

Portrait

Big Pablo Ferenc Zatlaz, 2021, from the series "Death Imitates Language"
UltraChrome print on CNC perforated German Etching Hahnemühle paper, framed, 100 x 100 cm



Harm van den Dorpel

The Squirrel of Life



Courtesy: the artist and Upstream Gallery, Amsterdam

Vgdamn Pipikaka Yozdczmi, 2017, from the series "Death Imitates Language"
UV Print on CNC multi layered acrylic glass, packaging foil, 100 x 100 x 3 cm

Berlin-based artist *Harm van den Dorpel* has created software art since the late 1990s – an early explorer of Web3 and the cofounder of the digital art marketplace left gallery, he’s seen some revolutions, from net art to Post-Internet to crypto. In this conversation, he and curator *Tina Rivers Ryan* explore generativity, in every sense of the term. Can it be an entry-point for tokenised work to stay fluid and subvert the market?

TINA RIVERS RYAN Many of the first generation of artists to respond to the internet – the so-called “net artists” – were fascinated by the way this novel tool could transform how art is made and shared; some even thought the net would liberate art from bourgeois capitalism. But for the Post-Internet art of the 2010s, the World Wide Web was no longer a novelty, and many of its iconic works seem less utopian than pragmatic as they grapple with the merging of our online and offline worlds. With the emergence of Web3, the rhetoric about the internet as a liberatory tool has returned, and I wonder: can we only have this attitude because we’re once again “pre-”, and not yet “post-”? Should we be more cynical, or are things going to turn out differently this time?

HARM VAN DEN DORPEL The term Post-Internet did not mean that the internet was over, but that we grew up and realised that its utopian possibilities actually turned out to be the opposite: mass surveillance and websites that are so bloated with advertisements that we don’t load them anymore. In the simplest terms, the idea behind Web3 is that the older internet relies on servers that exist somewhere remote, which can be messed with or taken down. But with Web3’s decentralised online platforms, supposedly there is not one single point of failure – which has political implications as well. I’m optimistic about this, but also worried about what it means for all online activities to potentially become financialised transactions. I don’t even know if it’s good or bad, it’s just what it’s going to be. But, to me, Web3 did bring back the energy of early net art; it’s really fun again. I used to be called a net artist, then I

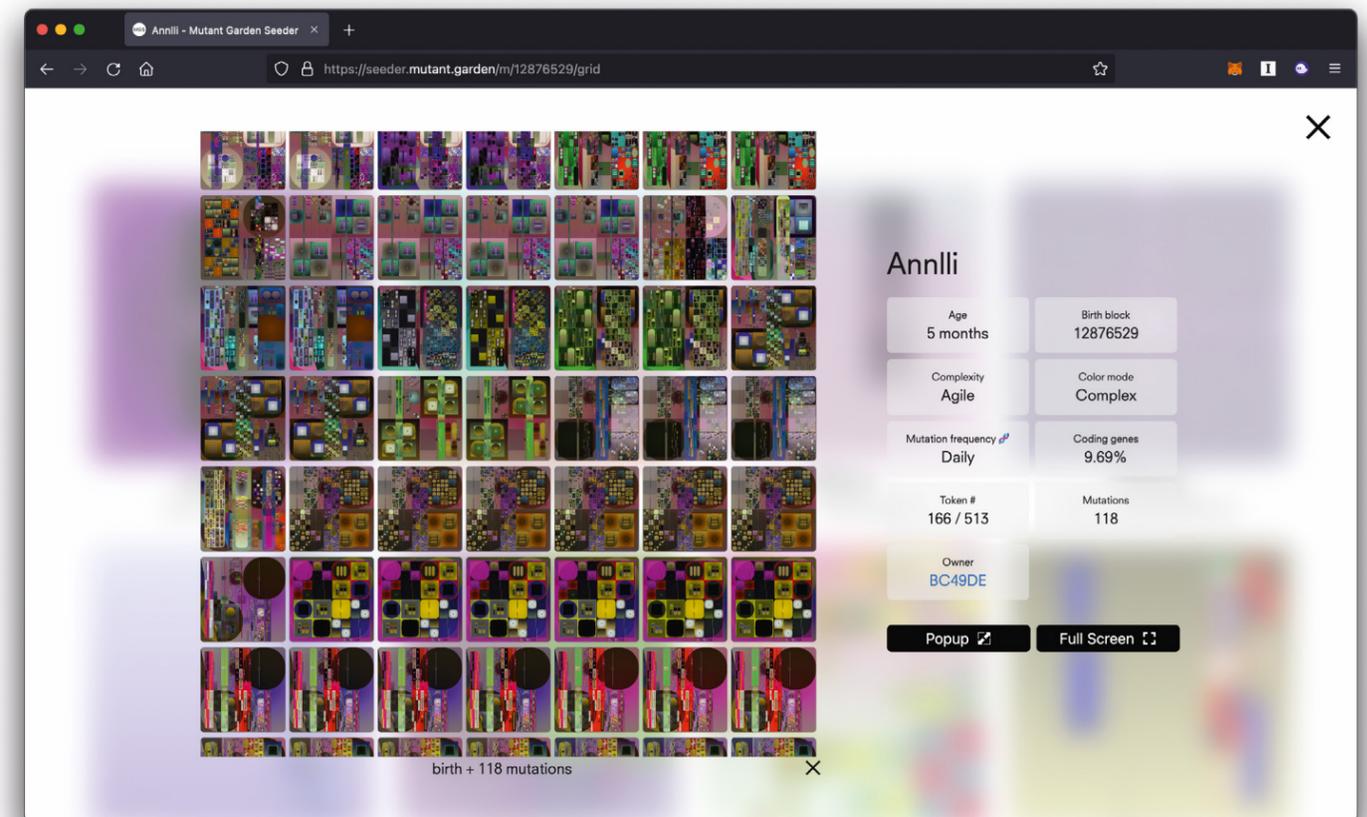
was a Post-Internet artist, now I’m a crypto artist. I don’t care. If people still look at my work later, maybe I’ll be a post-crypto one.

Obviously, artists are excited about blockchain because it has created the wealth that has fed a new market for digital art. Although there is a lot of hype around the idea that this market “cuts out the middlemen”, in practice, I think it is more accurate to say that galleries are being replaced by platforms, for better and for worse. Given that you have been selling editioned, affordable digital art online for years via left gallery, what are your thoughts about the commercial models now emerging from the crypto space?

Initially, left gallery offered relatively large editions of artworks for relatively low prices. For example, we would offer a work as an edition of one hundred, with each edition selling for fifty Euros. Gradually the editions became smaller and more expensive, because the blockchain transaction costs per edition got so high, and the overhead of administrative work like bookkeeping is substantial for a small organisation like ours. But across the board in NFT markets, I see a desire from collectors to own a uniquely configured token that is part of a larger NFT project, especially a PFP or “profile pic” project, instead of a work that has a high edition number. Of course, this fits generative art very well, as it lets artists create multiple related yet unique works. But with left gallery, we still believe in other models. We are currently looking into the possibilities of using a different blockchain with lower transaction costs, which would allow us to sell, for example, e-books for a low price with an open edition number.

TRR

HVDD



Annlli, 2021, mutation grid “Mutant Garden Seeder”

To intervene in contemporary life means to operate on the level of user interface design, because that’s where we spend most of our time now.

TRR

I’d love to see more artists and platforms experimenting with affordable open editions of NFTs, which essentially perverts the NFT market’s obsession with “uniqueness”, and would combat the intense financial speculation that’s been happening while allowing more people to collect digital art. At the least, it’s important to keep in mind that there can be other models for financialising digital art, even within the crypto space. In fact, your 2015 work *Event Listeners*, which was the first tokenised work ever purchased by a museum, was editioned – the work is generative, but you editioned the program itself, instead of selling its

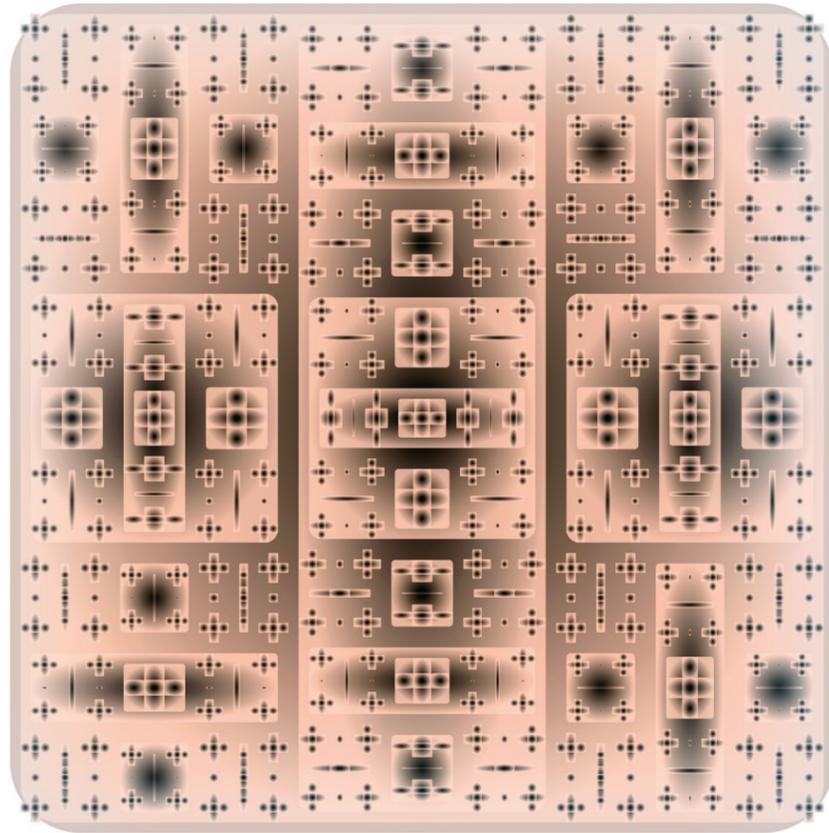
unique outputs as “1/1s”. But since I don’t want the market to continue to dominate our conversations about digital art, maybe we can shift our conversational focus to the aesthetics of this work?

Sure. *Event Listeners* is a generative work that uses relatively simple algorithms to define recursive structures we often find in nature, like how trees branch. It reminded me of all the screensavers that I had known since the 1990s. There was a certain melancholy to this aesthetic for me. When I was a child, I didn’t have access to the internet and I was not living in a big city, there was a boredom that could only be addressed by

HVDD

HVDD becoming a better computer programmer. I was trying to understand the world and myself by writing software and making aesthetic systems. But in the end, I was just more isolated. So this melancholy is what the work is about. It generates a typical 90s-style graphic screensaver, which I find profoundly interesting and beautiful, overlaid with these descriptions of experiences that I would have in social situations where one also

evolution of forms, I wonder if you see any kind of contradiction in taking work that's fundamentally about mutability and entering it into the immutable ledger of the blockchain? Obviously, you can decide whether each property of the work will or will not change, and the NFT can point to something that is dynamic, even if the links themselves are static. But does the metaphorical framework of fixity matter?



Mutant Garden (early bug), 2020, NFT

Courtesy: the artist

follows a script, like family birthday parties, which often made me feel incompetent.

TRR I love that your use of generative processes is not arbitrary, but rather expresses your experience of these “scripted” real-time situations; it also emphasises that organic organisms and social networks are in fact the original “generative” systems. Given that generative art is so much about emergent properties and the

There's this idea that tokenising digital art sacrifices its greatest potential, which is its mutability. But to what extent a tokenised generative work of art itself is static is really a design question. The problem is: you can't commodify something that always changes. I also think it has to do with creating an aura, the feeling that there's one singular artwork.

I can see that. It's a problem that often crops up with art that is indeterminate or open-ended, from

HVDD

TRR

Dada to Fluxus to net art. But generative art is usually pictorial, and I think it's precisely because it resists the idea of composition as necessarily intentional that it gets categorised as being decorative. It's something that digital artists – like some abstract painters before them – have long grappled with: How do you make meaning out of randomness? With the generative art that you make, do you focus more on the specific elements that you put into play, or the configurations of the elements

that run dating apps; these are optimised to create short-term relationships, so users keep returning to the platform. Because these relationships can produce offspring, the algorithms are essentially engineering ten percent of the Western population. This is very interesting and also terrifying, because the software developers and economists are actually designing our human species, in a direct and biopolitical way. I thought, can I employ genetics in a large series of



Event Listeners, 2015, screensaver for MacOS

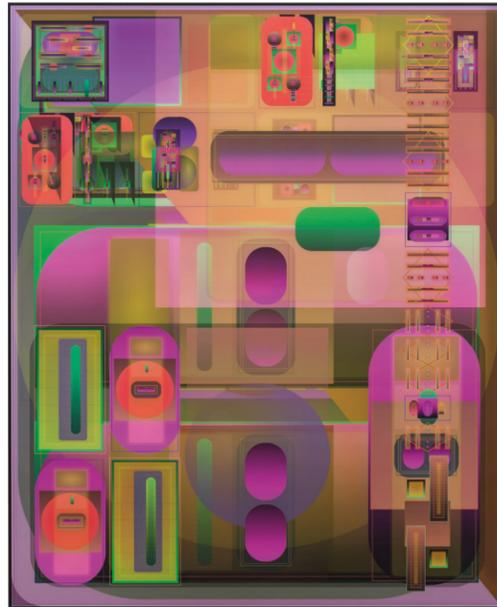
Courtesy: the artist and left gallery

that the system forms, or the overall concept behind the system, or the code itself?

HVDD

I have made generative art that is based on random numbers, which enables a wide range of unexpected configurations. This is kind of fun for a while; it's always different. But it's also always the same, in a way, and after a while you get bored, as there's no direction or growth. Then I encountered this video by Vinay Gupta about the neural networks

generative artworks so that instead of just selecting among outputs – like in classic, generative art – I can judge which outputs are better than others, and then breed those and slowly reach some kind of optimal output? The criteria can be manual – in the 2016 work *Death Imitates Language*, I made the matches between specimens myself and decided which got to “live” and “die” – but I've also used crowdsourcing, in the version of that work called *Hybrid Vigor* (2017), where



Plural Shim, 2021, from the series "Mutant Garden", exposure on light sensitive metallic paper, mounted and framed, 122 x 100 cm

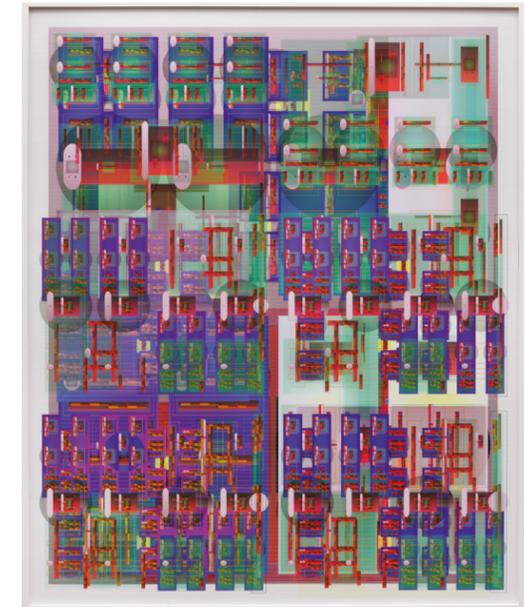


Grand Formation, 2021, from the series "Mutant Garden", exposure on light sensitive metallic paper, mounted and framed, 122 x 100 cm

Courtesy: the artist and Upstream Gallery, Amsterdam



Trivializer, 2020, from the series "Mutant Garden", exposure on light sensitive metallic paper, mounted and framed, 83 x 70 cm



Decent Fabric, 2021, from the series "Mutant Garden", UltraChrome HD print on archival fine art paper, 124 x 102 cm

people could make these decisions for me. The exact decision-making criterion is called a "fitness function" in genetic algorithms. In *Nested Exchange* (2017), I called it the "hipster algorithm", as each specimen was judged as being more successful the more it was different from all the others. Each one wanted to be as unique as possible in the population, just like at a

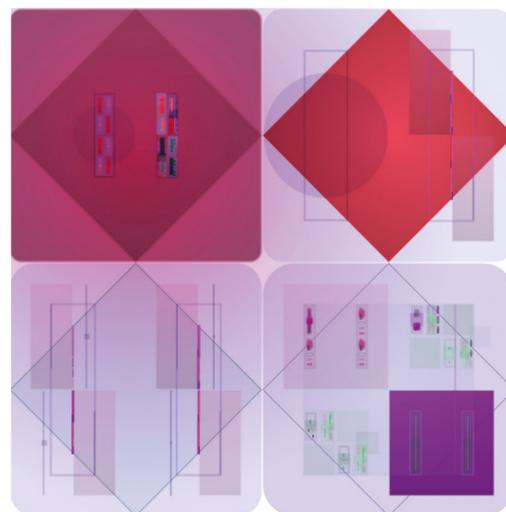
music festival, where everybody thinks they're unique, but also looks quite similar to everyone else there. Most recently, I had the very modernist thought that a successful composition is simple in construction but complicated as an aesthetic experience. So I defined complexity in construction according to the time it takes the computer to render it, and complexity of experience as

the size of the file after compression. Actually, if you apply this to a lot of abstract paintings, it kind of makes sense. But now, with generative art, the complexity comes from recursion, creating modular systems with repetition and nesting like Matryoshka dolls.

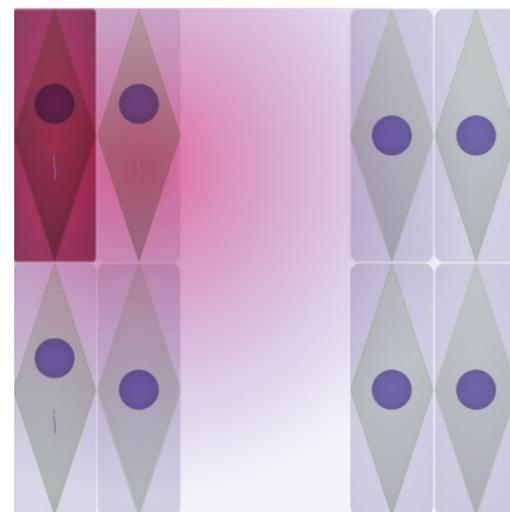
TRR

I want to talk more about the direction you give to your work through the aesthetic choices you

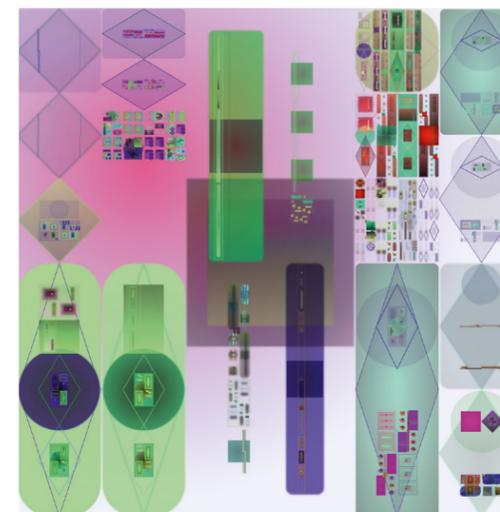
make. You exhibited *Mutant Garden* (2019–) at Upstream Gallery using both screens running a live version and prints you call "wall objects," including square prints. Artists like Kazimir Malevich began using the square to refuse the idea that painting should have a representational relationship to the world. It was an affront to the idea of the canvas being



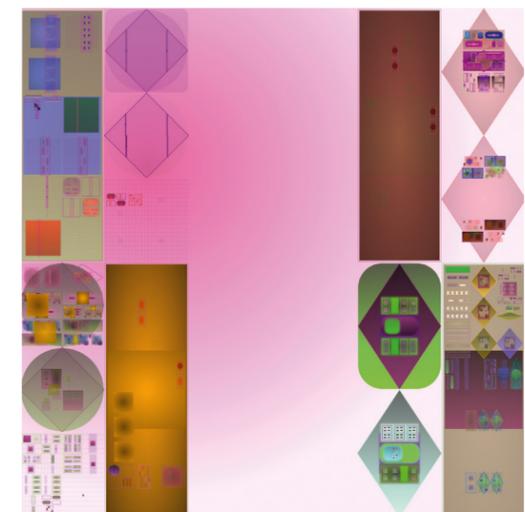
Dorlly, 2021, from "Mutant Garden Seeder" NFT (birth)



Dorlly, 2021, from "Mutant Garden Seeder" NFT (mutation 3/25)



Dorlly, 2021, from "Mutant Garden Seeder" NFT (mutation 9/25)



Dorlly, 2021, from "Mutant Garden Seeder" NFT (mutation 23/25)



Lammer Asbestos, 2018, UV print on CNC plexiglass, packaging foil, 100 x 100 x 3 cm
Installation view, Schinkel Pavillon, Berlin



Wyn (generation unknown), 2018, UV print on CNC plexiglass, packaging foil, 100 x 100 x 3 cm
Installation view, Schinkel Pavillon, Berlin

Both from the series "Nested Exchange". Courtesy: the artist and Upstream Gallery, Amsterdam

a mirror or window, as seen in the history of Western art, which for centuries relied on vertical and horizontal rectangular formats. In other words, the square in painting heralds abstraction, which is to say, art's supposed autonomy. But digital art, even when it is abstract, is so often about the embeddedness of art within social and technical systems. For example, your algorithms are a response to the social engineering of dating apps, and your squares recall not only Suprematism but also the default format of Instagram posts and our profile pictures on social media.

HVDD

Exactly. To your point, the elements in my work are taken from user interfaces. A very important element is the so-called squiracle, which is a square circle. Especially on the Mac, the user interfaces have these rounded edges, which are supposed to give it a human feel. Actually, they're horrible. They look like 60s wallpaper. But anyway, the squiracle is considered impure. Mathematicians hate it. And yet, this is the primary shape that defines the aesthetics of the interfaces of our era. For me, to intervene in contemporary life means to operate on the level of user interface design, because that's where we spend most of our time now when we consume culture. Not all the time, but a lot, and more

so over time. This environment is not static. In *Mutant Garden*, even the artwork itself changes depending on the window size. What the collectors are buying is a programme that spontaneously mutates and also generates compositions based on the aspect ratio and the scale of the programme's window – which makes them even more slippery, because even within one mutation, the work is not "stable" but dynamic.

So through its aesthetics, *Mutant Garden* is drawing attention to our new algorithmic "environment" and also promoting the idea that works of digital art, like that environment, are fundamentally variable – regardless of whether they're tokenised on an immutable ledger. In this light, the capsule-like, semi-transparent squiracles that float over each other encapsulate, pardon the pun, a vision of digital art as radically fluid and permeable.

The work is always changing. In the FAQ of the project, one of the questions is, "Well, what happens if the mutation algorithm stops?" In that case, I would call them fossils. Which means that at some point, the work died. And that's okay. But as long as Ethereum is not wiped out by a magnetic nuke, people can also run the software

TRR

HVDD

locally, to facilitate decentralisation and prevent that central point of failure.

TRR

Speaking of fossils, I wanted to ask you about your concept of archaeology. You have talked about your use of the Cartesian genetic programming algorithm in *Mutant Garden* as being like "algorithmic archaeology", because it was made in the 90s. I love this phrase, because it implies that algorithms can be excavated. This means that algorithms are not just pieces of math that are objective and universal and true, but that like fossils, they themselves have a history and are the products of particular historical situations. The idea of archaeology gets at this, too, because when you excavate a fossil, you discover it within the context of its historical layer. To me, this is the larger critical stake of your project: If technologies have a history, it means that they are not self-evident, as suggested by the crypto rhetoric that "code is law", but are in fact constructions that, like your works, are always evolving – and therefore can be changed.

HVDD

I know what you mean. And I agree. There is another dynamic at work, though. For example, the source code of Windows is so large, and the newest

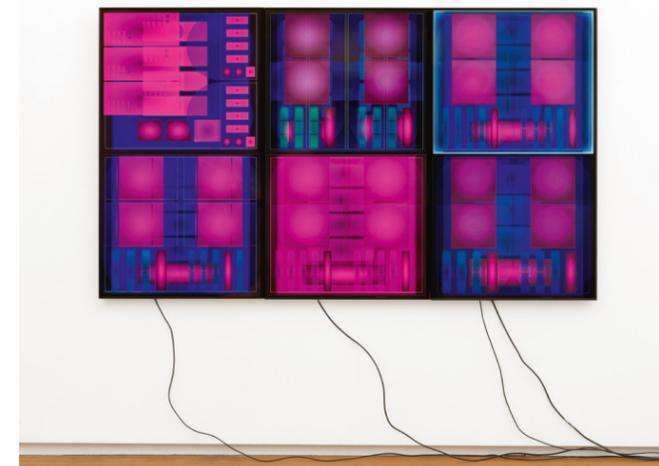
version still uses code from twenty years ago. If you open it in a text editor – which I would not recommend – you can see remnants of Windows 3.1; it's still there. This system is so large that no single human being has an overview of what it is; it cannot be comprehended in its totality. You can only understand sections or some connections between certain parts. In that sense, code is law, as some things are just too large to change. You cannot replace the sewer system in New York.

Maybe code isn't law, but rather destiny. Programmers are creating a legacy that future programmers will have to build on or around. That's what history is; as a society, that is what we're always doing. That's what art does, too. It adds to the record, and then the future has to contend with that.

This is a very important part of *Mutant Garden*. The algorithm it uses was made for industrial circuit board development, but also other engineering problems that are way too hard to compute directly. Instead, it uses estimation, by randomly generating many potential solutions, approximating one that might be acceptable. And maybe that's a nice metaphor for making art.

TRR

HVDD



Mutant Garden Autobreeder, 2021
Dimensions variable, duration infinite

Courtesy: the artist and Upstream Gallery, Amsterdam

HARM VAN DEN DORPEL, born 1981 in Zaandam (NL), lives in Berlin. Recent solo shows took place at Upstream Gallery Amsterdam (2021) and Narrative Projects, London (2019). Selected group exhibitions have been held at ZKM Karlsruhe (2017); Ullens Center for Contemporary Art, Beijing (2014); New Museum, New York; MoMa PS1, New York (both 2013). In 2015, he and Paloma Rodríguez Carrington started left gallery, an online marketplace that commissions, produces, and sells downloadable objects.

TINA RIVERS RYAN is a curator of modern and contemporary art at the Albright-Knox Art Gallery in Buffalo, New York, and a historian and critic of digital art.