Animism in Design: Creating an Internet of (Quirky) Things

Have you ever had an inkling that your laptop was having a ditzy day? Or perhaps you’ve found yourself speaking in dulcet tones to a smartphone having a particularly tough OS update? Come on, you say softly. Everything’s backed up. Just 300mbps to go. You’re going to be OK.

The ‘AniThings’ diagram

Of course, we understand that our phones are not sentient. They don’t throw srops, however much it might feel that way. They malfunction. When we close the lid of a laptop it isn’t sleeping a dreamful sleep of fluffy white cloud data or electric sheep. Standby is not tech purgatory. It seems that humans have a tendency to use human characteristics as a short-hand for a perceived behaviour or as a substitute for fundamental technological understanding.

“Devices whose computational capabilities exceed human comprehension have become our trusted companions, and yet we hardly know how they work.” Betti Marenko

After all, we’re not all computer scientists and technical engineers, however interested or tech-savvy we happen to be. As Betti Marenko, Professor and Research Leader at Central Saint Martins in London points out “Devices whose
computational capabilities exceed human comprehension have become our trusted companions, and yet we hardly know how they work.” It turns out that this blind spot might have its uses.

Betti Marenko, Professor and Research Leader at Central Saint Martins, London

Betti Marenko and Phil van Allen, Professor of Interaction Design at Art Center College of Design in California, argue that this tendency to fill in the gaps in our understanding might provide users of interactive technologies access to untapped creative opportunities. Both are railing against solutionism, the ‘there’s an app for that’ culture whereby technology is regarded as problem-solving aid. They assert that Animism, the human predisposition to attribute human-like qualities or spirits to animals, offers an interesting alternative perspective. If we already speak about our devices as sentient, why not make use of this quirk?

“We already project personality traits onto our gadgets. Why not make this small leap by engineering them in?” Betti Marenko

If we hardwire unpredictability, a typically human quality, what exciting new combinations could we foster? What might come of helping to promote happy accidents in the working day of creatives, for example? As Betti and Phil both emphasise, this is not about imbuing devices with genuine artificial intelligence. We don’t need to be fooled into believing these devices actually have their own true idiosyncrasies. Animism simply serves as a useful metaphor for interaction design. This all sounds quite lofty, but in practice, it’s going to be fun. Really fun…

Phil van Allen, Professor of Interaction Design at Art Center College of Design, California

“AniThings”, a Phil van Allen collaboration, is an exercise in design fiction, which employs these ideas within an imagined scenario. While their owner is absent, five devices with contrasting personalities wake from daydreaming
to amuse themselves as they see fit. They interact with one another, bouncing various media back and forth. They

select and filter content according to their personality type and in direct response to each other, all autonomously from the device user. One may even doze off entirely.

“We need narratives and metaphors to understand the digital world, much as we need them to understand the everyday analog world: “My car is old and tired,” or “That tree is majestic and stately with an old soul” or “The weather has a mind of it’s own.” Phil van Allen

**Bold Ideas:** Phil, I’m aware that this is a field in which you have been working for about 10 years. Can you explain a little of it’s inception, related to the Internet of Things? What first prompted you to consider animistic metaphor in relation to interaction design?

**Phil van Allen:** My work in animism began about 10 years ago when I taught a class called The New Ecology of Things with Bruce Sterling. As I developed ideas around the future of the Internet of Things, I felt that much of the thinking was focused on a too simple view of the role computation could play in our lives, and that notions of automation didn’t allow for the variety and depth of human experience and desires. In particular, I was interested in how a more mythic and embodied approach to designing computational things could create new kinds of interactions that were more open ended and could facilitate curiosity, spontaneity, exploration and creativity – what I called Productive Interaction. These ideas led to a collaborative publication called The New Ecology of Things.
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As I worked on these ideas, it became clear that something more was needed than simple behaviours or interactions to fully engage people’s imaginations in a rich way. So I began thinking that new devices and systems could create a sense of personality, with the attendant unpredictability, point of view, complexity and open-endedness that would create conversations with people instead of the kinds of one-way, master-slave interactions that are common to digital devices. So Animism became central to my design and research. Not a literal version of it, but a modern take that lives in tandem with rational thought, embracing a more full view of what people are — a mix of rationality and the mythical.

**Bold Ideas:** That’s what got us excited. The combination of rational and consciously irrational, measured design meets magic! Betti, what do you perceive to be the benefits of this approach?

**Betti Marenko:** The digitalisation of experience demands new ideas and new theoretical models to use to think at our interaction with digital devices. On one hand, digital devices are becoming way more powerful, faster, and hyperconnected than ever before, on the other users are locked into a linear mode of relating to their devices, underpinned by conventions of predictability, standardization and rational cognition. Humans design technology in the same way in which technology designs humans. Right now we are being designed as users who stare intently at black mirrors.

“Humans design technology in the same way in which technology designs humans. Right now we are being designed as users who stare intently at black mirrors” Betti Marenko

They are inseparable extensions of our embodied self (all that checking, scrolling, swiping, holding…), yet our relationship with them is linear and its reassuring predictability has the side effects of producing automatic responses, narrow or even myopic attitudes, and a general capture of attention. An animistic approach offers ways of disrupting this set-up by introducing elements of unpredictability, uncertainty and indeterminacy.

**Bold Ideas:** Educational professionals such as Ken Robinson have highlighted the importance of divergent thinking and creativity, which is high during infancy but dips dramatically in adulthood. Your works also deals with creative possibilities and something termed ‘heterogeneous multiplicity’. Could you explain what this means and its significance, particularly to creative and creativity?

**Betti Marenko:** Animistic responses are already profoundly embedded in the way humans deal with objects – way before Siri manifested it, or movies like Her gave it a narrative. Digital devices are only magnifying these tendencies.

“Animistic design can nudge us to reimagine what does it mean to be human in a world of objects designed to be smart.” Betti Marenko

The question however is: can animism be deployed as an agent of creative disruption? In practice this would mean to use animism as trigger to rethink our role and agency of humans in a world of objects that are getting smarter and smarter. The ontological and philosophical implications of this approach concern the extent to which animism, by acknowledging the agency of other nonhuman actors, even when this agency might product outcomes not aligned with ours, can nudge us to reimagine not just interaction with technodigital objects but also what it means to be human in a world of objects designed to be smart.

**Bold Ideas:** An Internet of Things as agents of creative chaos? If you’ll forgive the Dark Knight reference…
Phil van Allen: Common views of automation and IoT see computation as a kind of solutionism, that through data mining and machine learning our systems can anticipate our every need and make life smoother. But this seems to me to be incredibly boring and counter to a full and rich life. What if, instead of a singular device that tells us the solution, we could have a range of opinionated systems that create a wide field of exposure and interaction – much like we the way we interact with our friends and colleagues, or the resources in an old-school brick and mortar library. The thinking and making that comes out of these kinds of conversations/collaborations is very different.

Bold Ideas: In what ways could a device, or multiples devices, with simulated characteristics be beneficial, or perhaps, counterproductive?

Betti Marenko: It is interesting that you use the word counterproductive as this is precisely what animistic design could offer in its more speculative and experimental form: a way of designing interactions that are not predictable or comforting, but that instead throw the user off-balance and confound their expectations. But why should this be goal? After all we like it when our objects-devices-companions behave as they should… However, the creative potential opened by disruptive behaviour should not be underestimate as it can trigger different response based on more intuitive forms of apprehension, and ultimately generate a more creative environment.

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Bold Ideas: I’m sticking with my Joker analogy in that case…

Phil van Allen: In addition to the role our digital colleagues may play in the creative process, they also offer a better way to interact with complex systems. Digital things and the networks and algorithms behind them are so complex today as to be impossible to fully comprehend. They have become overly simplified black boxes that behave in mysterious ways. Animism offers a way to tell an active, evolving story that offers greater transparency than the black box approach we have now. It won’t be literally accurate, but accurate enough to be practical. In the same way that a different sound gives us a sense of what is happening with our car or washing machine, a personality and corresponding behaviours can help us understand the intent and state of our digital devices as they go about their autonomous ways. The animism can also provide a way to frame a history of a device and help us understand its experiences and memory – a kind of digital trace or patina for devices.

Animism also offers us a different kind of relationship with technology. Right now, we seem to have a kind of master/slave relationship with our devices. Do this, do that! And it’s not always clear who is master and who is slave. But in appropriate contexts, we can have a more equal relationship, as kinds of peers. This may be a more healthy way to interact, when we are spending all day long with in the digital world, especially when the way we deal with our devices tends to bleed into the way we deal with other people. On the downside, animate behaving devices could “lie” to us, do bad things behind our backs, or simply be annoying. But this is true of any autonomous system, animate or not.

“Animism is interesting in part because it will make people more conscious of suspending disbelief – we know it’s a fiction rather than thinking, falsely, of computation as “accurate,” “rational,” and “dispassionate.” Phil van Allen

Someone, or more importantly, some corporation, has designed our digital things with certain intentions. Giving them personality could make us more aware of these intentions, or at least that intentions are there whether they are revealed or not. And it may also give us permission to tune the digital out rather than treat it as something so
Lastly, I think it will become necessary to provide IoT devices (again, animate or not) with some kind of certification for how they will behave when interacting with other devices/systems/people. A kind of Good Housekeeping seal of approval (more nuanced but related to Asimov’s Three Laws of Robotics) that lets us know if, how and when data will be shared, transactions are made, and so on. There could be variations on this – our social media agent could be given pretty free reign with our public photo stream, but we would require a much more stringent certification for our medical advising devices.

**Bold Ideas:** What hopes or expectations do you have for this field of interactive design in the future?

**Phil van Allen:** In the short term, I think our hope is to generate a robust dialog in the design and technology fields about the role of digital things in people’s lives. In particular, we are suggesting an alternative to user-centered design. A post-user approach that has the designer consider the entire milieu their artifacts are participating in. We’re also interested in influencing designers to move away from solving problems and towards designing rich contexts for people and digital systems to work within, interact with, and evolve. That is, building systems that empower, challenge, or simply delight people. We hope to host a symposium or conference on the topic in the near future.

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Longer term, I hope to refine what a native digital animism is (vs. a skeuomorphic animism drawn from animals and humans) and then create working systems and products that are used by people in everyday life. I’m also interested in creating an animistic toolkit that allows people to create their own bespoke animistic systems.

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**Written by Dan Davies**

*Photos courtesy of Phil van Allen and Betti Marenko*

Dan Davies is a visual artist, musician and writer. He is interested in how emerging interactive technologies are used to explore and explain ideas.