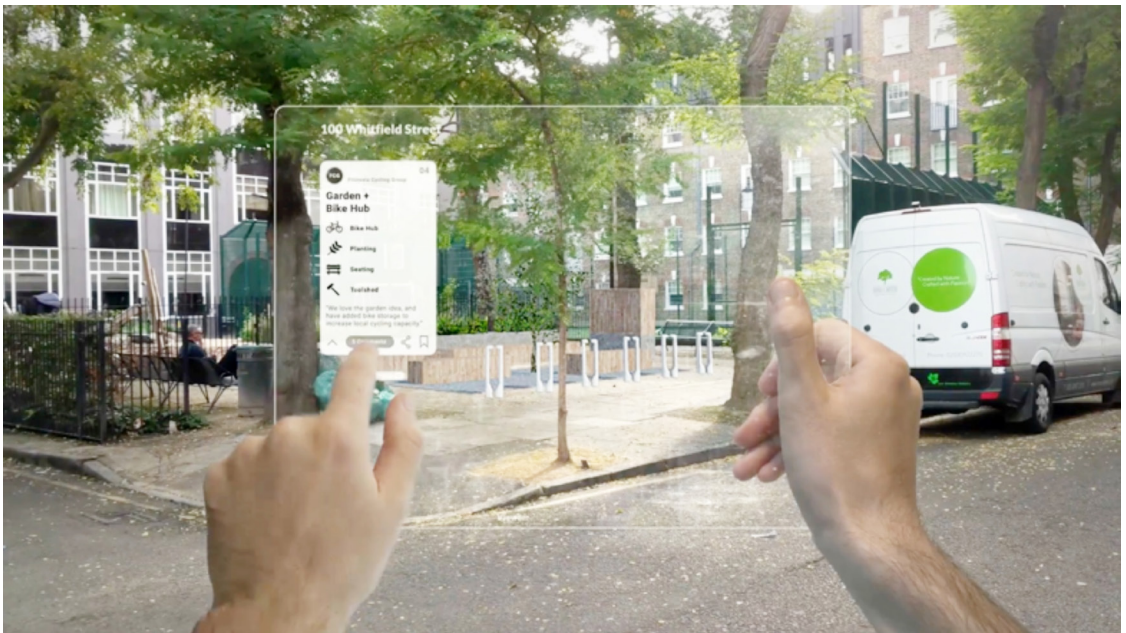


Figure 2. Still from a 'sketch video prototype' for planning notice using an augmented reality (AR) interface, by Arup Digital Studio with Ericsson (2018)

So god knows what percent, 75 percent, of the ideas in the average drawing from me and my team are probably not going to happen. And that's hard to take. Because almost all of those things would lead to beneficial outcomes, to reference Simon again. But again, the humility says, even with the most convincing person in the world, it's not going to happen just like that. But if we can get 25 percent of them over the line, then fantastic. And if they're generative enough, then we can learn, go back and develop them. (Figure 3)

SC: Even if you accept the 75 percent failure rate as the cost of getting the 25 percent through, if you're playing the long game, you're seeding stuff for later, because it habituates them to seeing it. "Dan Hill actually presented that to us ten years ago, maybe it's time to give it a shot."

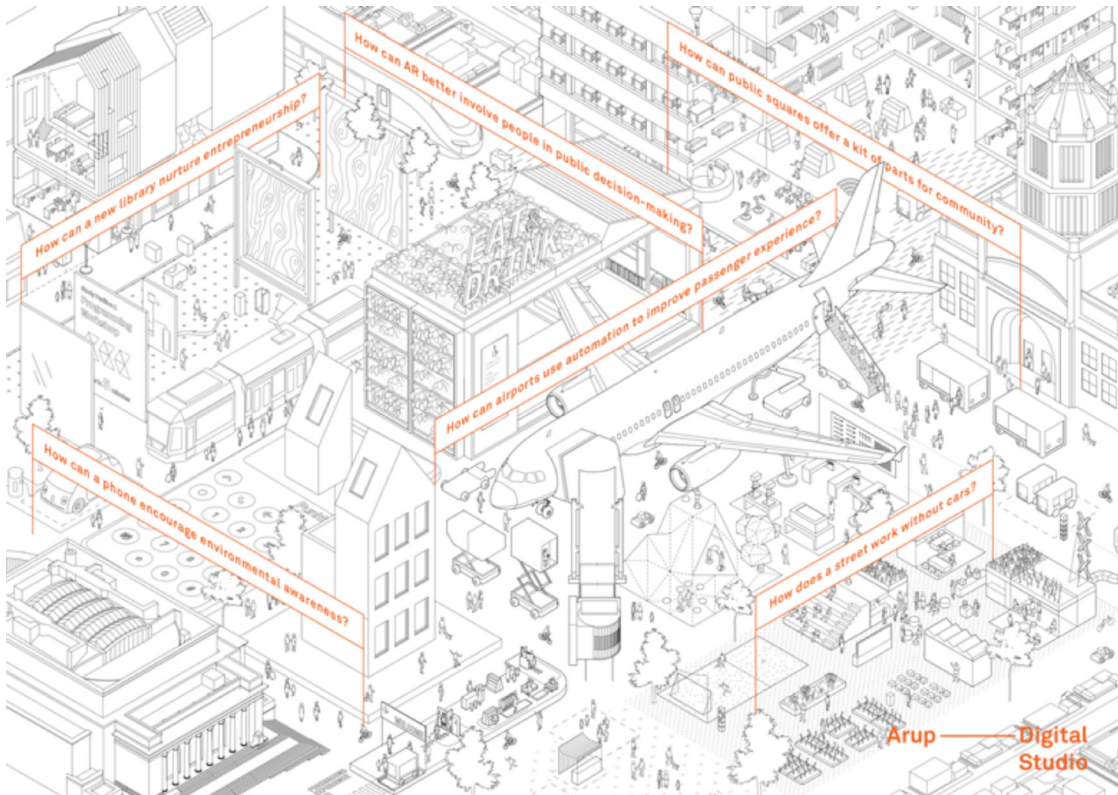


Figure 3. Asking questions with design. Drawing: Dan Hill / Arup Digital Studio

DH: Oh, a ton of what I do, actually, is less to do with specifically giving them a design solution that happens right now, and might just be changing their attitude, with a long, slow release of some kind. It's more generative that way, and they're driving it. It's not what I'm *intending* to do, necessarily – I would like to make the train station without the gates, because I think it would be a great space! – but it's kind of a drip release. And it's very hard to trace the effect of the work.

SC: This evaluation thing is a real challenge.

DH: Traceability, exactly. I was looking at what we did in Helsinki around the street food stuff. We made this Open Kitchen project on the back of the citizen-organized, *Ravintolapäivä* thing. I have this slide now with five or six different actual tangible outcomes, in law or policy or organisation change. And then just like a really awkward, wiggly line in between them! Because there's no way that I can say Open Kitchen did *that*, and Ravintolapäivä did *that*. But it definitely did have some effect, and you can sort of trace it a bit, but I know that those things don't happen without those things. But yeah, I cannot draw a straight line, which is usually what the world tries to make you do as a designer, or any kind of pseudo-professional.

SC: Right. It created an environment in which this later became possible.

DH: Exactly, and this is why I use this “dark matter” analogy, because it is kind of loose enough. It’s all about creating the conditions for things to happen.

SC: Is “drip feed” a strategic design vocabulary entry?¹ It should be!

DH: We have this sort of idea of something like a slow release, like a slow release drug in a system, but even that is a little bit too direct, because it’s going into culture, which is far more complex.

Maybe that’s also why, as you said, my practice, for want of a better word, is magpie-like, because I’m trying different things. And so for someone, I might think it’s a movie that will do the job; someone else it might be a conversation; something else it might be an event, or for something else we need to make a newspaper. And then there are books and writing, and I enjoy making all of those things as well, as craft. But there’s a constant searching and trying to figure out: what is the thing for this thing, that will trigger a response?

SC: I really like your idea of your design function as a kind of general practitioner and a first port of call, and you can refer clients on to the specialists as and when that’s appropriate, rather than starting with “what you need is a building”.

DH: Absolutely, you can’t start with a specialism. A hammer only sees nails.

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Notes

1. Hill, D. (2012). *Dark matter and Trojan horses: A strategic design vocabulary*. Moscow: Strelka Press.

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