

The End of Design As We Know It

It's foolhardy to predict more than a few years into the future. Much unforeseen can happen between then and now. That being said, in 30 years, give or take 10 years, the discipline of design as it's practiced today will be over. This isn't anything new for design—it's practiced very differently now than it was 30 years ago, or 30 years before that, and so on, stretching back decades, perhaps centuries. This also won't be unique for design, as many fields of work will be utterly transformed in 30 years' time. These changes will be drastic and design will never be the same afterwards.

The canary in the coal mine is Autodesk's Project Dreamcatcher. Introduced by CEO Carl Bass at this year's Solid conference, Dreamcatcher appears to work like this: Industrial designers put together inspiration in the form of exemplars and combine them with requirements and constraints, then feed them all into Dreamcatcher. An algorithm then processes this information and spits out many possible designs. Designers can either start over with new or tweaked criteria, or continue by selecting a design to refine. It's no stretch of the imagination to see this being done for digital objects as well. In fact, it might well be an easier task for digital design than for physical objects.

So if you wanted, say, a new mobile app, you'd feed in similar mobile apps, maybe some type and color palettes, and describe what the app is supposed to do ("Send a drone to a selected location to pick up a package and deliver it to another location."). Moments later, you'd have dozens of app designs you could choose from. You like the structure of one of them, but the color palette of another. You select and combine them, and the algorithm presents you with another set of options to choose from. One of them looks great, and there you have it: a new app. And, oh, did I mention that the code will be ready in a few minutes, written by another algorithm once the API licenses are negotiated with another algorithm?

To many people this is a bleak, grim, oh-shit-there-goes-my-job, future.

Which is understandable, because for many people this probably will be the end of their job *unless they future-proof themselves*. **You future-proof yourself by ensuring that the kind of work you do cannot be easily replicated by an algorithm.** In design, those skills are insights-gathering, problem framing, and crafting unconventional solutions.

One thing algorithms will probably suck at is being able to read context. It won't know what's good for your organization. It won't know what's tried and failed in the past. It won't know that users have hated your previous solution. There are hundreds of nuanced, human variables that a human will have to weigh when providing input to the algorithm. And then use to judge the potential outcomes. It's a guarantee that many of the "solutions" an algorithm comes up will likely be awful. (At least at first. Probably by watching what gets selected, its "taste" will improve. One can also imagine algorithms being coded with the taste of Dieter Rams...) At first'll be up to the designer to select and refine any suggested solution to make it fit the context.

In order to provide the algorithm the right information to suggest solutions, you have to be certain you're solving the right problem. Knowing the context, and being able to determine what the *true* problem is to solve (and not just fixing a symptom) is a key part of the designer's role (as it is now). Fortunately, the current present abounds with great examples of startups solving non-problems for us to learn from.

Lastly, the way all progress moves forward is by someone thinking differently, trying something that no one else has tried, breaking the established traditions and rules. This is the same in design as in any other field. I don't see algorithms, as rule-based entities, doing this very well. Sure, they can replicate the style of established artists, but deliberately coming up with new styles will likely be challenging.

One final prediction: the hand-made, the bespoke, the unique and irreplaceable will become more valuable and more cherished. What cannot be mass-produced will be viewed as precious. If you can make something by hand, that will only become more desirable in the years to come.

So what should you do? For many practicing designers now, this wave will hit us at or near the end of our careers. By then, hopefully you will have built up a style and taste and skills (such as design management) that will be hard to replace or replicate. But never stop learning either; adaptation will be the key to survival. For new designers starting out, work on both your soft skills

(understanding context, problem definition) and the hard skills (making new ways of solving problems). The more you can experiment, take risks, and do the unexpected, the better off you'll be. **Find your secret sauce.**

Remember too, that design isn't just about problem solving; it's about creating a more humane future. Solving problems is what computers have been about since their creation. But deliberately making a future we want to live in is a human struggle, one that I hope designers continue to participate in. Designing the algorithms that help design our world will be part of what we do. If we don't design human values into the things we create, we'll find ourselves in a world that is alien to us. We need to continue to invent the kind of future we want to live in. Algorithms can't do this alone.

As Alfred North Whitehead told us, it's the business of the future to be dangerous. Seldom has it seemed more so. I wish us all more than luck.



Dan Saffer

