State of Queerness Computing

An artistic/activist thought experiment

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1. Introduction

A mosaic is an assemblage of many pieces of different shapes and colours. An image, a picture, composed of a multitude of elements. This is the way in which François Letourneux, lecturer at the University of Montreal (UdeM), has proposed approaching the concepts of homogeneity and heterogeneity. As this visual paradigm suggests, it is not a matter, then, of comparing two aspects of rendering them opposites, but of thinking of them together, as a group, whilst allowing them to retain a certain individual distinctiveness. Based on Jacques Rancière's ideas of the collective and the community,[1] combined with Rafael Lozano-Hemmer's 'connective',[2] I have previously reflected on the 'distinction between shared thought and collective thought' (Félix 2022: 11). In this article, I proposed a communal heterogeneity, with the goal of finding common ground where each person can find an individual identity: 'It is thus the force of the individual, gathered with others, that makes for a powerful community, and not the group as such, as (id)entity' (Félix 2022: 13). This aspect of multiplicity in the individual entity, or the complex in the binary, has been a feature of my own research for a long time. Indeed, it always seems relevant to me to consider the societal aspect as a whole in which each individual is unique. Just as a house defines the way its inhabitants function, it is a case of a global structure in which each of us evolves, while seeking to find our own autonomy.

The modern computer, I think, embodies this same paradigm. A 'large shell' housing a multitude of hardware and software: the hardware as a fixed component,

1 'It is especially through the intellectual power of the individual faced with an exchange, an interactivity (artistic or not), that communal force is created, and not through a mere collective gathering' (Félix 2022: 10f).

2 'Rafael Lozano-Hemmer … refutes the idea of the *collectiv*e, as, in his view, the term instinctively refers to a universalization of thought. Preferring the world "connective" … as [an] "assemblage of disparate realities having neither prior intention nor homogenizing effect" (Félix 2022: 13).

with each material element divided up into a number of other elements that enable the machine to work; and then the software, which consists of a state that can be further modified by its multiple programming components. On the basis of this standard description and definition, everything is possible and conceivable. This is because my interest in digital studies is not as a scientist or a computer technician. Rather, I approach the field looking through an artistic/curatorial and philosophical lens. As I am not concerned solely with the aesthetics produced between us and the daily use we make of computers, my reflections are directed towards the development of a real awareness of this communication link.[3] I do not seek, therefore, to definitely incorporate a digital medium into my approach but rather to create a link with concrete, tangible practice, involving performance and writing. My decentralised way of working is positioned between artistic practice and cultural and visual studies.[4] I thus have a profound belief in multiplicity as an intellectual approach to research. Above all, though, I believe in deconstructing established structures that are arbitrarily assigned to separate disciplines. As a result, this essay is halfway between a non-exhaustive societal case study and an artistic proposal, an in-between that allows us to reflect on our digital practice in relation to the body, whilst proposing new ways of approaching, using and/or applying this interconnection in our daily lives, so that our current environment becomes a way of challenging us both as individuals and as a society.

Based on this observation, let us approach a computer as a societal system in which components are designed and processed to serve a very precise purpose: the functioning of the machine. The hardware would be the skeleton, whereas the software would be, as it were, the way the elements that form the computer behave. Why do I draw this parallel between humans and computers, which seems totally unrealistic? Because, in the past, the human body has often been used as a model for creating new technical tools.[5] The human body is an organism, a system that we are still exploring and do not fully understand, the identification of which often relies on visual categorisation and differentiation. The best-known example is the binary division between the body and the brain.[6] This distinction was reinforced by a method that studies the models of exchange and systems of interactive principles/functions (biological, mechanical, and electronic): cybernetics, a term democratised in 1948

3 I identify myself as a *white* Western woman who questions the relationships of power that *white* Western society has created through political, philosophical, and computational systems. The 'we' used in the text mainly encompasses *white* Western society, which consistently imposes itself on everything that does not fit into its system of thought.

4 And therefore, outside art history with its traditional focus on aesthetics.

5 René Descartes sees in the mechanical movements of an automaton or a clock similarities to a body with a blood system and a heart (Descartes 1987: 46).

6 Descartes's 'I think, therefore I am' (Descartes 1987: 32), is the best example of *cerebrocentrism*, in connection with his interest in automata.

by Norbert Wiener. At the Macy Conferences in the 1940s and 1950s, an interdisciplinary group of researchers came together to discuss the characteristics of thought (related to the intellectual process of the brain) as the very principle of communication. Although, in his landmark work *Cybernetics: Or Control and Communication in the Animal and the Machine*, published in 1948, Wiener speaks of the 'organism' – on the basis of which we might think that the link between the body and the brain had been established – it is pertinent to stress that this analogy, while corporeal, is still predicated on the brain. This further deepened the separation and divide between the body and the brain. Since that time, feminist theorists have done everything they can to move away from this *cerebrocentric* premise, in order to take a holistic view of thinking, seeing the brain, by extension, as components incarnated in a body, and so irrevocably bound to it.[7]

We will deal with the analogy between brain and machine in Chapter 1, *Calculation, Brain-Machine-Analogy and Quantum Computing: Computer and Body/Body and Computer*, in which we will return to the interest of scholars (and of Norbert Wiener in particular) in ideas of exchange between an automated system and a living body. Cybernetics, as a communication science, remains an interesting intellectual vehicle for this essay, since the term, even though it has now fallen into disuse, was a breeding ground for major research projects centred on ideas of what would be called computing from the 1950s onwards. Binary language would become the main foundation of this discipline. Indeed, the functionality of the computers we use every day is based, as we know, on an (operating and storage) system composed of zeros and ones, called bits. The zeros and ones can be represented as the energy in a circuit board (1 would represent ON and 0 OFF). The functionality of this energy is given: it is in either one state or the other. More recently, research in computer science has been focused on the production of quantum computers composed of qubits (quantum bits). So, if in a binary computer each bit has two states (1 and 0), in a quantum computer, qubits can have more: 1 or 0, and all the possibilities between.

By switching between cybernetics, basic computing and quantum computing, my intention in this essay is to question the way in which the analogy between the computer (binary or quantum) and the human body has changed our view of one or the other or both. This will allow us to question the binarity (which seems, in principle, to be so innate) that is applied to all living beings.

These thoughts on revisiting the supposed binarity of living beings will be developed in Chapter 2, *Body, Multiplicity and Non-binarity for Living Beings: Flux and Queer/Queer and Flux*, through the prism of flux and, more specifically, *Queer Feminist Durationality*. This is a term coined by Amelia Jones that allows us to redefine other possi-

7 Feminist theorists do in fact have a rallying point – while their approaches to the body vary from author to the author, it is always inherently situated as a physical entity.

bilities of seeing ourselves and each other through the surrounding world (digital or not). Then, to conclude, Chapter 3, *Artistic Positions of Body Identities in Computing: Performativity and Language/Language and Performativity*, will suggest a visual and mental link between flux and the body by drawing on artistic examples and artistic writing. Let us reflect on the following questions: Could channelling our thinking through the prism of a quantum computer change the way we see the living world, starting with our own bodies? Doesn't experimenting with our environment condition and shape our vision of ourselves?

2. Calculation, Brain-Machine-Analogy and Quantum Computing. Computer and Body/Body and Computer

In his paper *Penser l'automaticité au seuil du numérique* (Thoughts on Automaticity on the Threshold of the Digital Age), David Bates returns to the origins of robots and cybernetics. He points out that researchers like W. Ross Ashby and Donald Hebb had a particular interest in the malleability of the human brain, as opposed to the machines' automatisms. Although these cyberneticists wondered how such a complex brain could be embodied in a machine, it is essential to know that while cybernetics concentrates mainly on aspects of communication (feedback) of living bodies engaging with machines, it does so through phenomenological approaches. So, this legacy of thought further cements the idea that the brain is intimately linked to the physical and thus corporeal interactions of a living body. For Norbert Wiener, this phenomenological relationship shows that there are encounters between our own body and our environment, and he sees both entities as chaotic. Interestingly, Wiener eschews a Newtonian view of physics – which regards the world as an organised space – and approaches cybernetics with a more modern physical perspective (based on relativity and/or quantum physics) and the idea that the world, and all living beings, should be seen as variable and chaotic. According to Wiener, living beings (bodies directed by a brain) search unceasingly for a constant and stable space mediating between themselves and their environment. This is why communication science is so important for cybernetics.

Although usage of the term cybernetics declined throughout the 1950s, the field of computing became an important part of applied research. If the concept of interactivity (as *communication between*) remains paramount, the body as a communicating organism seems to give way to the brain as the only organ suitable for communication. In her paper on interactivity, Catherine Guéneau makes the following point:

> The analogy man/machine is at the heart of future science; upon developing the first calculators, John von Neumann explicitly refers to them as *electronic brain[s]*.

> The binary code of software programmes is directly inspired by the study of the human nervous system. (Guéneau 2005: 118, translated)

So, there we have it. Here, Wiener's 'organism' as a potential instrument of communication is replaced by a brain that then turns digital and is entirely dedicated to data sorting. As a result, it loses its infinite supply of communicative possibilities, which are reduced to a 1 and 0, an ON and OFF, an ending and a binary system. Indeed, the fact that in his *The Computer and the Brain* – written just before his death in 1957 – Von Neumann uses the terminology of nervous impulses to draw a parallel between the brain and the binarity of computer language shows how keen he was to create an analogy between the brain's unique organ and computers:

> I want to come now to the digital character of this mechanism. It is clear that one can consider the nervous impulses as markers (with two values) … the absence of an impulse represents one value (the binary number 0, let's say) and the presence of an impulse represents the other value (the binary number 1). (Guéneau 2005: 118–19, translated)[8]

While cybernetics made use of the analogy between the nervous system of organisms and the binary language of digital computers and created theories around it,[9] computer science engineered a shift in which the organic body gives way entirely to the brain, and the phenomenological approach (and that of quantum physics) is replaced by a binary vision oriented towards data storage and processing. Indeed, with regard to the Turing machine, Bates (2014: 36, translated) maintains that 'the binary logic of a digital computer was quickly applied to the question of the synaptic connectivity of the brain'. I would like to ask a provocative question: Doesn't the act of reducing the multiplicity of the brain and the body to a binary option constitute a failure? To reduce the brain to an automated system is to diminish it both terminologically and conceptually. Shifting from a concept of multiplicity to a binary idea, even metaphorically speaking, changes the way we visualise the brain and how we approach it. While cybernetics saw a parallel between the internal workings of a digital machine and a living organism/body endowed with a phenomenological and variable way of communicating, computer science views it in terms of a brain whose relationship with itself and with its environment is only binary.

How have the assimilation of these ideas, this imaging and the physical nature of this process impacted the way in which we see ourselves and our environment? How do we view our bodies if we assign them in such a binary manner to a machine? If the process has indeed been set up in the direction human → machine, this allows us to

8 Guéneau is quoting from Von Neumann's 'L'ordinateur et le cerveau', published in Daniel Bougnoux (Ed.), *Sciences de l'information et de la communication* (Paris : Larousse : 1993) : 458.

9 See the chapter *Computing Machines and the Nervous System* in Wiener's *Cybernetics: Or Control and Communication in the Animal and the Machine*.

see that we initially think of or approach the human body as a binary system, which we then assign to a machine. Is it not possible, then, to reverse this connection, in order to consider what the digital machine can teach us of/about ourselves, as body (not just as brain) and as multiple (not just binary)?

Cybernetics seems to have dreamed of a science based on modern physics (relativity and/or quantum) and phenomenology. Could one then make the connection between these strands of thought dating from the 1950s and the emergence of the current quantum computer (which still has a utopian quality overall)? Does the quantum computer not embody this desire of cyberneticists: a multiple and non-binary means of knowledge? From a philosophical and artistic point of view, quantum computing opens up new ideas about multiplicity and non-binarity in the digital environment (and even on a wider scale). In practical terms, quantum computers are equipped with processors and other new elements allowing different information to be managed simultaneously (also called quantum superposition), an impossible action for a classic computer, as its binarity only allows it to manage a single piece of information at a time. The quantum computer thus has much more computing power and a much faster execution time. As previously stated, I am no technician and I do not pretend to understand such a complex process, one that the world's largest research teams are working on. Although my interest in this area ought to be dampened by some of the abstract concepts involved – for fear of succumbing to *intellectual imposture*[10] – it seems entirely normal that as an artist-researcher in digital and cultural studies, I may question quantum concepts and integrate them into my reflections on society, by virtue of the fact that quantum physics is part of the world in and around us and embodies, for me, a greater possibility of mixing certainties.[11] From the point of view of Western society, which has, on the whole, binarized the human body (male/female, heterosexual/homosexual etc.) and public and private space (separate toilets according to biological gender, pink things for girls and blue things for boys, etc.), the possibility of superposed states has real potential to engender action and change.

In fact, this quantum process never creates a third state, but a true multiplicity of several states, which exist simultaneously. This multiple state of superposition is known as *coherent* when it remains in this condition for a given time. However, if it is measured against or interacts with its immediate environment, it experiences *decoherence* to become a classic binary state that can be identified and formulated. Returning to the example in the introduction, it once again becomes a 1 or a 0, whereas

10 This term obviously refers ironically to Alan Sokal and Jean Bricmont's *Intellectual Impostures* published in English in 1998.

11 And it seems to me that it is for these reasons of fruitful exchange between physics and art that the artistic residence ARTS · AT · CERN was created: https://arts.cern/ (accessed 15 March 2022).

in a quantum state, it was both 1 and 0, as well as all the in-between states. So, the two processes, bits and qubits, are different, not in their end point, which remains binary, but in their transition period. Although the bits always have the same state (1 or 0), the qubits' display of superposition makes it possible for them to be in a relationship of multiple states, as though this indeterminacy allowed continuous movement and the possibility of flux.

So, superposition is linked to flux, since as soon as the qubits' state is measured or interacts with its immediate environment, it loses its multiplicity and turns into bits, becoming binary. Let us now apply this idea to a societal system: a person who defines themself as queer could live out their multiplicity in a space that allows constant flux, in accordance with their internal flux. So, in a context and an environment where they/we would face stigmatisation, this external 'measure' would bring decoherence and binarity. This relationship of superposition to flux has, in my opinion, a significant impact from a societal point of view, because it allows us to reflect on the way flux, in or around a queer being, can be blocked by the simple fact of being measured or confronted by their environment – an environment that is rapidly becoming violent and conditioned by a need for *measurable identity.* A day-to-day environment filled with distinctive elements that are determined. An environment that is often static. An environment containing binary digital machines. This gives rise to the following thought: when we find ourselves facing a computer (in communication mode), do we wish to see the binarity of a body, taken as an example of theoretical and practical elaboration, or do we want to encounter a simultaneous multiplicity that allows us to be everything at once?

3. Body, Multiplicity and Non-binarity for Living Beings. Flux and Queer/Queer and Flux

This back and forth, this movement between what we see, what we experience of the world and our sense of our own bodies can help develop an awareness of feminist and/or queer thinking, approaches that allow us to construct a non-hegemonic, non-patriarchal view, enabling us to simply see *differently*. This implies a transformation, a future that is constantly changing because the way of seeing changes depending on our environment. Queerness is undeniably inseparable from the look, the transformation and above all from the flux – as a continuous movement that is never still. In her work *Seeing Differently: A History and Theory of Identification and Visual Arts* (2012), Amelia Jones warns us about the fixed nature of identity in our Western society. This inertia seems to reflect the very structure of a society based on a binary system, in which a dominant person constructs him/herself as an individual in opposition to an *other* – an idea that runs from Hegel to Descartes to Merleau-Ponty:

> I will note as well the interrelation between perspectival models of seeing and making with early modern philosophies of the subject, from Descartes to Kant and Hegel, the latter of whose theory of subjectivity in the model of the master/slave dialectic was developed in twentieth-century neo-Hegelian theory to crystallize the binary at the base of modern European thought. […] I also trace the political codification of the master/slave model of subjectification of the 1940s and 1950s in the identity theory of Simone de Beauvoir and Frantz Fanon, both working in close proximity with Sartre and Merleau-Ponty. (Jones 2012: 4)

This relationship of binarity is thus integrated into the philosophy of our Western society, blocking/fixing any entity (external to us) into a state, an essence, a fetishism that cannot change anymore (that, in any case, this societal structure does not wish to see changed). In response to this Western model that forces everything to be confrontational, antagonistic, and contradictory, Jones suggests that the ability to *see differently* lies in our visual engagement with and awareness of the ideological construct around us. It is a way of thinking about ourselves in a more self-reflective way, including ourselves in relationship with others, by making the boundaries of the space between porous.[12] Here, she shows that this empowerment is constituted as a mode of thinking that she calls *Queer Feminist Durationality*, which breaks with and thwarts the binary, patriarchal hegemony by preserving an intersubjectivity:

> Queer Feminist Durationality is thus a term that itself is performative and temporal, specifically offered as a strategy of this moment and time, and is not intended as a fixed historical or hermeneutic prescription for what 'should' be done. Queer feminist durationality is a potential, an idea; as I articulate it here, it indicates the potential for doing something with artworks though interpretation that, I want to argue, reactivates them by returning them to process and embodiment – linking the interpreting body of the present with the bodies referenced or performed in the past as the work of art. (Jones 2012: 174)

Queer Feminist Durationality is thus a process linked to time and materiality, like an interrelational buffer zone affecting the viewer and the viewed, which are mutually reversible positions, and encouraging thought about what we see, feel, live, and experience around us, whilst changing us in a way that is inherent and fluid. Fluid because change is never radical and definitive – it always remains open to movement. This concept thus makes it possible to weaken, or even destroy, the hegemony of a progressive evolution linked to a relationship with causality, by integrating the

12 Let's entertain the thought that it is perhaps this in-between state, this way of communicating that so many cyberneticists were looking for. However, it is impossible to think this way without deconstructing the walls of a dualist and colonial philosophy.

idea of movement. If the aim of the work is indeed to *see differently* whilst questioning the relationships tied in with the identification of the (surveying) viewer with the viewed, the exploration that Jones suggests allows us to disassociate the relationship of temporal finality that is linked with the definition of things (as mentioned previously, all of the Western ways of seeing have been tied up with a process of identifying one's environment, for the sake of dominating it more effectively), by proposing a way of viewing that changes the viewer. To change one's way of looking at something is also to understand how one's perspective has been conditioned by a dominant system, to allow ourselves *to understand how power works*. Jones makes the following appeal to us, calling on us to consider changing our way of seeing because it offers us the possibility of being transformed,[13] over time, by a flux, a movement:

> Queer is that which by definition troubles the idea that we can know what we see and installs durationality, and its corollary qualities of undecidability and unknowability, at the heart of meaning. We could even argue that *queer is that which indicates the impossibility of a subject or a meaning staying still*, in one determinable place. (Jones 2012: 174f.)

Non-binarity, movement, flux and time are thus at the heart of what the term queer embodies. In her work, Jones proposes approaching it by starting with the physical materiality of works of art, by experimenting with a queer transformation offered to our body. *Self-Portrait/Nursing* (2004)[14] by the artist Cathy Opie is the latest example of work that Jones presents.[15] This image brings us back to a portrait of a Madonna and Child. We see a bare-breasted woman, feeding a child who looks to be between two and three years old. The child has blonde hair, while the mother's is short and brown; the pair stand in front of a thick ochre curtain, with an arabesque-style print. According to Jones, the photograph is imbued with what Barthes calls the *punctum*, a kind of spark that seizes and unsettles the viewing public, with the mother's tattoos and the word 'Pervert' slashed into her skin a striking injunction signifying a non-normative gender in the eyes of contemporary patriarchal society. Jones invites us to see this photograph as an appeal from the artist, suggesting that 'we can identify or disidentify but either way our own relationship to sexuality, to the "signs" gender society imposes or proposes, is continually opened up as we engage with these works' (Jones 2012: 210). Lastly, she maintains that the practice of *Queer Feminist Durationality* is evident in Opie's work in as much as 'representation does not secure the

13 'A Two Voices Talks with Amelia Jones', EDHEA, 16 January 2021. https://www.facebook.com/edhea.valais/videos/462696301397292/?__so__=channel_tab&__rv__=all_videos_card (accessed 15 March 2022).

14 https://www.guggenheim.org/artwork/14666 (accessed 10 March 2022).

15 In this example, Jones (2012: 203) recalls that this single image 'telescopes us backward in time to other moments, other images, other bodies, other politics'.

meaning of the subject' (Jones 2012: 211). Thus, if the encounter with a *physical* work of art can disturb the binary view of our body, it also seems to me that this type of encounter could happen in our everyday life in the West, conditioned as it is by our use of digital technologies. In effect, this super-connected situation suggests new ways of envisaging ourselves, of constructing our own body. Ian Heisters's works eloquently pick up on this point.[16] Two of his video projects are an invitation to see the ambiguity that exists between the representation of a body and its veracity (*Human ID*, 2020–21) and the dissonance between a body and the gestures that no longer seem to belong to it (*Gestures #2-#4*, 2018).

These are two works that are, I believe, imbued with a practical *Queer Feminist Durationality* as it relates to the transformation of the body that we are looking at (using a deepfake AI process) and the disappearance of our own. A reversal takes place through movement. Standing in front of a screen on which our gestures and our bodies are used in fluid ways, without having any control over this, can be disturbing for an individual who never questions the hegemony of his/her body and its complete dominance over his/her environment. As discussed above, our body is constructed (actively or passively) through our relationship with the world. And if the world around us is fluid, we should let this fluidity change our body. If all these movements/exchanges, between the viewer and the digital surroundings, are situated, naturally, in a context that influences them, the computer can, to a great extent, become a means of creating change and challenging the binary hegemony of the body, allowing a *Queer Feminist Durationality* to be integrated in a more abstract manner. Here, it seems essential to me to quote a passage from Jones's work, in which the author makes particular reference to the connection between the subject and object through the writings of Henri Bergson:

> Here are external images, then my body, and lastly, the changes brought about by my body in the surrounding images. I see plainly how external images influence the image that I call my body: they transmit movement to it. And I also see how this body influences external images: it gives back movement to them. My body is, then, in the aggregate of the material world, an image which acts like other images, receiving and giving back movement, with, perhaps, this difference only, that my body appears to choose, within certain limits, the matter in which it shall restore what it shall receive. (Jones 2012: 192)[17]

What Jones asserts when she quotes Bergson is the performative link in our relationship to the world – the crucial link between the object/materiality and the viewer or even between the object/materiality and the viewed. So, a performativity takes place

16 https://heisters.co/# (accessed 15 March 2022).

17 Quotation from Henry Bergson, *Matter and Memory*, trans. Nancy Margaret Paul and W. Scott Palmer (1896; New York: Zone Books 2002): 19.

between the viewer and the viewed. This is a very long way from an appropriation that would only happen in one direction and where domination would be the driving force behind this link. Here change takes place in/within/through each of the parties. It involves a real process of exchange in the act of transformation. To follow up on Bergson's quotation, it seems to me that a more abstract example (based not only on artworks showing anthropomorphic entities, as in the works cited above) would further enhance the human potential.[18] I believe profoundly that this abstract idea that we can have of the human body is anchored in our connection to new technologies. Nevertheless, it is important to highlight that the democratisation of the computer has accelerated mainly in countries with significant financial clout. Proceeding from this question of material dominance (tied to the accessibility of computers) and of how a body is constructed through its direct environment (digital in this case), might we not speculate that in applying the concept of *Queer Feminist Durationality* to computers, we could thus make ourselves aware of the complex organisation of our own body, be surprised, be transformed by its flux,[19] just as we transform it through the performativity of our interactions?[20] Let us speculate further … what if this computer did not furnish us with a binary image of an abstract body (in a stable state of arrested motion), but rather a plural active, performative image, a way of thinking about the queerness of our body through the fluidity of multiplicity?

4. Artistic Positions of Body Identities in (Quantum) Computing. Performativity and Coding/Coding and Performativity

Given that this possibility of transformation is realised through performativity (an active process of *doing* through experimentation), I would like to put forward some final thoughts from a crucial article by Inke Arns on the performativity of coding and how it can initiate a process of transformation:

> Accordingly, when I speak of the performativity of code, I mean that this performativity is not to be understood as a purely technical performativity, i.e., it does not only happen in the context of a closed technical system, but affects the realm of the aesthetic, political and social. Program code is characterised by the fact that

18 On this point, Jones (2012: 183) reminds us that 'I would like to hang onto one aspect of this theory, arguing that a presentation of bodily forms, whether abstracted or explicit, might shift larger political structures and assumptions about gendered experience, enacting them in ways than can be experienced as non-binary'.

19 Flux is characterised by Jones as the very condition of being queer.

20 Here it is worth recalling Bergson's words cited above: 'I see plainly how external images influence the image that I call my body: they transmit movement to it. And I also see how this body influences external images: it gives back movement to them' (Jones 2012: 12).

> here 'saying' coincides with 'doing'. Code as an effective speech act is not a description or a representation of something, but, on the contrary, it directly affects, and literally sets in motion, or even 'kills', a process. (Arns 2005: 7)

Thus, the performativity of code is a way of establishing creative and political agency, not in its content, but in the act of performance. Of course, if we focus on the result of the code using a binary/classic or a quantum computer, the results will in all probability look the same.[21] Nevertheless, as previously stated, it is not the outcome that matters in my approach but rather the process of potential and speculative performativity inherent in the interrelation that our body experiences with the computer:

> *AnUnuneumoun·eun-npossible performance through programming language that we usetouttoustoutetoutestoustetoustes. Thinkingthelelalolulialiflux is wanting to keep, in us, anununeumoun·eun-na superposition of multiple states, because without flux, binarity returns…*
> *Keeping thelelalolulialiflux open is keeping the potentialities, thelelalolulialipossible variants. Keeping thelelalolulialiflux open is also keeping thelelalolulialilinks to words, opening the boxes, bringing about thelelalolulialisurprising, thelelalolulialiunusual, the chaos – but a link – in the systemic machine. Keeping thelelalolulialiflux open, is becoming multiple – simultaneously*.[22]

If the quantum computer would be a utopia from a practical point of view,[23] we are left with the notion: thinking and performativity in dialogue with a classic computer composed of a binary circuit. A relationship that can and must be deconstructed by the simple possibility/speculation of a computational plurality (which I like to call *queerness computing*), with the aim of transforming ourselves. A kind of reversal. Following on from this 'utopian' statement, the performativity of code, standing/acting with a system of *queerness computing*, might allow us to think about ourselves as queer bodies rather than as bodies constructed and made binary by normative cultural rationales, of which computing is a part. And because the computer was initially created through the framework of the binary human body (which I would call an immobile analogy/metaphor), it seems to me that the time has come to use the idea of the quantum computer (even if it is utopian) to start rethinking our body and give it back multiple, queer characteristics.

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21 As we have seen in the introduction, certain calculations are impossible for a binary computer. Besides, in a quantum computer, the processors are not identical, and it has much more computing power and a faster execution time than a binary computer.

22 Inspired by and loosely based on the work of Legacy Russell (*Glitch Feminism: A Manifesto*) and Svetlana Boym (*Nostalgic Technology: Notes for an Off-modern Manifesto*).

23 https://www.technologyreview.com/2022/03/28/1048355/quantum-computing-has-a-hype-problem/ (accessed 1 April 2022).

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