Volume 2, Issue 1 (Spring, 2019)

The Cabinet of Curiosities: Between Curatorial and Ethnographic Practice

Axelle Van Wynsberghe

Keywords: Digital anthropology, creative coding, multimodality

Recommended Citation:

Licensing
This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License
The Cabinet of Curiosities: Between Curatorial and Ethnographic Practice

Axelle Van Wynsberghe

Abstract
As researcher and co-curator of Creative Coding Utrecht’s HELLO WORLD! exhibition, I produced the ‘Cabinet of Curiosities’, a multimodal space in the exhibition through which audience members explored the tools and practices of creative coding. Creative coding is an interdisciplinary practice whose works treat digital technologies as material for creative practice. The community that has established itself in the Netherlands is composed of a range of creatives: they are artists, designers, programmers, performers, musicians, scientists, and craftsmen. From the Cabinet of Curiosities emerges an intricate collection of stories that challenge conceptions of technology as ‘rational’, ‘objective’, or ‘neutral’. It revisits the 19th century wunderkammer as a way to classify and recompose knowledge and address the technic and aesthetic as intimately intertwined. This paper suggests that creative coders’ correspondence with digital technologies illustrates their processual and relational nature, and offers further insight into novel forms of ethnographic approaches to the digital in line with New Materialist understandings of matter. Positioning technology as a form of inquiry, this paper addresses creative coding as part of an ontological search for how we relate to the world around us. Composed of physical tools, software screenshots and demos, prototypes, exhibition videos and interactive puzzles, the cabinet immerses the audience into the experiments and works of creative coding culture. It showcases the process of making as a ‘weaving together’ of artifacts that ‘momentarily hang together and coheres’ and invites the audience to think together with them (Ingold, 2013).
Introduction

The HELLO WORLD! exhibition consisted of the first overview exhibition of Creative Coding Utrecht (CCU), presenting the works and experiments of the creative coding community. It took place at Sensor Lab, between the 2nd and 4th of November 2018. As researcher and co-curator of the exhibition, I produced the ‘Cabinet of Curiosities’, a multimodal space in the exhibition through which audience members explored the tools and practices that underscore creative coding. Creative coding is an interdisciplinary field whose works treat digital technologies as material for creative practice. The community that has established itself in the Netherlands is composed of a range of creatives: they are artists, designers, programmers, performers, musicians, scientists, and craftsmen. This paper delineates digital technologies as artifacts that are ‘always in the making’—a product the collective action of human and non-human entities. From the cabinet’s workshop space and the makers’ interactions with digital tools emerges an intricate collection of stories. The cabinet explores how art objects and technological tools ‘do’ things; how they “reproduce the agency of their commissioners, makers and users; (...) evoke emotional reactions within and amongst individuals, and urge people to take certain actions and positions” (Svasek, 2007:85). To begin with, I will illustrate the ways in which curatorial and ethnographic practice merged in this research, and how they shaped the exhibition themes and framework. Secondly, this paper will argue that the Cabinet of Curiosities framework allows for a multimodal and participative way of classifying and recomposing knowledge. By converting ‘wonder’ into ‘doubt’, it allowed new pathways to be explored when it comes to our conception of
digital technologies. Thirdly, the ways in which the technic and aesthetic are intertwined when it comes to creative coding practice will be delineated. Lastly, I will outline how the cabinet not only served to be reflexive about the processes of translation that took place at the curational level within the HELLO WORLD! exhibition, but also the translation that always-already takes place in our correspondence with digital technologies.

Between Curatorial and Ethnographic Practice

After a brief meeting with Fabian van Sluijs, the director of Creative Coding Utrecht, in which he pitched the HELLO WORLD! exhibition, it was clear that as an anthropologist I would be creating a ‘bridge’ between the broader audience and the creative coding community. His aims were ambitious—he did not only want to immerse the audience within the local creative coding community by showcasing their works and experiments; he also wanted to explore creative coding as a practice which could offer a critical approach towards digital technologies. Indeed, CCU describes itself as ‘stimulating creative coding as artistic and emancipatory practice’, fostering the Utrecht-based creative coding community for several years through talks and participatory workshops. From the beginning of our collaboration, there was a critical and political dimension to the exhibition. The sociopolitical character of the project would be a center point for the exhibition, and tie our exhibition themes together.

Fabian additionally expressed the need for an anthropological understanding of creative coding as a practice. I was aware of the tendency within art audiences and art professionals in the contemporary art world to harbor an attitude of ‘technophilia’ or ‘software determinism’ towards artworks made with digital technologies (Graham and Cook, 2010; Rugg and Sedgwick, 2012). It was also important that the creative coding community not be subsumed within traditional art historical concepts and histories. As Fillitz and van der Grijphe point out, the ‘art world’ “must be considered as locally, not universally, determined” (2018:5). The aim of my ethnographic fieldwork was therefore not to ‘look for fixed categories’ but rather to offer a ‘thematic and methodological perspective’ on creative coding practices (Rutten, Dienderen and Soetaert, 2013:628). Through investigating the materiality of the practice, my aim was to create more understanding of the community and its practice.

Operating within the exhibition framework allowed my fieldwork to become entangled within what Ingold terms the ‘meshwork’ (2013). The process of interviewing, researching, writing and curating content was a way of bringing attention to the fissures and entanglements within both creative coding practice and the makers’ critical remarks on the digital society. It challenged my own approach to artifacts and tools as an anthropologist, and the ways in which I thought of contextualizing and historicizing the culture and community of creative coding. Working on this project has additionally allowed me to explore what anthropology can offer art institutions and museums, and also what kind of artistic research methodologies can be relevant for an engaged digital or multimodal anthropology.

Multimodality does not only represent a desire to explore various forms of media and
the ways in which they impact ethnographic fieldwork and data, but also points towards “the heterogeneities of anthropological research across multiple platforms and collaborative sites, including film, photography, dialogue, social media, kinesis, and practice” (Collins, Durington and Gill, 2017:172). Heterogeneity furthermore appears to be a salient characteristic of contemporary art and culture since the computational revolution. As Nicolas Bourriaud notes, the heterogeneous has “come to govern the current regime of visibility”—representing an age of ‘constellations’ which is “dominated by pulverization, scattering and links” (2016:47). A multimodal approach therefore becomes more prevalent, and also more necessary. Multimodal ethnography has encouraged anthropologists to explore different modes of knowledge production, and how these semiotically alter the meaning derived from it. Anthropologists are not only increasingly using different modes of doing and presenting research—from using still and moving images to working with the senses and soundscapes—we are also situated in a world that has an increasing concentration of multimedia technologies (Dicks, Soyinka and Coffey, 2006).

Within my fieldwork notes and data lies a network of social media posts, studio interview video recordings, audio recorded talks and conversations, artifacts, event pamphlets and posters, and exhibition catalogues. During twelve studio visits, I interviewed makers about their relationship to the creative coding community and how they view their practice. The semi-structured interviews lasted 40min to 1h20min and were held in Amsterdam, Rotterdam and Utrecht. The artists that could not be interviewed in person—some of which were located in China and Belgium—sent us written interviews. The recorded interviews were transcribed and coded and served to develop the main exhibition themes: 1) Making, Together: Redefining the ‘User’ and ‘Amateur’ in a Community of Makers, 2) ‘Critical Making’: Discovering Underlying Processes and Systems, and 3) Artistic Agency: Experimenting with Control and Randomness. The interviews allowed us to create a participatory approach to the creation of the Cabinet of Curiosities, and led further considerations about the nature of the ‘artifact’ and digital materiality. Furthermore, it engaged the creative coders in thinking beyond code to explore the material and semiotic character of their practice.

This fieldwork within the creative coding community in Utrecht involved a ‘witnessing digital materiality in the making’ (Pink, Ardèvol and Lanzeni, 2016:2). Understanding the nature of digital technologies, as well as complicating the relationship between ‘virtual’ and ‘material’ has been part of several prominent debates within media anthropology and digital anthropology. Indeed, the ways in which creative coders engage with the digital as material for their creative practice resonates with the New Materialism Turn. New Materialism reflects new ontologies influenced by posthumanism proposed by anthropologists which focus on the processual qualities of matter, defining matter “for its living process in the world’s formation”, and questioning the notion of a world as composed of ‘discrete entities’ (Pink, Ardèvol and Lanzeni, 2016:11). Michael Taussig’s description of sailors amidst the death ship, and his assertion that a ‘web of interaction’ exists ‘between stories and substances’ illustrates the intimate relationship creative coders share with digital technologies—getting to know the ‘landscape’ of their tools, exploring its possibilities and expanding its boundaries (2015:21). This paper highlights the
transformative capacity of the digital material, and the heterogeneities which compose
digital technologies. Although it disputes the notion of digital as immaterial, it attempts
to address its often intangible dimension by observing its ‘leakages’ (Pink,
Ardvol and Lanzeni, 2016).

The ways in which creative coders correspond and interface with the digital material
leads to the discovery of new possibilities; both technical and conceptual, personal
and political. Technology can be understood as a form of inquiry—experimenting with
digital technologies is therefore also an investigation of how one ontologically relates
to the world (Børsen and Botin, 2014:72). Although algorithms are often thought of
as bounded and rational technological structures, the term algorithm has a variety of
applications and boundaries in ‘the wild’. During Nick Seaver’s (2017) fieldwork at a
Software Company, he notes that at times computer scientists do not comprehend
the totality of how algorithms function because: “The “algorithm” (…) was a collective
product, and consequently everyone felt like an outsider to it” (p. 3). Algorithms can be
hacked, tweaked or its functioning altered through the users’ interaction with it. Rather
than seeing them as bounded entities, algorithms can be conceived of as a collective
practice comprising of both human and non-human agents. Sjef van Gaalen proposes
that algorithms can be conceptualized as ‘algorithmic companion species’, reflective
of Donna Haraway’s (2015) work. Creative coders intervene in and tinker with the
’intended use’ of technological tools and systems, and technological systems them-
selves give rise to misuses, new uses, and abuses. The use of digital technologies is
therefore emergent, always ‘relational and contingent’ (Pink, Ardéval, Lanzeni, 2016;
Børsen and Botin, 2014). Indeed, it is not just that creative coders use tools to make
art, but that the tools themselves became a responsive and complex medium through
which they interface. The Cabinet of Curiosities framework allowed me showcase
the practice of creative coding whilst avoiding an art historical conceptualization of
the field.

The Cabinet of Curiosities
A state of wonder is also a state of doubt
The HELLO WORLD! exhibition’s Cabinet of Curiosities presented a selection of
artifacts and activities in a context that blended the disciplines of the arts, technology,
and ethnography. Composed of physical tools, software screenshots and demos,
prototypes, exhibition videos and interactive puzzles, the cabinet immerses the
audience into the experiments and works of creative coding. It showcases the
process of making as a ‘weaving together’ of artifacts that ‘momentarily hang together
and cohere’ and invites the audience to think together with them (Ingold, 2013).
Within the Cabinet of Curiosities, we framed digital technologies as the new tools
through which humans attempt to master the world, showcasing how creative
coding as a practice sheds light on the ever-mysterious and highly debated creative
process. The Cabinet of Curiosities framework additionally served to address the
technic and aesthetic as intertwined processes. Furthermore, the Cabinet of Curiosities
framework itself points to the beginnings of museology and ethnographic collections.
The Cabinet of Curiosities revisits the nineteenth century *wunderkammer*, referring to a museum practice when the arts weren’t yet divided and art, design, and science were considered part of the same discipline that tried to make sense of the world. The Cabinet of Curiosities consisted of collections of artifacts pulled from various disciplines such as natural history, archeology, geology, and the arts. These ‘cabinets’ began to proliferate in the sixteenth century and were often composed of several paintings and sculptures: ‘curious items from home or abroad’ and ‘antlers, horns, claws, feathers and other things belonging to strange and curious animals’ (Pearce and Flanders, 2000). The first known representation of a Cabinet of Curiosities is Ferrante Imperato’s engraving of *Dell’Historia Naturale* (Naples, 1599). They took the shape of small cupboards, cabinets, as well as rooms and palaces. The term ‘curiosities’ referred to non-Western artifacts often brought from the Pacific, and “occasionally, this term, or ‘curios’, also embraced certain kinds of antiques and classical relics, and even natural specimens—coral, bones and mineral samples” (Thomas, 1991:126). There are several common threads within these seemingly haphazard collections. To begin with, in these *wunderkammers* both the natural and manmade were superimposed within a single collection; being composed of *artificialia* (such as antiques or works of art), *naturalia* (natural objects or strange creatures), *exotica* (plants and animals from exotic places), and *scientifica* (scientific instruments). Secondly, the cabinet’s role was to create a sense of wonder in the various audiences of travelers and guests. Thirdly, the cabinets not only have a representational function, but were also used as a ‘technique of inquiry’. Indeed, the artifacts themselves “served as proof of an event and contact and knowledge of the peoples encountered” and the collections served as “objectifications of authoritative knowledge” (Buchli, 2002:4). Furthermore, the distinct arrangement of these cabinets explored the juxtapositions between nature and art, also “between ancient and modern, divine and human, European and non-European” (vanReenen, 2018).

The Cabinet of Curiosities has a strong link to the emergence of material culture studies and early ethnographic collections, which “often contained souvenirs accumulated by sailors on expeditions that one way or another made their way back to the European capitals” (Buchli, 2002:4). The ethnographic monograph would later replace these collections: “If initial collections were an attempt to bring such exotic, invisible and otherwise unknowable realms into being for Europeans, then these attempts, at knowledge of other realms of experience found more satisfactory expression in the ethnographic monograph which was based on direct fieldwork and participant observation” (Buchli, 2002:5). In *Entangled Objects*, Nicholas Thomas claims that ‘curiosity’ itself also represents the European “tension between a scientifically controlled interest in further knowledge and an unstable ‘curiosity’ which is not authorized by any methodological or theoretical discourse, and is grounded in passion rather than reason” (1991:127). He describes this ‘curiosity’ as a rather ‘infantile attitude’ which, without aim, is aroused and mesmerized by the exoticism and apparent ‘strangeness’ of such objects (1991:140).

The Cabinet of Curiosities is therefore wrought with complex histories. Yet, the cabinet as a ‘way of knowing’ remains an interesting framework through which to understand
elements of digital culture, and the community of creative coding. Indeed, both Barbara Maria Stafford and Horst Bredekamp argue that the Cabinet of Curiosities holds similarities to the ways in which cyberspace functions; for example, they both “invite users to make their own connections”, and “impose their own methods of organization on information through visual interaction” (van Reenen, 2018:4). Furthermore, when applied to the Internet and digital technologies, one can observe how the collecting and curating practices of the cabinet have become common to many platforms. The cabinet allowed for a strategy of remediation to take place; one which both ‘acknowledges and celebrates the mediated nature of representation itself’ (van Reenen, 2018).

The cabinet also encouraged an engaged and reflexive collecting and curating practice, and served as a framework through which themes and stories could be explored within the community. It was an opportunity to classify and recompose knowledge. A state of wonder is also a state of doubt; in producing ‘wonder’, the cabinet calls on audiences to re-examine their predetermined positions and explore new pathways (Raes, 2018).

A heterogeneous exhibition
The Creative Coding Cabinet of Curiosities presented selection of crowd sourced tools sent in by the CCU community. Fabian and I collected the Kinect, Leap, Oculus Rift, Raspberry Pi, and all sorts of controllers used in the practice of creative coding. The acts of scraping, sorting, filtering, and categorizing were also explored as contemporary practices that have come to dominate the ways in which we interact with and sort the information around us to create our understanding of reality. Various phenomena that have emerged from digital culture were highlighted in the exhibition and in the cabinet. We included a screen recording of several prominent Tumblr blogs who chronicle the interesting behavior of algorithms or digital systems, and sociocultural phenomena that have emerged from certain digital processes. For example, a restaurant calling itself ‘Brunch Near Me’ to appear as the top search on Google Maps or algorithmic price hikes in times of emergency.

During my fieldwork within the creative coding community, and it became clear to me that the creative coding community was still taking shape, with the term ‘creative coding’ apprehensively defined by makers. As a consequence every practitioner saw themselves differently: as a developer doing creative projects with code on the side, or perhaps an artist that uses digital technologies as their medium. The cabinet served as a way to explore the heterogeneity of creative coding itself, and highlight the diversity of ways in which different practitioners relate to digital technologies. By doing so, it became an opportunity to put emphasis on the heterogeneity within digital technologies as such. Furthermore, it challenges the cabinet’s previous divisions between naturalia and artificialia by blurring the lines between what is the outcome of ‘natural’ processes and what is ‘man-made’.

Creative coding works consist of iterations of previous tests and concepts often laid out in other mediums, and themselves hold a multi-semiotic character. For example, Frederik Vanhoutte states that “every finished piece leaves a trail of prototypes, variations, test versions, all of them accessible, some of them revisited at a later time and spinning off in totally different directions. It often happens that a new piece has its
An exploration of the various elements that constitute creative coding practice and immersing the audience in them was one of the major aims of the cabinet. To do this, we not only exhibited artifacts within several antique wooden cabinets, but also exhibited artworks, interactive experiments and prototypes, as well as a video composed of our studio interview footage. This showcased the multiplicity of perspectives that creative coders have on the community and their practice.

Sylvain Vriens and Mark van Koningsveld describe the iterative process within creative coding. Sylvain Vriens states that his process starts with an idea that seems interesting to investigate, and leads him to ‘play about and change all the details forever until I find something worthwhile to show people or keep to myself.’ He states that “what makes creative coding ‘creative coding’ is that you try to make something that has a new value or an artistic value, or a proof of concept that something else can be done with all the technology we have.” For Mark van Koningsveld, creative coding is not just about the visual output, but also how the backend forms the artwork:

“You make sure everything behind the scenes hangs together by a couple of tracks and you make it work, but it is not pretty. The front looks very pretty, and it gives the people a way to experience how the program would be if it was fully developed. For me creative coding is, literally, being creative through code—so, getting code from googling all around the web, and putting it together. Making something that is functional, not pretty—but artistic. As an artist it gives me the power to already give people the experience I want them to have, without a really well functioning program.”

Others focused on the problem-solving aspect of creative coding, seemingly giving artists agency over digital technologies as an artistic medium. For Art van Triest, creative coding represents a moment between randomness and control, and is an active and critical exploration of the questions that digital technologies raise:

“I think, if you are really like a hard-core coder, then you also always have to come up with a way to makes code fit around a problem that is not as ‘straight’ as code is. The gap between digital and physical (...) is more or less, I think, the same gap between problems in reality and the coder who has to deal with it. You always have to try to control it; you have to come up with a code or construction to solve the problem you have; and to take into account that the problem can be glitchy or the problem can be doing things that you didn’t expect.”

For Frederik Vanhoutte, creative coding is “using techniques, technologies and data from diverse ‘serious’ fields of knowledge freed from the rigorous constraint of ‘proper use’. It’s combining everything you know and large amounts of what you don’t know,
learning as you go along, playing with serious tools. It is the greatest game of all.” For Roald van Dillewijn, it represents finding novel solutions for the problems that you craft and encounter. Ren Yuan mentions that creative coding represents an exploration of the nature of programming itself: “through creative thinking you can explore all kinds of possibilities of the physical and the digital worlds based on programming (...) it is also an exploration of programming itself, through the understanding and practice of programming languages to find the boundary and meaning of programming.” Creative coding becomes a method of exploring the digital materiality of their tools, and crafting new kinds of questions and problems to solve when it comes to their application.

For Saskia Freeke, creative coding is both her tool and sketchbook, allowing her to ‘explore new things’ through programs that she makes herself. Other artists were still working through their relationship to the term ‘creative coding’. Jasper van Loenen did not necessarily identify with the term creative coding itself; to him it could ‘be a lot of things’, such as “playing around, writing, trying to see what kind of result you get.” For Carolien Teunisse, creative coding also remains a definition in progress. Nevertheless, they all put emphasis on the iterative aspect of creative coding, and how this process leads to new discoveries. For the exhibition, I outlined several core characteristics of the practice:

Creative Coding is...

ITERATIVE
EXPERIMENTAL
PLAYFUL
SERENDIPITOUS
PUSHING BOUNDARIES
CRITICAL
DIWO (DO IT WITH OTHERS)

Local inventions & (un)intentional uses
As creative coders tinker with digital technologies, they engage in several processes which include 1) interfacing with digital technologies by exploring their purported boundaries and intentional uses, 2) discovering alternative uses of digital technologies through imitation and improvisation, and 3) producing a work or experiment that consists of a techno-aesthetic intervention. In creative coding practice, the maker is not only setting code in motion but also ‘making sense of’ and ‘making aesthetically pleasing’ their artistic research into the technology. Furthermore, their works and experiments often highlight the ‘gaps’ and ‘fissures’ of digital technologies. Their practice shows how we are always-already in correspondence with digital technologies, and how these correspondences alter them, further changing the ways in which are enacted in the world.

The cabinet aimed to present creative coding not as a bounded practice or community, but one that is constantly shifting and evolving as new technologies emerge. The artifacts that were presented in the cabinet were pooled from this vibrant community of...
makers, and their contributions came with stories about what these artifacts meant to them. It was important not to alienate the broader audience by presenting these tools in a very technical way. As Nadine Wanono points out, working with technological tools, certain analyses “completely forget about the objects’ relation to the cultural, economic, and sociological worlds” (Schneider and Pasqualino, 2014:186). Technological artifacts are often presented as ‘neutral’ tools that offer ‘objective’ solutions. However, as Van Dijk points out, ‘defaults’ are “not just technical but also ideological maneuverings (...) Algorithms, protocols, and defaults profoundly shape the cultural experiences of people active on social media platforms” (as cited in Varis, 2014). As anthropologist Martino Nicoletti notes in his experimental approach to media and technology, each technological artifact contains ‘their own vision of the world’ which represents an ‘impartial eye’ (Schneider and Pasqualino, 2014:167). The collected stories from the creative coding community about the varied (un)intentional uses of these technologies, as well as their experiments within their entanglements and fissures, allowed audiences to explore digital technologies as artifacts that are always-already ‘in the making’.

The cabinet’s broader aim was to remain critical of the purported promises of the digitized society. It was important to situate the various artifacts in the cabinet in ways that were not bound up in the language of ‘Silicon Valley Ideology’, which represents ‘a mix of cybernetics, free market economics, and counter-culture libertarianism’ and sees technological advancement as inherently progressive (Barbrook and Cameron, 1995). In Miller and Slater’s research on the Internet in Trinidad, they argue against a universal notion of ‘the Internet’. The cabinet therefore sought to explore how digital technologies, the discourses and rhetoric that surround them, are also ‘always a local invention by their users’ (as cited in Horst and Miller, 2014:18). Creative coding highlights these ‘local inventions’ when it comes to the (mis)use of digital technology. Furthermore, the technologies needed to be presented in a nuanced light that did not fall into the well-known tropes of techno-phobia or techno-fetishism that had already stigmatized the digital art scene. More than offer the audience a solution to the ways in which digital technologies should coincide with our society, CCU aimed to explore what these technologies and tools represent. In HELLO WORLD!, one sees that within creative coding, “making is a correspondence between maker and material” (Ingold, 2013:xi).

**Between Technic & Aesthetic: Coding & Creativity**

“The tool is—what can the tool do, what are the boundaries there, and what can I do with that? What is it made for and what else can it do? That’s the main question.”

— Sylvain Vriens, creative coder

Art historian and art critic Nicolas Bourriaud states that “It is because social reality constitutes an artifact through and through that we can imagine changing it” (2016:49). Tim Ingold’s ‘thinking through making’ approach aligns with this vision, in which ‘the artifact is the materialization of a thought’ which is never truly finished (2013).
Michael Taussig’s also pronounces that ‘things come alive’ in his description of the death ship or *petroleo*; and they do so “in a continuous, if staggered, series of transformations” (2015:30). The way in which creative coders describe their relationship with digital technologies implies an intimacy with the material within their practice. In their correspondence with the software and hardware, they activate particular outcomes that lead to new ‘ways of seeing’. The material within the practice itself enacts upon the maker a ‘computational thinking’ approach that allows them to discern common patterns and address complex problems, whilst continuously re-evaluating and refining them. In the cabinet, we exhibited the analogue sketchbooks of Frederik Vanhoutte and Woulter Willebrands, who use their notebooks to manually design and test simple prototypes of generative algorithms. Wouter states that “in a way, I am a biocomputer operating within my own invented restrictions.”

The prototypes, sketches and shared code of creative coders showcase the important role of imitation and improvisation in technology as well as art (Ingold, 2007). For example, Richard Sennett comments that the use of open source within the Linux community has made it so that ‘the Linux system is a public craft’. He states that: “The underlying software kernel in Linux code is available to anyone, it can be employed and adapted by anyone; people donate time to improve it” (2008:24). The creative coding community relies on this open source culture, which not only grants them access to all kinds of code generated by their peers, but also to advice on how to create certain effects. This aspect of the community has also made it so that ‘amateurs’ can quickly learn the art of coding, or can create interesting experiments and visuals with code that they don’t have to completely write themselves. This creates a ‘trial and error’ approach, and a willingness to fail, and share those failures with their peers. As such, digital technologies function as emergent artifacts that are always in the process of being reframed.

One of the particularities of the creative coding community is an openness about the code and software that they use to achieve their works. Creative coders
will showcase the remaining mistakes or glitches within their work, and there have been times when the audience shouts suggestions whilst someone tries to fix a bug onstage. In one live-streamed Facebook interview, an artist Mark van Koningsveld repairs a crashing bot, whilst giving information about the backend of his work. This openness and inclusivity is not just for insiders. The artistic approaches that creative coders have to their work approximates Marcos Novak’s notion of transvergence, which ‘advances translinearly by tactics of derailment’. Novak states that “While convergence and divergence contain the hidden assumption that the true (...) is a continuous landmass, transvergence recognizes true statements to be islands in an alien archipelago, sometimes only accessible by leaps, flights, and voyages on vessels of artifice” (as cited in Schneider and Pasqualino, 2014:185). The practitioners I encountered point out that programming is a creative process in itself, requiring an experimental and reflexive approach.

‘Art Up Close’

The exhibition was open to amateurs as well as connoisseurs such as developers, or avid young programmers. It greeted visitors from different demographics; some were local families with small children there for the Culturale Zondag (Cultural Sunday), others were students or young professional couples, others were computer scientists interested in exploring the more ‘creative side’ of their talent. Travelers also came from France, Shanghai, and England for the opportunity to connect with this community. Some had also been doing work and experiments in the field and wanted to connect with other practitioners in the community. The Cabinet of Curiosities offered advanced programmers the opportunity to understand how the works were made, whilst also allowing broader audiences the opportunity interact with the prototypes and tools of creative coders.

As Schneider states, “To exhibit is this: to bring things—or traces of things—from different places and to arrange them in such a way that the visitors have a meaningful experience from it. It is a kind of translation in its double sense of transportation and transformation (…)” (2017:77). In the Cabinet of Curiosities, we were able to showcase, in a reflexive and critical manner, not only the translation that...
took place at the curational level within HELLO WORLD!, but also the translation which always-already takes place in our engagement with digital materials. The framework of the Cabinet of Curiosities allowed the artifacts to ‘do’ certain things within the exhibition and allow a form of material deliberation to take place, beyond discourse. The visible backend of works reframed the audience’s experience of the artworks, and their interaction with various puzzles and interactive prototypes disentangled constructs such as ‘virtual reality’. Some works functioned as interventions—Sabrina Verhage’s Nice To Meet You (2018) uses face recognition to capture and categorize the audience, making them aware of being watched. The Data Flâneur (2018) performance by Cristina Cochior and Ruben van de Ven explored the intricacies of data collection by taking participants on a ‘data walk’ throughout the city. One of the audience members pointed out that for once, he saw ‘happy people talking about tech!’. This reaction mirrored the overall atmosphere of the exhibition, which aimed to render the often intangible characteristics of creative coding tangible, engaging broader audience members with the community of creative coders in the region. The artists themselves were approachable at the opening, often committing to long discussions about their work. One of the staff members at CCU jokingly referred to this as ‘art up close’.

Conclusions
The Cabinet of Curiosities allowed for a constellation of technical descriptions, personal stories, artifacts, data, themes and theories to interact within the exhibit, offering a multimodal and ethnographic perspective on creative coding culture and its insights into digital technologies. The curatorial and research processes that informed the cabinet, as well as the various experiments, technologies and works that intersected within it, shed light on the ruptures, debris, glitches, prototypes, sketches, myths, and malfunctions that are entangled within our digital technologies. The effect is a fracturing of the phantasmagoric aura of interminable progress that surrounds these technologies. Concepts such as ‘neutrality’, ‘objectivity’, ‘community’, ‘agency’, ‘disruption’, and more are unpacked as the complexity and heterogeneity present within them is revealed. Revisiting the Cabinet of Curiosities framework within the context of contemporary digital culture has allowed for ‘strangeness’ and ‘queerness’ to be re-imbued within the ideologies and historicities that surround digital tools and technologies.

Creative coders show that programming, like other crafts, is always in the process of being shaped by collective human action. They additionally showcase the possibility for a critical approach towards the personal and societal use of digital technologies—engaging both the ‘wonder’ and ‘doubt’ of the audience in their interventions, works and experiments. Within their artistic practice, the artists that were showcased at HELLO WORLD! had different ways of finding, exploring and subverting the fissures and entanglements within digital technologies. In doing so, they render them material for artistic practice and artistic research, and contribute to the ever-evolving process of ‘keeping life going’ as it exists in the technology sector. Creative coders share their experiments, research and code in communities centered around the open source movement and welcome amateur participants to join and play. Their work showcases that digital technologies are not a repository of knowledge, nor a deployer of necessarily more
‘efficient’ strategies, but are rather always in correspondence with human and non-human actors. In the case of creative coding, there is a constant challenge to the way we make sense of the world and quantify things through technological tools and processes. This shows that technology is never an ‘end product’ but rather the beginning of a profound search of what it means to be human and how we can understand and function within our current reality.

The media practices and digital tools that creative coders use are also of interest for an engaged digital and multimodal anthropology. One of my aims within this research was to explore how creative coding and digital art practices can offer anthropology methodological tools for research on digital culture. Many of the artists in the exhibition engaged with artistic research to uncover deeper realities and structures within the digital technologies and cultures that make up contemporary life. There is still much to be discovered when it comes to anthropology’s approach to this field as a site which is increasingly responsive, iterative, and fragmented—composed not only of human agents but also non-human entities in the form of bots or machine learning algorithms. This nature of digital technologies seems to point towards the need for more participative and even interventionist strategies, which could shed light on the internal structures and biases of certain technologies.

References


Appendix
Artists & Works of HELLO WORLD!! Exhibition

Jasper van Loenen Neural Cities Arnhem (2017)
Mark van Koningsveld Hokjesbots (2018)
Sabrina Verhage Nice To Meet You (2018)
Cristina Cochior & Ruben van de Ven The Data Flâneur (2018)
Saskie Freeke Entangled Gem no 1, 2 & 3, Perpetual Flow no 1, 2 & 3, Parallel Twist no 1, 2 & 3 (2016-2018)
Wouter Willebrands The Depths of Many Marvelous Moments Seen All at One Time (2013)
Frederik Vanhoutte ISO CCU (2018)
Art van Triest Imperfect Primitives: Sea Plane (2018)
Bram Snijders & Carolien Teunisse DEFRAME RE: (2010)
Ren Yuan Sorting (2018)

Axelle Van Wymsberghe is a social anthropologist currently working at the European Commission’s Joint Research Center on citizen engagement in science and technology policy. She also works as an independent researcher and curator for art institutions in the Netherlands. She received her BA in Cultural Studies & Social Anthropology at the University of Kent, as well as an MA in Arts & Society at Utrecht University. She has won the University of Kent’s Public Engagement Prize in 2017 for her ethnographic film ‘In One Vital Motion’, and was the editor-in-chief of an award-winning magazine in the UK.