RESEARCH OUTPUTS / RÉSULTATS DE RECHERCHE

Re-imagining a "we" beyond the gathering of reductions.

Rouvroy, Antoinette; Athanasiadou, Lila; Klumbyte, Goda

Link to publication

Interview

Re-Imagining a 'We' Beyond the Gathering of Reductions: Propositions for the Three Ecologies

Antoinette Rouvroy, Lila Athanasiadou and Goda Klumbyté

The first shorter version of the interview took place in a discord server. The current edited version has been further elaborated by Antoinette Rouvroy.

Lila Athanasiadou (LA): Hello Antoinette! Thank you for agreeing to talk to us!

Goda Klumbytė (GK): Hello Antoinette! Wonderful to 'meet' in this discord server.

Antoinette Rouvroy (AR): Hello Lila, hello Goda!

GK: Again, thank you very much for agreeing to our interview and experimental format.

AR: It's a pleasure, and an experiment.

LA: We can start with a small introduction so you know who hides behind our avatars 👀

GK: Yes, let's do some disclosure ☺

AR: 🤓

LA: I am Lila, a cultural worker and lecturer in social practices at the Willem de Kooning Academy in Rotterdam. I have a background in architecture and urban design, and I am quite entangled in housing and labour rights activism. I have been interested in the ways our subjectivities are produced and structured as a result of both linguistic codes and spatial gestures. Also, I have been looking into technological determinism within smart cities design and applications and especially the kind of subject they reproduce.

AR: Nice to meet you, Lila!

LA: 👍

GK: I am Goda Klumbyte, currently a researcher at the University of Kassel in Germany, in the research group Gender/Diversity in Informatics Systems. I'm working mostly on algorithmic bias, feminist science and technology studies and posthuman/new materialist approaches to tech. I'm in my last year of a PhD on machine learning epistemologies and systems design.

AR: Nice to meet you too, Goda. 🏵

GK: 🏵

AR: I'm Antoinette, interdisciplinary (and unfortunately quite undisciplined) lawyer. I am a researcher and professor at the university of Namur, mostly interested in evolving normativities at the interface of legal theory and philosophy, sciences and technology studies, Foucauldian governmentality, Deleuze and Guattari… etcetera.

GK+LA: 👏👏💯

LA: We will poke some of these interfaces today.

GK: Just a note: Lila and I actually met at a Deleuze seminar, led by Rosi Braidotti and Rick Dolphijn, and referred to your work extensively in collaborative writing that came out of that seminar. Today we thought we could try and tease out more affirmative politics and arrive at some kind of propositional format. Based on Guattari's *Three Ecologies*, and arguments that are found in the intersection of your work with that of Stiegler's we will pose short questions and try to find spaces for lines of flight in the infrastructural/individual, social and global/environmental realm.

AR: Excellent! wow, this is great and intimidating! I am a fan of Rosi Braidotti myself.

LA: ☺

GK: Something that interests us is how we can update the dynamics within the three ecologies for

the digital age, what tweaks and changes we need, and how we can create more affirmative politics and propositions alongside critique.

Environmental ecology: countering exhaustion
Maybe we can start with the environmental ecology, and specifically the digital-material binary pair or dichotomy that seems to haunt the relationships within and to this ecology. In a recent interview you called for treating data a waste product that exhausts the planet's resources and minerals to support the growing need for sensor-building, cloud computing and storage power.[1] You also suggested that 'big data does not allow itself to be disturbed by the materiality of the word'.[2] So there seems to be a complex relation between the digital and the material when it comes to big data. Big data is completely dependent on worldly materialities, from fibre cables to energy resources, while it also encroaches on materiality, colonising and extracting value. We wonder whether and how we could understand the material-digital as non-oppositional but rather as entangled, overlapping? And if you think it important to break this oppositional thinking to begin with, would the focus on data as waste-product help with that?

AR: Ok, I'll try to respond. Suggesting the possibility to think of digital data as waste was meant as a provocation to challenge the currently prevailing dataism: the central dogma of both data behaviourism and digital capitalism. The metaphor of the computational turn evokes a certain transformation of the linguistic turn. The unit of perception, of understanding the world is no longer the sentence, the word, the sign – always bearers of meaning – but data, individually a-significant but computable fragments, a proliferation rather than a transcription of the world. That's what I call data behaviourism. As default automated data collection and storage no longer requires any conscious effort, archival classification or curation, data storage has become cheaper than curation, erasure or depletion. In this regard, data is comparable to toxic waste: getting rid of it is more expensive than storing it. Digital sobriety

has become more costly than digital overconsumption. Most of the time, data is collected and stored by default not because data as such conveys valuable meaning. In digital capitalism, meaning would rather be conceived as an impairment, because meaning presupposes a referentiality 'attaching' data to its context, while digital capitalism pursues an acceleration of flows of deterritorialised digital signals, meaningless yet prone to be correlated with other individually meaningless data, so as to produce predictive patterns or clusters.

In the era of big data, it is the quantity and speed of data rather than the density of information of each piece of data that matters. Jean Baudrillard, in one of his dazzling affirmations, said that 'we are in a universe where there is more and more information, and less and less meaning'.[3] Among the different hypotheses explaining this state of affairs, Baudrillard refers to what he calls Claude Shannon's hypothesis that, being a purely instrumental, technical medium,

> information has nothing to do with meaning. It is something else, an operational model of another order, external to meaning and to the circulation of meaning itself … A kind of code, as the genetic code can be: it is what it is, it works like that, meaning is something else that comes after in a way … In this case there would be simply no significant relation between the inflation of information and the deflation of the meaning.[4]

But in fact, as Erich Hörl suggested, machine learning algorithms are indeed generative of a novel kind of 'techno-ecological' meaning (semiosis); they produce a different, 'alien' meaning, which is no longer attested or attestable alphabetically by a transcendental subject of reading and writing.[5] Or, as Jean-Louis Déotte puts it: 'the digital arch-writing … in a certain way, starts only from itself to meet only its effects, because it is an elementary language that no speaker can speak.'[6]

The proliferation of data, or 'signaletic matter', doesn't contribute at all to what Bernard Stiegler

called the epiphylogenetic milieu. Instead of a trans-generational sedimentation (the inherited psychic representations, or forms, transmitted through the symbolic milieu, through language, through symbolic materials in general, objects, icons, all forms of memory supports), non-selective data proliferation, as over-abundance of digital a-signifying signals, or raw data, amounts to a de-sedimentation of primary, secondary and tertiary retentions in a cybernetic perspective according to which the biological, social and symbolic dimensions of existence would only be apprehended as pure computable data flows, updated in real time.[7] This production of life itself as eminently plastic, re-combinable data flows, as exorganic computation overcoming/leveraging emergences, conceived in and reinforcing an imaginary of infinite growth, of infinite acceleration, while 'freeing' life from the forms in which constantly confine it, is in fact exhausting/consuming/disinvesting the future. As Bernard Stiegler puts it:

> With planetary reticulation, a threshold has been crossed: the biosphere itself, in totality, has become a hypercomplex functional exorganism, and in so doing it is reaching its anthropic limit in the form of the systemic exhaustion of all singularities through informational calculation placed in the service of making certain that there are gains to be had for speculators who thus become disinvestors. This disinvestment, which is the accomplishment of nihilism as such, consists in prohibiting all neganthropic bifurcations that would reintroduce uncertainty with respect to such gains.[8]

In a way, this rejoins Ray Brassier's critique of Nick Land's acceleratinionist nihilism:[9] 'When you accelerate, your ability to accelerate is limited by material constraints, but there must also be a transcendental speed limit at some point. The ultimate limit … is death, or cosmic schizophrenia. It is the ultimate horizon.'[10] I wish to add that, of course, the digital economy appears very immaterial, and the 'imperative of innovation' that is now at the core of the agenda of European and other institutions

obfuscates the materiality of the extractivism that it presupposes.[11] For example, the exploitation of forced labour in Foxconn and other factories, the exploitation of children in coltan mines in Congo, and so on. The digital economy is a cannibalistic economy. 'Data as waste' is thus also a provocation to think beyond the increasingly dominant assumption in the post-industrial western world that 'current and future economic growth and societal well-being is increasingly based on the value created by data'.[12] Dataism carries the sense that it has become possible to translate the virtual into surplus value by the grace of an algorithmic semiosis generating immediately and automatically actionable operational information without the intervention of human perception, imagination or understanding. Not factories, not workers, not even knowledge: *data* – rendered amnesic of all conditions of production (including the heavily material logistics involved) – is perceived as the privileged site of value production.
LA: The point you're making is spot-on! 🧑‍🦰 💯 Could you elaborate on that complex transformation further?
AR: In his visionary 'Postscript on the Societies of Control', Gilles Deleuze rightfully observed that the advent of computers and cybernetics was not only a technological revolution but also a transformation of capitalism. [13] It represented a shift from a capitalism dedicated to production to a capitalism having relegated production to the periphery of the Third World, and therefore a capitalism repurposed to buy shares, sell services, assemble components produced elsewhere, advertise and sell imported products. To western post-industrial capitalism, data – as that which allows 'smarter marketing' and other speculative (rather than productive) practices – is indeed what creates value. What change would it make if we started to think of data as waste rather than as an asset, based on the negative externalities generated by the digital economy? Would it allow for a bifurcation away from toxic consumerism towards the needed sobriety? Would it help us recover the intelligence of limitations?

The excessive proliferation and expansion of the digital universe, corresponds, in the techno-semio-logical stratum, to what Patrick Tort recently referred to as 'hypertelia' in the organic stratum:

> the development of an anatomical part or character beyond its optimal level of usefulness [such as the] giant antlers of the fossil deer Megaloceros giganteus, hypertrophied upper canines of ancient 'sabre-toothed tigers', disproportionate tails of peacocks … such structures, by continuing to grow much more than their initial function required, would have become 'monstrous' and harmful to their holders through a disabling growth inertia, maladaptation, and tendency to be fatal to the survival of the species during a subsequent change in life conditions.[14]

This overload of appearance, endowing them with symbolic assets in sexual selection, exposed their holders to obvious survival disadvantages. In a similar vein, the excessive proliferation of digital data, or what I call, in the techno-semiological stratum, digital pheromones, doesn't ensure any survival advantage for our species. Of course, in digital neoliberalism (or algorithmic governmentality – which is but the last recombination of capitalism), homo economicus gives way to homo numericus, as injunctions to maximise production-performance and consumption-enjoyment are supplemented or even superseded by the injunction to of maximise digital human capital or self-branding. [15] Individual performances are evaluated against hyper-mobile metrics, varying according to the behaviours of all others. The algorithmic regime intoxicates individuals with an insatiable thirst for credit. Individual self-branding is the hollowed-out personology in anomic digital capitalism where (in)dividuals are thrown in absolute competition at the quasi-molecular scale of the digital pheromone.[16]

You see then that whenever normative, institutional systems and their stable, recurrent, recognisable patterns (what Foucault called hegemony) give way to apparently endogenous and self-learning ordering systems.[17] In the absence of a common frame of reference, strategies of power mutate in (at least) two directions. The absence of common referentiality attests both to an apparent emancipation from the yokes of stable and recurrent norms (always inadequate to the spontaneous emergences in the world) and to a drastic de-semiotisation or digital abstraction (as digital data is rendered amnesic of the organic, material, cultural compositional plane from which they proliferate). This is what emancipates algorithmic governmentality, and the vectorialist class that thrives on it, from both the institutional, legal, and social-normative constraints, and from the limitations imposed by organic life's intelligence of limits (negentropic organic regulation). Algorithmic governmentality is instrumental to the infinitisation of capitalism: 'data science fiction' nourishes fantasies of transformation of the perspective of extinction into a perspective infinite growth. Under the guise of making power immanent, techno-feudal corporations are taking the lead, as Yanis Varoufakis recently argued.[18] Whereas, on the side of those called users and consumers – whose possibility to act in their capacity of citizens, contributing with others to deliberative processes about matters relevant to the common good irreducible to the mere juxtaposition of individual interests, is radically circumvented – their strategies of power consists in maximising their capacity to be known, to attract 'followers', and therefore to impose themselves numerically, as nodes in the network's mesh.[19]

GK: 📖 I wish there was a nodding emoji I could use here. 📎

AR: When it comes to big data and the materiality of the world, I meant that the technological ideology of big data includes the pretensions of 'exhaustion' (big data as a huge statistical database where n=all), and the illusion that, if one has enough data, one does not need to interrogate the world in its materiality to generate 'reliability' or 'credit' (rather than knowledge).

GK: Yes I see, almost as if data is a stand-in for or equivalent to materiality.

AR: Yes, but nor does it stand in: digital data is no longer understood, perceived or used as secondary instances representing or conveying pre-existing entities (subjects, objects, truths, activities, intentions, relations of forces or domination); they are not 'signifiers' anymore. They are not treated as 'signs' or 'stigmata', or 'evidence', but as purely decontextualised , dehistoricised, a-semantic but computable signals, dispensing with our need to confront the world and its inhabitants through sensory relationships, or even perceptual relationships. This digital stratum is rather a matter of what Baudrillard called 'simulation processes':

> The internal logic of these procedures (statistics, probabilities, 'operational cybernetics') is certainly rigorous and 'scientific', yet somewhere along the line it doesn't stick to anything, it's a fabulous fiction whose refraction index in a reality (true or false) is zero. This is even what makes these models strong, but it is also what leaves them with no truth other than that of paranoid projection tests of a caste, or a group, which dreams of a miraculous adequacy of reality to their models, and thus of an absolute manipulation.[20]

LA: They get a life of their own, often appear more valid than real life in some ways.

AR: Yes! 💯 It's really a regime of indistinction between signals and things, but where things as things disappear and are replaced by speculative patterns or clusters. In a way, the constantly proliferating digital universe appears like a map that produces its own territory (a purely speculative territory of risks and opportunities).

LA: Do you think that this false imagery of digital as immaterial posited against materiality of nature and real life is somehow what also prevents us from operating differently in the environmental ecology? There is an argument advocated by Benjamin Bratton that the power of the digital allows us to enact certain epistemological shifts and enables us

to think of the physical environment not as an object to be observed or manipulated but as a co-designer. Do you think there is potential to this argument?[21]

AR: Yes, I would say that the way to hell is paved with good abstractions! It is hard not to perceive the naïve realism of those who believe that crunching data provides direct, unmediated, objective access to the world in itself. Jacques Lacan's formula that 'Les non-dupes errent' is perfectly suited to that 'ideology of big data' (or algorithmic realism) assuming an indistinction between the world and data proliferating from the world, and denying that reality is always structured by symbolic fiction.

The 'alien thinking' of machines, however, as Luciana Parisi calls it, may offer another perspective, from unprecedented angles, on the universe, on emergences, or on discrete regularities that are only observable on large numbers… the new possibilities opened by this 'alien thinking' must be preserved from the new kind of extractivism (the transformation of the virtual into surplus value) allowed in digital capitalism.[22] For the moment, the virtual (in the Deleuzian sense) is the new target of extractivism, whereas it could have been and should become a preserve for… imagination, creation, collective fabulation, a heterotopic site of openness to what is not any more or not yet present, a site of investment – rather than over-consumption – for the sake of the common over time. After all, machine learning algorithms metabolise the world in small, discrete, abstract units, which they recompose in their own way, with an automatic curiosity that is not tamed by anything but their objective functions, which reflect the particular sectoral rationalities (of the interests) they serve.[23] To a certain extent, they remain much too 'human' but in a way that is mostly obfuscated, as they also tend to absolve human actors – those at the service of whom these optimisation machines function – from assuming responsibility for the negative externalities and costs of their highly speculative practices, which are to be suffered by actual and future others. The reason for this is that, because the algorithmic decision imposes itself as the necessary

result of computation performed in a black box, rather than as an arbitrary choice or option, human agency appears resorbed in the hidden layers of neural networks. Failure to question the finalities (or objective functions) of automation, on the assumption that algorithmic decision-making is necessarily an improvement of rationality, waives the possibility to decide about its deployment.

LA: The tech circles' solutionist imperative indeed tends to jump into 'digital products', before a problematique is even articulated. In order to explore the full capacity of digital abstraction, we will have to drop the extractivist attitude ☆ ☆

AR: You know, I'm thinking right now about what Karen Barad has to say about the void…

GK: Do tell us...

AR: The dominant evil, for the moment, is the glutony of digital capitalism, and the imperative of optimisation which really forecloses thinking.[24] In French we can say that algorithmic governmentality consists in an operation of *dé-penser* (both spending in the sense of exhausting, and un-thinking) the future. It's a way of managing uncertainty by neutralising the virtual (through preemption or optimisation). Barad writes that

> even the smallest bits of matter are an enormous multitude. Each 'individual' is made up of all possible histories of virtual intra-actions with all Others. Indeterminacy is an un/doing of identity that unsettles the very foundations of non/being. [25]

It is precisely that in/determinacy of matter that digital capitalism both feeds on and neutralises.
GK+LA: ▨ ▨
LA: Exhaustion seems to be the theme permeating all three ecologies. Earlier you referred to it as the cannibalistic depletion of energy in the environmental realm, but also the exhaustion of possibilities for fabulation of a future in the social realm, and the physical and psychological state of workers, let alone the numbing of consumers within

a mental ecology. What could the antidote to the persistence of exhaustion be?

AR: Exhaustion – or exhaustivity – triumphs only to the extent that the technical ideology of dataism becomes hegemonic, and succeeds in persuading that other practices of 'mattering' (making things matter) are obsolete. The antidote to dataism, or digital capitalism, or algorithmic governmentality, is to allow speakability, visibility and authority (conceived not in the axioms of domination but in the axioms of enunciation, as the authority to speak) of what remains irreducible to data flows, the singularities articulated to forms of life, to the people to come… justice as an ideal of perfectibility of the present, rather than as an optimisation of the state of facts.

Social ecology: re-inventing institutions as practices of mattering

LA: In some ways, though, it is also a matter of the use of that computational potential and the instrumentalisation of its alien logic. Large scale computation is what enabled us to start to understand climate change. One can claim that computational power is wasted on surveilling for the state and private corporations, financially speculating, extracting value from everything that is or could be and spamming individuals – all of which centres the human once again. From the Anthropocene to the transhumanists undercut by global capitalism, computation's goals are very anthropocentric. How can we re-imagine computation as less mirroring individuals and more reoriented for the commons? ☆

AR : Yes, Lila! ✊ It is a matter of use! Big data and algorithms are very useful to detect regularities that are unnoticeable otherwise because they are observable only in 'big numbers' – that is, from a perspective that is alien to situated human subjects. 'How can we re-imagine computation as less self-mirroring individuals and more reoriented for the commons?' Great question! I try not to be trapped in my lawyer's tropism, but I believe that this is a matter

of constitutionalism. The problem, for the moment, is that big data and algorithms allow for unlimited extractivism and exhaustion (of everything, including the future). Today, there is no overarching constitution, arbitration or limitation of the possibilities of exploitation and growth of competing digital corporations. There is only a juxtaposition of objective functions translating (encoding) the sectorial logics of profit maximisation and so on. There is no way to 'make count' the interests of beings who have not left any digital trace or are unable to issue digital signals, like future generations, like people living in less connected areas of the planet. While everyone is obsessed with questions of regulation, it is above all constitutional issues in the most fundamental sense that should interest us instead. Now is the critical moment to advocate for a trans-national constitution for the data-driven world. The virtue of constitutions (political, legal) is that they bind the prevailing powers of the present for the sake of the common and the future. At a time where corporations like GAFAM have come to concentrate quasi-sovereign powers (as a matter of fact they concentrate legislative-like, executive-like, and judiciary-like powers without being held accountable to anyone other than their shareholders) and have acquired means to pre-empt regulation, I wonder (very tentatively) if we are not at a time where a constitutional moment would be needed to bind not only states and citizens but also corporations.[26] In *Freedom and Time: A Theory of Constitutional Self-Government*, Jed Rubenfeld writes that

> democratic self-government cannot be achieved, even in principle, by way of a politics of popular voice. It requires an inscriptive politics, through which a people struggles to memorialize, interpret, and hold itself to its own foundational commitments over time. I will call this idea: constitutionalism as democracy … Constitutional democracy supplies a better account than we currently have of how a constitution binds – of how, in other words, constitutional law exerts legitimate authority over time.[27]

The crucial question, from a constitutional point of view, is this: how to imagine and enact social forms, or how to constitute these forms – beyond the nation-state and its institutions, and beyond liberal dualisms and oppositions – capable of committing scientific and technological practices not towards the intensification and hegemony of integrated world capitalism, but rather towards the growth of the living world (growing trees, raising children, deproletarianising grown-ups). The urgent question is not – as Guattari argued – how to 'keep the human in the loop' but rather 'how to keep life in the loop' against the algorithmically boosted human obsession with growth (of extraction, production, consumption, profit). Therefe, we don't need 'innovation' as much as we need scientific inventions and political imaginations.

I really believe Mark Fisher was right when saying that 'it is now our task to develop alternatives to existing policies, to keep them alive and available until the politically impossible becomes the politically inevitable'.[28] The crucial thing is, he said, 'the futures that we expected in the 20th century have failed to happen and the perspective must come from that'.[29] Building a critique not from the past but from the future that has not arisen, that is, from what has not so far and not yet left any computable digital signal, from the blind spots of the digital.

Building a critique from a future that has not arisen presupposes building a scene, a space-time, a heterochrony, an hyperstition – or write a constitution – where not the past but the future may emerge as a persona – as impersonal singularity – with claims on the present. A critique built from a future is another aporia, another hyperstition. Not only do written constitutions span the absence of origin, they also thwart and renew the absence of recipients of the written commitments towards 'a people who are missing', a people that always exceeds its present representations.[30] The possibility to address a critique to the present in the name of the yet-to-come is at the heart of constitutional inscription as I understand it.[31] Of course, using the word

'constitution', what I have in mind is the absolutely aporetic character of the constitutional moment as heterochronic moment par excellence, an efficient ritual ensuring in a hyperstitional mode of writing, the being over time of a people that always misses and overcomes itself. Against the de-historicising imaginary (des)institution of (dis)society propelling and propelled by digital capitalism, the word 'constitution' evokes a task Nietzsche assigned to nature: 'to breed an animal that is *permitted to promise*'.[32] What I have in mind is a notion of constitution that allows for the breaking into the present of everything that is only there in the form of stigmata or prefiguration, and committing the actual (and taming actualisation) to not exhaust (*épuiser*) or neutralise the virtual: the contrary of digital abstraction and gluttonous recursivity, an extreme attention to and support for processes of mattering. What is at stake, what must be defended against the pre-emptive power-temporality of algorithmic governmentality, is an openness of time, or an heterochronicity, which is also a precondition for the possibility of justice, as Jacques Derrida reminds us in *Specters of Marx*:

> No justice … seems possible or thinkable without the principle of some responsibility, beyond any living present, in that which disjoins the living present, before the ghosts of those who are not yet born or who are already dead, victims or not of wars, of political or other violence, of nationalist, racist, colonialist, sexist or other exterminations, of the oppressions of capitalist imperialism or of all forms of totalitarianism. Without this non-contemporaneity of the living present to itself, without what secretly misaligns it, without this respect for justice towards those who are not there, those who are no longer or not yet present and alive, what sense would there be in asking the question 'where?', 'where tomorrow? ('whither?').[33]

For the moment, the reflex responses of the law, in Europe at least, attest at best to a nostalgia for the liberal subject (insisting on personal data protection

and so on), whereas issues are obviously collective, structural, common, and involve future generations as well as all living beings of our planet. The prism of current liberal constitutions – social contracts committing states and citizens – is too narrow to address the urgent planetary stakes. Moreover, the deployment of digital infrastructures – such as 5G and maybe soon enough 6G – presented not as options or choices to be made collectively despite their potential to radically transform the collective assemblages and the intricated semiotic components that characterise territories and forms of life, are typically constitutional matters.

GK: This is a very good point. ♡ Lila and I were thinking, though, that at the same time there is a crisis of governance, with both laissez-faire self-organization of market forces on the right, and suspicion of any forms of government on the left. How do we deal with this crisis and distrust across the political spectrum? Is the answer to go more towards digital literacy or perhaps new institutional forms? What kind of institutional forms are we missing that allow for collective fabulation?

AR: The stakes are high in the question or problem of institutions. See the new forms of digital populism, the emergence, on social networks, of 'crowds' of supporters for and opponents to a person like Donald Trump having transformed politics into the branding of insurrection against the state apparatus itself… How should one conceive of institutions capable of blocking the rise of this new kind of digital populism that, in their book *Sovereignty.Inc.*, William Mazzarella, Eric Santner and Aaron Schuster powerfully describe as driven by the desire and enjoyment of 'brands' like Donald Trump?[34] (The Trump name was and is a brand before being the name of a former 'insurrectional' president.)

I think the new institutional forms should reconnect to the idea of institutions like Pierre Legendre's 'populated empty spaces'.[35] Institutions in this sense are conceived primarily as affordances for new practices of mattering, as new ways of occupying

space-time or of creating new space-time. This is what Deleuze and Guattari called *machines de guerre* (war machines), which have nothing to do with war, but which are new ways of occupying space-time or to create new spaces-times: new scenes, new interrupting spaces, where collective assemblages could happen. At the planetary scale at which digital capitalism operates in its pursuit of total synchronization (abolishing space-time), the 'war machines' presuppose a constitutional and institutional infrastructure to emerge. In order to imagine such space-time, we first have to identify the obstacles, all the things that are obstructing, foreclosing, closing the digital upon itself. I have a little list, for example, of a few 'reductions' that expropriate us from individual imagination and collective imaginary capacities. I truly believe, that, as Frédéric Neyrat powerfully exposed, after Cornelius Castoriadis, it is the ground of individual imagination, and of collective imaginary, that is fundamentally at stake, the ground (space-time) of individual and collective self-overcoming, or self-government.

LA: Can you elaborate more on this list? It has propositional potential! ☺

AR: Here is a list of some of the reductions, which are also toxic abstractions, that would need to be overcome in order to re-open the space-time, the collective assemblages, and the spaces of possibilities that appear increasingly foreclosed. I say 'toxic', because they deny the primary, secondary and tertiary retentions, that is, the epiphylogenetic milieu we live in and that we live by on this planet. These reductions condemn us to what I call an acquiescence to a transcendental platitude:
- reducing singularities (or processes of individuation or subjectification) to particularities (the detected or inferred infra-individual attributes or supra-individual patterns that are the grips of subjection of machinic enslavement in semiocapitalism);
- reducing the status of citizens to that of consumer-user;
- reducing politics to the juxtaposition of individual interests;
- reducing the commons to the juxtaposition of sectorial logics;
- reducing 'the people that are missing' to present political representation;
- reducing the future to the optimisation of the state of affairs;
- reducing the virtual to 'real time';
- reducing social justice to post-actuarial calculation;
- reducing justice to law;
- reducing hermeneutics to digital seismography;
- reducing imagination and creation to innovation;
- reducing foresight to the extrapolation of past trends;
- reducing work to employment;
- reducing the plasticity and alterability of life to the execution of a genetic programme;
- reducing life to flows of digital information;
- reducing the human person to the sum of his or her digital records and interactions;
- reducing the public to the audience;
- reducing 'right measure' to high-resolution;
- reducing people to their behaviour;
- reducing existence to pure presence;
- reducing singularities to symptoms,
    and so on.

The redeployment of *differances* or differences between those terms requires a constitutional moment which is a moment where negativity – the not-yet-there, the irrepresentable, the to-come, the incomputable, or the 'symbolic fiction in excess of empirical reality', a 'depersonalised or impersonalised Other' that is not an actual individual, imposes limitations on the pure positivity of the present drives of self-maximising and self-optimising power.[36]

GK: This makes me think about the *Resisting Reduction* manifesto by Joichi Ito et al.[37]

AR: 😎

GK: This is a really great list to start from, with regard to thinking about changes that are needed within and across the three ecologies.

LA: 💯

AR: You know, what is at stake is, I believe, the possibility to re-imagine a 'we' – as a composite transcending the 'immunitarian' dichotomies of human versus nature, artifice versus spontaneity, autonomy versus determinism, presence versus duration and historicity – beyond this gathering of reductions. Thinking of the three ecologies, they find an almost perfect translation in the domain of legal philosophy in the writings of Alain Supiot: the anthropological function of law, according to him, is to link together the biological, symbolic and social dimensions of human existence.[38]

Mental ecology: new subjectivities for collective enunciation

GK: Yes! Drawing on that – this also seems to require different imaginaries of what a subject is, both collective and individual. You mentioned that there is a resistance to letting go of the liberal subject; we can see that in AI ethics, in data protection law, and so on. What other figurations of subjectivity could we enlist or envision here? Or do we try to re-appropriate the dividual and find some kind of remedying aspects of this?

AR: The dividual is a figure still haunted by the individual... it is still a nostalgic dis-figuration. I think we need a non-nostalgic critique and a non-mesmerised critique (knowing the difference between marketing discourse of the 'digital transformation' and its material (ir)reality). The legal subject's autonomy and self-determination is a functional fiction for the law: the liberal legal subject is not so much an empirical reality as it is a functional necessity for a series of legal operations such as the imputation of responsibility for the consequences of actions and decisions. As a functional fiction, it remains indispensable. I thought what might be interesting would be to displace the centre of gravity of the legal subject from its fantasised and fetishised liberal capacities of understanding and will to its dialogic capacity of becoming subject through enunciation, identity performances, self-overcoming. The subject is always cosmetic; processes of individuation or subjectivation are masquerades: putting on and editing our persona (mask); but this remains at the individual level.

There is perhaps another way to subvert the individualistic logic of – for example – the European data protection regime, which flatters the possessive individualism of users-consumers by focusing on free, prior and informed individual consent to data processing. The insistence on individual consent, on individual autonomy and self-determination nurtures and is nurtured by the illusion that problems that concern the commons can be contractualised and, to some extent, addressed by relying on each individual's self-determination and responsibility, or treated as a matter of self-regarding individual preferences. In a context of algorithmic governmentality, the forms of power that are exercised are much less about the processing of personal data and the identification of individuals than about algorithmic forms of impersonal, continuously evolving evaluations of opportunities and risks statistically correlated with life forms (attitudes, trajectories). A profile is not really anyone – no one fits completely, and no profile is aimed at one person, is only about one person, identified or identifiable. However, being profiled in this or that way affects the opportunities available to us and the space of possibilities that defines us: not only what we have done or are doing, but what we could have done or could do in the future.

Moreover, in a regime of algorithmic governmentality functioning like a 'scored society', individuals are thrown into an absolute competition at the scale of the a-significant digital pheromone and are evaluated against hyper-mobile metrics: typical neoliberal injunctions to maximise one's production-performance and consumption-enjoyment are supplemented by the injunction to maximise one's digital human capital, that is, to produce oneself as a brand in a communicationary universe where the belief in our own existence increasingly depends on our ability to attract purely quantitative signals

– that also operate like endorphins – of credit, notoriety or reputation.

The value of each piece of data is not contained in itself, but is essentially relational. It is the (co-) relations discoverable among data that give it its usefulness, a value, and also possibly a more or less sensitive character. Data – in the context of algorithmic governmentality – in fact has less to do with any pre-constituted individual than with the ways opportunities and risks are and will be distributed in the whole society. Therefore, it deserves a 'social' protection, and the requirement of free, prior and informed consent (to data processing) should be as much a collective as an individual right: a collective right of the people not so much inspired by post-war bioethics (medical deontology and the principles of human dignity and inviolability of the individual human body), as by the idea that government is only legitimate if it has the consent of the governed. Therefore, perhaps the infrastructures and practices of data processing should cease to be considered exclusively as matters of contractual relations between platforms and users-consumers but also as constitutional issues. In the context of algorithmic governmentality, to paraphrase Guattari, the individual is the illusion that hides, obfuscates, denies voice to the people (including the people that are missing). In a context where knowledge, power, individuation happen mostly through operations of statistical correlations, we need to stop talking of individuals in isolation.

As in systems theory, but also in theories of institutions emerging from deconstruction, the person and the individual are not the constitutive elements of social systems; rather, what is constitutive of social systems, and what conditions the very possibility of their existence, what both requires and conditions the dynamism of their continuous institution is their self-overcoming, their exposure and openness to otherness, to the not-yet, to the to-come as something that cannot be inferred or deduced from the past or the present, to the incomputable or the impersonal

singularity that Deleuze articulated with his notion of the virtual. Perhaps we should rethink our institutions as the space-time of what Stiegler called the non-inhuman:

> the non-inhuman – which seems inevitably to be absent from the technosphere – is never defined positively. It is therefore undefinable, and improbable in this – because it is 'indefinable': non-inhuman being or becoming or future is infinitive, never happened, always yet to come. Again. Not yet. 'Humanity does not yet exist' Anything that poses a positive humanity and therefore a positive justice (thus confusing justice and law) always generates in the end a scapegoat.[39]

Of this this heterochronicity, Derrida gives one of the best approximations:

> One then sees quickly that the presence of the perceived present can appear as such only inasmuch as it is continuously compounded with a nonpresence and nonperception, with primary memory and expectation (retention and protention). These nonperceptions are neither added to, nor do they occasionally accompany, the actually perceived now; they are essentially and indispensably involved in its possibility.… As soon as we admit this continuity of the now and the not-now, perception and nonperception, in the zone of primordiality common to primordial impression and primordial retention, we admit the other into the self-identity of the Augenblick; nonprescnce and nonevidence are admitted into the blink of the instant There is a duration to the blink, and it closes the eye. This alterity is in fact the condition for presence, presentation, and thus for Vorstellung in general; it precedes all the dissociations that could be produced in presence, in Vorstellung.…Once again, this relation to nonpresence neither befalls, surrounds, nor conceals the presence of the primordial impression; rather it makes possible its ever renewed upsurge and virginity. However, it radically destroys any possibility of a simple self-identity.[40]

GK: This is a perfect end note, Antoinette! 👍

LA: Indeed! 😊 😊

GK: We have more questions but we thought we could stop here since it's been two hours already. ☺

AR: Sorry for my approximative English and my too long responses…Thank you for being so patient!

LA: It was great! 😊 Thank you for being so generous with your time and willing to experiment with the (digital) platforms.

AR: No this was great! I really loved that it took time – a different pace is much appreciated.

LA: We are so grateful! 😎

GK: I second this! 👏

AR: I feel privileged to have had this opportunity to talk to you! Thank you! ♡

Notes

1. Antoinette Rouvroy, 'Algorithmic Governmentality and the Death of Politics', Green European Journal, 9 March 2020, https://www.greeneuropeanjournal.eu/algorithmic-governmentality-and-the-death-of-politics/.

2. Antoinette Rouvroy, 'Revitalizing Critique Against the Critical Sirens of Algorithmic Governmentality', conference talk at the *6th ICTs and Society Conference: Digital Objects, Digital Subjects*, University of Westminster, London, 20–21 May 2017, https://youtu.be/ezd24NQoqCw.

3. Jean Baudrillard, *Simulacres et simulation* (Paris: Galilée, 1981), 120.

4. Ibid.

5. Erich Hörl, *Sacred Channels: The Archaic Illusion of Communication* (Amsterdam: Amsterdam University Press, 2018), 23–24.

6. Jean-Louis Déotte, *Cosmétiques: Simondon, Panofsky, Lyotard* (La Plaine-Saint-Denis: Éditions des maisons des sciences de l'homme associées, 2018), http://books.openedition.org/emsha/224.

7. Deborah Hauptmann and Andrej Radman, 'Asignifying Semiotics as Proto-Theory of Singularity: Drawing is Not Writing and Architecture does Not Speak', *Footprint* 14 (2014): 1–12.

8. Bernard Stiegler, *Technics and Time, 4*, unpublished draft, trans. Daniel Ross, chapter 2.

9. 'The story goes like this: Earth is captured by a technocapital singularity as renaissance rationalitization and oceanic navigation lock into commoditization take-off. Logistically accelerating techno-economic interactivity crumbles social order in auto-sophisticating machine run-away. As markets learn to manufacture intelligence, politics modernizes, upgrades paranoia, and tries to get a grip.' Nick Land, 'Meltdown", *Abstract Culture* 1 (Coventry: Cybernetic Culture Research Unit 1, 1997).

10. Ray Brassier, 'Mad Black Deleuzianism: On Nick Land', contribution to the Symposium on Accelerationism, Goldsmiths, University of London, 14 September 2010, https://backdoorbroadcasting.net/2010/09/accelerationism/.

11. An absolute logic doesn't suffer any balance against another logic, nor any discussion, or social deliberation… at best, it tolerates reformist schemes – attuning algorithms and artificial intelligence to 'European values', for example – with the aim of generating trust of users-consumers and industrials, as to foster their conversion to dataism.

12. The central dogma of western digital capitalism is perfectly spelled out in the recently proposed 'Artificial Intelligence Act' of the European Commission (2021), https://digital-strategy.ec.europa.eu/en/library/proposal-regulation-laying-down-harmonised-rules-artificial-intelligence-artificial-intelligence.

13. Gilles Deleuze, 'Post-scriptum sur les sociétés de contrôle', *L'autre journal* no. 1 (1990).

14. Patrick Tort, *L'intelligence des limites: Essai sur le concept d'hypertélie* (Paris: Gruppen, 2019).

15. William Mazzarella, Eric L. Santner and Aaron Schuster, *Sovereignty, Inc.: Three Inquiries in Politics and Enjoyment* (University of Chicago Press, 2019).

16. Aaron Schuster, 'The Debt Drive: Philosophical Anthropology and Political Economy', talk delivered on 17 December 2016 at *Fantasies of Capital*, a Jnanapravaha Mumbai conference.

17. 'Or again—since you know that I love Greek words and that in Greek the exercise of power is called

"hegemony," although not in the sense we now give this word: hegemony is just the fact of being in the position of leading others, of conducting them, and of conducting, as it were, their conduct—I will say: it is likely that hegemony cannot be exercised without something like an alethurgy. This is to say, in a barbarous and rough way, that what we call knowledge (connaissance), that is to say the production of truth in the consciousness of individuals by logico-experimental procedures, is only one of the possible forms of alethurgy. Science, objective knowledge, is only one of the possible cases of all these forms by which truth may be manifested.' Michel Foucault, *On The Government of the Living: Lectures at the Collège de France, 1979-1980*, trans. Graham Burchell (London: Palgrave Macmillan, 2014), 7.

18. Yanis Varoufakis, 'Techno-Feudalism is Taking Over', *Project Syndicate,* 28 June 2021, https://www.project-syndicate.org/commentary/techno-feudalism-replacing-market-capitalism-by-yanis-varoufakis-2021-06.

19. Martijn Konings, *Capital and Time: For a New Critique of Neoliberal Reason* (Redwood City: Stanford University Press, 2018). As a matter of fact, the competitive dynamics at play under an algorithmic regime are very similar to the speculative dynamics of finance in late capitalism described by Konings: Power in a risk society depends on the ability to be known in a context of pervasive uncertainty, on the ability to establish oneself as a central reference point in the speculative logic of contingent claims, as an attractor for the speculative investments of others. In this context, the deliberate creation of uncertainty and insecurity can even be a source of advantage, allowing actors to consolidate their normative position.Ibid., 50

20. Jean Baudrillard, *L'échange symbolique et la mort* (Paris: Gallimard, 1976), 102, translation by author.

21. Benjamin H. Bratton, *The Terraforming* (Moscow: Strelka Press, 2019).

22. Luciana Parisi, 'La raison instrumentale, le capitalisme algorithmique et l'incomputable', *Multitudes* 62, no.1 (2016), 98–109.

23. 'To speak of sectoral rationality is obviously not to speak of science. What I call here "sectoral rationality" is simply a recipe for a certain adequacy between the means employed and the ends pursued in a given sector: thus capitalism in its most primitive and most criticizable fundamental manifestations, such as the race for profit and the elimination of unfortunate competitors, possesses a rationality whose effectiveness has more than once been appreciated, albeit differently, by its beneficiaries and its victims.' Patrick Tort, *L'intelligence des limites: Essai sur le concept d'hypertélie* (Paris: Gruppen, 2019), 117–18, translation: AR.

24. Giorgio Agamben, 'Du livre à l'écran', in *Le feu et le récit*, trans. Martin Rueff (Paris: Payot & Rivages, 2015), 123–24, translation: AR.

25. Karen Barad, 'What Is the Measure of Nothingness? Infinity, Virtuality, Justice', in *Documenta Series 099* (Berlin**:** Hatje Cantz, 2012).

26. GAFAM is an acronym referring to Google (Alphabet), Apple, Facebook, Amazon, and Microsoft.

27. Jed Rubenfeld, *Freedom and Time: A Theory of Constitutional Self-Government* (New Haven: Yale University Press, 2001).

28. Mark Fisher, 'How to kill a zombie: strategizing the end of neoliberalism', *Open Democracy*, 18 July 2013, https://www.opendemocracy.net/en/how-to-kill-zombie-strategizing-end-of-neoliberalism/.

29. Mark Fisher interviewed by Andrew Broax, 'Do you miss the future?', 12 September 2014, https://crackmagazine.net/article/long-reads/mark-fisher-interviewed/.

30. 'Health as literature, as writing, consists in inventing a people who are missing. It is the task of the fabulating function to invent a people. We do not write with memories, unless it is to make them the collective origin or destination of a people to come still ensconced in betrayals and repudiations.' Gilles Deleuze, *Critique et Clinique* (Paris: Editions de minuit, 1993), 14, translation: AR.

31. In this respect, cf. Rubenfeld, *Freedom and Time*.

32. Friedrich Nietzsche, *On the Genealogy of Morality,* trans. Maudemarie Clarck and Alan J. Swensen (Hackett Publishing Company, 1988), 36.

33. Jacques Derrida, *Specters of Marx,* trans. Peggy Kamuf (New York and London: Routledge, 1994), 14–15.

34. Mazzarella, Santner and Schuster, *Sovereignty, Inc.*

35. Pierre Legendre, *De la société comme texte: Linéaments d'une anthropologie dogmatique* (Paris: Fayard, 2001).

36. Mark Fisher, 'Questioning Capitalist Realism: An Interview with Mark Fisher by Matthew Fuller', *Mute*, 20 December 2009, https://www.metamute.org/community/your-posts/questioning-capitalist-realism.

37. Joichi Ito et al., 'Resisting Reduction: A Manifesto', *Journal of Design and Science* (2017), doi: https://doi.org/10.21428/8f7503e4.

38. Alain Supiot, *Homo Juridicus: On the Anthropological Function of the Law*, trans. Saskia Brown (London: Verso, 2017).

39. Stiegler citing Jean Jaurès, *L'humanite*, 18 April 1904, in Bernard Stiegler, *Qu'appelle-t-on panser? 1. L'immense régression* (Paris: LLL, 2018), translation: AR.

40. Jacques Derrida, *Speech and Phenomena and Other Essays on Husser's Theory of Signs*, trans. David B. Allison (Chicago: Northwestern University Press, 1973), 64–66.

Biography

Antoinette Rouvroy (Doctor of Laws of the European University Institute) is permanent research associate at the Belgian National Fund for Scientific Research (FNRS), and senior researcher at the Research Centre Information Law and Society, University of Namur (Belgium). She authored *Human Genes and Neoliberal Governance: A Foucauldian Critique* (Routledge-Cavendish, 2008) and co-edited (with Mireille Hildebrandt) *Law, Human Agency and Autonomic Computing: Philosophers of Law meet Philosophers of Technology* (Routledge, 2011). Her current interdisciplinary research interests revolve around the concept of algorithmic governmentality. Under this foucauldian neologism she explores the semiotic-epistemic, political, legal and philosophical implications of the computational turn.

Lila Athanasiadou is a cultural worker, researcher and architect whose practice spans from visual and audio essays to teaching encounters and cultural activism. She has organised and moderated seminars, reading groups and lectures at TU Delft, ArtEZ, Stroom and Kunstinstituut Melly and has presented her work in academic conferences at KTH Royal Institute of Technology, Goethe University, Utrecht University and the Estonian Academy of Arts. Her work explores feminist and queer pedagogical practices and intersections of digital data with human and territorial bodies. Between 2016 and 2018 she acted as the curator of the Corporeal Discourse programme for the Master of Interior Architecture at ArtEZ University of the Arts. She is currently teaching within Social Practices at Willem de Kooning Academy.

Goda Klumbytė is a research associate and PhD candidate at the University of Kassel, research group Gender/Diversity in Informatics Systems. Her research engages feminist theory, science and technology studies and critical computing, including human-computer interaction, with focus on knowledge production in and through machine learning systems. Her PhD dissertation investigates epistemic premises of machine learning as a knowledge production tool and proposes innovative ways to work with critical humanities and social sciences research towards more contextualised and accountable machine learning systems design. She is a co-editor of *More Posthuman Glossary* (with Rosi Braidotti & Emily Jones, forthcoming with Bloomsbury in 2022). Her latest work has been published in proceedings of conferences on human-computer interaction, and journals such as *Digital Creativity*, *Online Information Review, ASAP* and others.