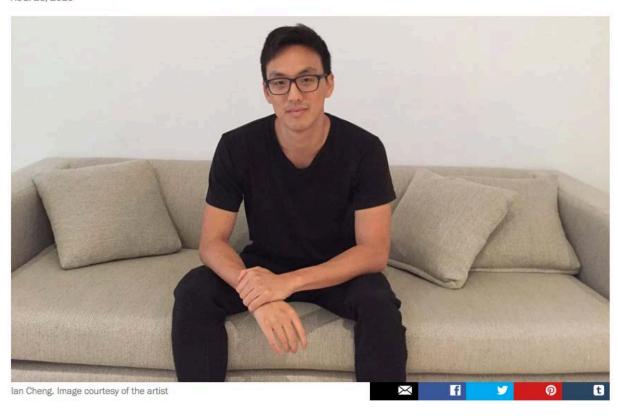Dylan Kerr, "Artificial Ecology: Ian Cheng on the Strange Art of Simulating Life, and the Conceptual Merits of Pokemon Go", *Artspace*, August 26, 2016

Artspace

ART BYTES

Artificial Ecology: Ian Cheng on the Strange Art of Simulating Life, and the Conceptual Merits of Pokémon Go

By Dylan Kerr

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Ian Cheng. Image courtesy of the artist

There's a dog waiting to play with you at the 2016 Liverpool Biennial. It's a Shiba Inu, the Japanese dog breed briefly made famous through the "doge"

[meme](#) of 2013, and it just can't wait to show you around. There's a catch, though: the dog, like the doge, is a digital beast, viewable only through the Google Tango tablet more commonly used for 3D mapping and augmented reality experiments. It's a part of **Ian Cheng's** piece *Emissary Forks For You*, the latest iteration of the artist's weird world of interactive and artificial lifeforms.

With reference points ranging from his education in cognitive science, a yearlong stint at George Lucas's visual effects company Industrial Light & Magic, and his work under era-defining artists including **[Pierre Huyghe](#)** and **[Paul Chan](#)**, Cheng's simulations are less about the wonders of emerging technologies than about the potential for these tools to realize new ways of relating to our own strange, chaotic, and contingent existence. For an art world still struggling to make sense of virtual realities, his efforts stick out as particularly refined examples of the affective possibilites of the digital medium.

Cheng first made a splash with simulations like his 2013 piece *Entropy Wrangler,* a digital realm populated by a swirling, morphing mixture of creatures, figures, and inanimate objects each programmed with their own set of behaviors. These aren't simply scripted 3D videos: after coding the component parts, Cheng presses start and lets the piece develop as it will in a kind of additive, pseudo-evolutionary process that can (and usually does) lead to strange and unforeseen results over the course of its infinite

duration. The artwork becomes an emergent ecosystem arising from these loose predetermined guidelines, like a set of **Sol LeWitt** instructions that create a world instead of lines on a wall.

In more recent works, Cheng introduces goal-oriented behavior into his digital avatars to create simulations with more direct emotional acuity. In both *Emissary in the Squat of Gods* and *Emissary Forks at Perfection*, the titular emissary characters (a shaman and a Shiba, respectively) attempt to guide their simpler counterparts through a shifting landscape. Each reset of the simulations produces a new journey through the world, complete with its own set of ever-changing micro-dramas.

Now Cheng is going a step further, replacing digital avatars with human viewers in *Emissary Forks For You* in pieces at the Liverpool Biennial and the Migros Museum. It's a reversal of the normative pet-master dynamic, placing the digital canine in the position of power as kind of an emotional exercise Cheng has likened to a "neurological gym."
In this interview with **Artspace's Dylan Kerr**, Cheng muses on the vulgarity of new technologies (including Pokémon Go), the similarities between dogs and artificial intelligence, and how his series of simulations are "more a phylum than a franchise."

Throughout your work, there's a recurring theme of beings—specifically AI-based entities—existing and changing beyond our control. Where does this fascination come from?

I have fond memories of going to beaches in California to look at tide pools. You see all of these ambiguous things—not quite creatures, not quite plants—all living in this little community. It's a bit like *Finding Nemo*, but without the cute fish. I always wondered about the lives of these kinds of things, especially when they start to wander away under their own agency. I'm an only child and didn't grow up with any pets, so I'm cursed with this craving for the lives of others.

What's the advantage of using digital simulation to explore this craving?

I'm trying to find ambiguity in the artificial. By artificially simulating something, I can start from a premise that is very fantastical, almost like what you'd see in Miyazaki films or the Sims. I can start from a world or lore that I've invented, or invent a fantastical lifecycle of a creature, and the formal properties of simulation play out that reality with a realist's rigor, true to its nature. It's like when fiction writers get to that sweet spot where they say the story begins to write itself. A simulation takes an arbitrary premise and writes itself, showing me consequences I couldn't anticipate. I'm then free to take on the role of behavior trainer for my artificial life forms.

Still from *Bad Corgi*, 2016. Image courtesy of the artist and the Serpentine Galleries, UK

Let's talk about dogs. Between your Serpentine-commissioned app *Bad Corgi* and *Emissary Forks For You* at the Liverpool Biennial, they've become something of a recurring motif in your work. What's so interesting to you about these canines?

It's because my pet corgi Mars has totally infected my life! The Shiba character comes from the work *Emissary Forks at Perfection*. It's a simulation set in the future about an advanced talking dog chaperoning a 21st century human. For me, the dog is a way to talk about artificial intelligence with the generosity we apply to pets. It's the opposite of the popular notion that AI is and should be an omniscient super brain oracle. The reality of AI, at least right now, is that it is more akin to dogs who are very fallible, not good at anything really, but can learn to learn. I think it is a more apt and generous perspective for growing up around AI growing up.

In contrast to your earlier works like *Entropy Wrangler*, your "Emissary" series feature characters programmed with certain goals, if not ends. Why the shift to this more narrative mode?

The earlier simulations like *Entropy Wrangler* were like the Big Bang—some initial physics conditions that erupt into chaos. Around 2015, I began to see that the simulations, and the processes of entropy and evolution that they exhibited, were inherently meaningless—like nature itself. This was no longer satisfying to me. I felt I needed a counteracting force to entropy and evolution, something very deterministic, and so I started to give certain characters in the simulations a storyline that they had to follow, where previously a basic reactive AI would have governed them.

In *Emissary in the Squat of Gods*, [shown at the Hirshhorn Museum earlier this year and discussed in [an earlier interview](#) with the curator Gianni Jetzer] the emissary character has narrative goals she tries to accomplish in spite of the other agents in the simulation who are much more reactive, who have no long-term goals. They often get in her way, try to recruit her into other activities, try to set her off her narrative course. I really wanted a situation where those two forces—meaningless dynamic simulation and meaningful deterministic story—could collide and sculpt each other.

I think of narrative as a technology—stories are our emotional scaffolding for making meaning out of meaningless reality. On one hand, the universe is meaningless. OK. On the other hand, we are creatures of narrative and

need stories to give ourselves situational awareness, a sense of meaning. On the other-other hand, we painfully thrive on moments in our lives when our life script is interrupted by a meaningless accident or circumstance that forces us out of our comforting stories. These moments are when we are forced to invent another story, another script, and expand our portfolio of narratives for dealing with the unknown. I'm trying to use the simulations to hold these metaphysical primitives together.

I hate that art is given the burden of having to be meaningful. I think this is a misunderstanding. Maybe the real purpose of art is to wrestle with the relationship between meaning and meaninglessness and how they transform each other.

Section of *Entropy Wrangler,* 2013, from Ian Cheng's vimeo page

Your simulations have been compared to fish tanks or gardens— enclosed areas where observers watch a kind of self-generated drama unfold outside their control. More recent work seems to want to include human participants as well, either as users or participants. How do you deal with human interaction in your work? What possibilities or behaviors does this augmented reality allow for?

The work at Migros Museum and Liverpool Biennial features the Shiba character, as well as the basic AI that governs Shiba, on Google Tango tablets. The Shiba commands you to follow it, and the viewer can physically walk or chase the virtual Shiba. The tablet functions as a portal to do this. Over time, you kind of become Shiba's pet. I found that the relationship to this AI is much deeper because your communication with Shiba involves your own physical movement. Your body really begins to believe in the operative reality of this virtual dog AI.

The most exciting part of your work, to me, is the idea of infinity it embodies—over an endless time scale, it can come up with things you never planned for. In creating these various simulations, what's the strangest emergent property or event you've encountered?
One time in *Emissary in the Squat of Gods*, a child character dragged a dead body to an open area and started to pee on it. Other characters nearby saw this, stopped what they were doing, walked over, and started peeing on the

dead body too. This dominoed into a mob effect where more and more of the simulated community gathered to pee on this dead body. It was a really magical moment.

Still from *Emissary in the Squat of Gods*, 2015. Courtesy of the artist, Pilar Corrias, Standard (Oslo)

[When we last spoke in 2013](#), you said that you wanted your art to become something like Angry Birds or Star Wars—an overarching world realized in series. Now, between your apps and simulations, it seems like you're on your way. How do you think about building a franchise as an artist?

I don't care about franchising. What I meant was the notion of creating a living, ongoing world, where individual artworks become journeys through

that world. This can be extended to creating a mind or an AI character like Shiba Emissary, who has enough agency where it can be cast into different projects, different contexts. I can expect Shiba to react to its new condition with its repertoire of ability, knowledge, desire, and thoughts in an improvisatory way. For me, creating something "alive" in this sense, whether a world or a mind, becomes a portal that keeps on giving.
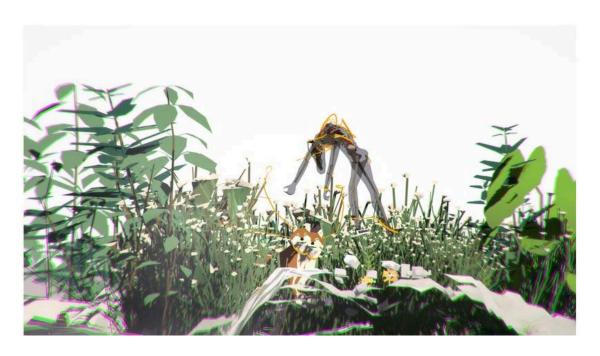
It's like how my pet corgi Mars continues to fascinate me every day, even though he's so predictable. I'm more interested in watching Mars roll around in his sleep than in re-watching a movie. Mars is self-generating a million stories a minute. For me, the idea of creating and training a life form excites me much more than making a static form. Static forms are vital for exploring and embedding arguments, or feelings we wish to bottle and revisit. But life forms are vital for compressing the experience of how things change, grow, or stay steadfast in their behavior, how parts affect wholes, how systemic causation unfolds. With artificial life forms, we can play with compressing these dynamics even more, to timescales that are legible to human perception. This is the kind of weirding that I'm trying to build on—it's more a phylum than a franchise.

You've said, "It's very hard for art to change the material world, but I think it can effectively change people's minds, refactoring their relationship to that world." Morality is subtle but recurring theme in your work—the parameters you set for your digital creations can be read as a

kind of moral code. What's the role of morality in an artwork? Does art have a kind of moral imperative, in your mind?

There's a Peter Drucker saying, "Management is doing things right. Leadership is doing the right things." I think the role of morality in art, if anything, is to err more on the side of doing the right things. Which is to say, to try to identify the noisy, ambiguous territories that our mental models don't cover and attempt to devise forms to help us navigate in there. The question of what is sacred about human nature is a very noisy, ambiguous territory. It's a frontier without answers that we are all caught in, which is scary, but rich with formal opportunities. Other industries can worry about doing things right, refining existing forms and models.

Still from *Emissary Forks at Perfection,* 2015-2016. Courtesy of the artist, Pillar Corrias, Standard (Oslo)

There's a certain echoing between some of your ideas and those of [contemporary philosophical movements like Object Oriented Ontology or speculative realism](#)—what do you make of these schools of thought?

I appreciate the dimension of new materialism that asks us to be modest about our place in the universe and humble about phenomena occurring outside of human perception. But I still think we are slaves to our neural programming. 90% of the day we make do on our habits, feelings, and sense of human timescale. Look at how we're all reacting to the current election. Are we not still so human? If thinking about the inner life of lichen is the emotional scaffolding we need to game ourselves out of ourselves, great, let's do it. But I personally find this speculation not emotionally coherent enough to fundamentally refactor my way of being.

I'm more excited about ideas around reconditioning our neurology to be more comfortable with ambiguity and uncertainty. It's self-help heuristic blogs and weird fiction. It's about creating portals and interfaces that begin from our limited humanness and guide us out to a way of becoming alien to ourselves. Emotional coherence goes as long a way to sustaining alien thought as formalized argumentation, if not more. A philosopher's job is to be like an operating system designer, mostly responsible to other OS designer conflicts, whereas an artist's job is to be like an interface designer. An artist has to play emissary between truth models and the messy spectrum of human neurobiology. I think some contemporary philosophy is

asking the question: how do we game ourselves out of ourselves? I guess I'm asking that question from a more felt angle.

You've said before that the digital simulations are only a means to the end of what you call "composing with behavior." What does that mean to you?

I'm most excited about composing with soft things—as in software, as opposed to hardware. A body is a hard thing. Behavior is a soft thing. The cognition that produces the behavior is a soft thing. It's the stuff that controls and animates the hard material world.

I'm terrible with physical material and too impatient. For me, simulations are a forgiving, easy, cheap, low energy, high variety, high abundance way to compose behaviors. I feel the freedom to play with behavior within the abundance and ease that the form of a simulation offers, like the way the abundance of paper and ink once allowed for playing with narrative worlds to flourish. It's far easier for my imagination to go wild in software than in hardware.

Emissary Forks For You (2016) in action. Courtesy of the artist, Pilar Corrias, Migros Museum

What kinds of emergent technologies have you most excited for their possibilities as an art medium?

Genetics, AI—so many things. If I was a six-year-old right now I'd be so excited to be alive. Imagine becoming a teenager in an era where you're printing a burrito, injecting a plague shot to feel the tickle of death, doing outside the womb births, learning you have nine genetic parents, sending AI to repair your relationship with your sister, telling mom and dad their fears are irrelevant. The future is going to be so vulgar compared to now.
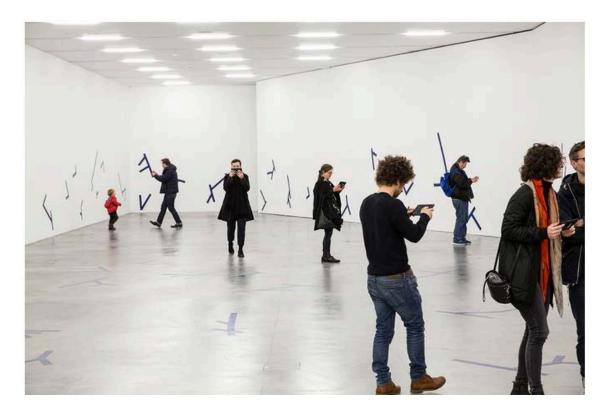
At the same time, the dark side of all this isn't really our social hang-ups. It's the paradoxical condition that you can be simultaneously awash in

interesting technology and also be economically poor. There's an expectation that technology should raise all ships. I believe it is overall. We're not worried about being a bear's dinner anymore. But the felt experience is that it's creating a deeper sense of winners and losers.

Tech insults our human prejudice on what is valuable, what counts as work, what is human. This rate of change on our lives doesn't look to be slowing down. The art world itself can't begin to reconcile this. But oddly, practicing what it feels like to face the changing void, and being okay with its indeterminacy, is something that art really allows for.

Augmented or mixed reality is rapidly entering the mainstream, perhaps most notably with the release of the cultural phenomena that is Pokémon Go. As corporations and pop culture embrace these technologies, what role do you see artists like yourself having to play in how they are implemented and played with?
I've only begun to grapple with this in the Migros and Liverpool tablet works. I'm intrigued by mixed reality's potential to make known physical locations really ambiguous again. I think of kids swarming the Westboro Baptist Church just to find a rare Pokémon, without caring what that site means to other people. It turns physical places into deposit points where different strata of social reality can be easily layered in playful and arbitrary ways. It also makes us more aware that we're already awash in arbitrary virtual realities. The consensual beliefs that sustain a church are no less

virtual than those of an exhibition space or those of Pokémon Go. There's something very vulgar about Pokémon Go, and I think that's great.

Viewers in the Migros Museum interacting with *Emissary Forks for You*, 2016. Courtesy of the artist, Pilar Corrias, Migros Museum

What do you mean by vulgar in this context?

All of these little changes in our technological landscape recondition what we think of as sacred or profane. There's a Douglas Adam line—the technology you're born into is like nature to you, anything that gets invented before you're 30 is exciting and you can make a living off of, and the technology invented after 30 is against the natural order and marks the

end of civilization. The vulgarity I'm referring to is to do with our changing relationship to technology relative to our generation and age. Ultimately, I think it's to do with how much ambiguity a human can tolerate. My parents can tolerate far less ambiguity than I could as a child, and now I'm 32 and I'm attempting to game myself into tolerating as much ambiguity as a 12-year-old.

Do you think the increased ability to tolerate ambiguity is a product of rapid technological advancement?

I think tolerating indeterminacy is a vital ability to cultivate in our era. We see right now that the fear of the unknown, of change, is fertile ground for tribalism and cartoonish violence to fester. Perhaps one day this quirk in human nature won't be holding us back, but right now, it's something that I personally want to work on, or find prosthetics to help me develop.