

From the actual algorithmic governmentality to new to rule of law it needs
Digital Studies seminar – 7 October 2014

Data collection and processing through algorithms, made possible by digital technologies, seem to have promoted the emergence of new kinds of knowledge, which the objectivity seems to be absolute, pretext that it directly stems from the automatic calculation made on raw data recorded by computational systems. However, this profiling established on the basis of statistic correlations, while suspending any kind of subjective intervention, is unavailable and imperceptible by the individuals they nonetheless apply to. These measures indeed allow anticipating their behaviors, since they can affect their desires and wills (and destroy them in their singularity), by constantly reorganizing in real-time their physical and informational environments. Far from producing knowledge about social world that individuals could appropriate, meditate and collectively question, this algorithmic “rationality” constitutes a new mode of government, based on a new kind of dogmatization, which gets ahead of any possibility of criticism, discussion and probation and prevails on behalf of digital realism.

However, the public debate between peers, at the origin of every rational discipline, cannot be thought independently from a mnemonic – today digital – environment, through which only the individuals can speak to each other thanks to a symbolic and signifying device. The automation and the speed of calculation, as well as the access to a massive quantity of data and the power of algorithms, which are de facto placed at the service of a digital behaviorism, thus include, in right, the promise of a new regime of truth. The accomplishment of such a promise yet implies an organologic upheaval, which allows desautomatizing the automata in order to make possible a [neguentropic](#) interpretation of digitalized data. Digital technologies could then further the exercise of reason and preserve intermittent, leisure and dream times, which are the conditions of invention and thought.

Antoinette Rouvroy



Antoinette Rouvroy is a Doctor in legal sciences at the European University Institute, and a qualified researcher at the [FNRS](#) in the Center of Research in Information, Law and Society of the University of Namur. She has been developing for a few years a research about what she called the algorithmic governmentality.

She reflected on the “[algorithmic governmentality](#)” through its epistemological, semiotic and legal issues. Relying on the notion of regime of truth in Michel Foucault’s work, her objective was to

bring out the contemporary crisis of representation which upsets our conceptions of proof, event and criticism as well as the notions of person, authority and testimony.



-The “[big data](#) ideology” and the digital closing on itself

She first characterized the “big data ideology” which, without necessarily coincide with the actual practices of [data mining](#), consist in the research of an absolute objectivity, maximal security and certainty, thus being closely linked to advanced capitalism.

The first part of Antoinette Rouvroy’s presentation was dedicated to the study of the notion of raw data, with its semiotic and epistemological implications. Far from being similar to a “degree zero” of writing, these data beforehand processed, sorted, cleaned from their signification, context and singularity – a process which shows the digital closing on itself, where the distinction between the sign and the thing closes and with it the space of criticism. Signifying reality is replaced by a network of a-signifying data, which work as calculable signals. We are today going from a deductive logic to a purely inductive logic, thus reducing the margin of unpredictability of a world which occurs, and the excess of its possible on its probable: we move from actuarial reality to post-actuarial reality.

The big data ideology conveys the impression that thanks to them, one does not have to produce knowledge about the world but could discover it directly from the world itself.

-Putting life in numbers and hyper-quantification of individuals

This action to put life itself in numbers, on the one hand, seem to be very emancipatory in so far as it appears to be correlative of a greater objectivity and democracy, since the setting of categories is no longer subject to political or social balances of powers. But on the other hand it also furthers a new conception of the individual, which is no longer considered as a person but a temporary aggregation of industrially exploitable data, only living according to its indexed value (number of friends on social networks, number of publications...), thus opening an era of hyper-[indexation](#).

Analyzing these transformations of the notion of person, Antoinette Rouvroy drew a parallel with the anti-personnology promoted by the poststructuralist authors of the 60s. This comparison however has its limit in the fact that this [methodological individualism](#) seems today to be replaced by an indexation through which the individuals only see themselves as hyper-quantified, defined by their relation to the others’ performances, within a hyper-competitive society.



-The multitude without other: the impossibility to make community

This mode of individuation through indexation fails in constituting a community: it creates at most a multitude, a “multitude without others”. When everyone becomes his own statistical reference, he does not meet the other but faces the lack of a space-time necessary for [collective individuation](#). This evolution is all the more worrying that the idea that the data are “raw”, perfectly objective, makes it pass for inoffensive and thus does not give rise to recalcitrance. Antoinette Rouvroy then focuses the second part of her lecture on the study of the possible recalcitrances that can be opposed to this new regime of truth supposed to be “the real as such”.

-Three recalcitrances to the algorithmic governmentality

For Antoinette Rouvroy indeed, three kinds of recalcitrances can escape this feeling of transparent and immanent totality, where everything should be recordable and digitalizable. But there are some “remains”, starting with **the unaccomplished in history**. If only are recorded the events that effectively happened, in contrast the unachieved and non-actualized projects, the vast wealth of utopias and failures, escape digitalization. **The future** is a second remain, this conditional dimension as such where the human life shows its recalcitrance to any attempt of excessive prediction and organization. Eventually, all the field of **human leniency**, misery and pity also escape the undertaking of digitalization. Antoinette Rouvroy quotes the example of the difference between a robot-judge, who would establish automatic recommendations based on standard profiles of recidivists, and a human judge, who can free someone by resisting the temptation to follow the recommendations of the machine, thus introducing the critical margin of his humanity, in a justice which otherwise would stay closed on itself.



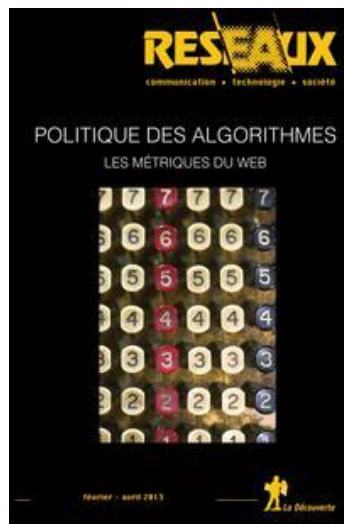
-The suspension of three sources of uncertainty: subjectivity, selectivity and virtuality

These three kinds of recalcitrance are conflicting with the tendency of the algorithmic governmentality to suspend three forms of uncertainty –subjectivity, selectivity and virtuality. The ideology of big data indeed bypasses **subjectivity** in that it is uncertain and unpredictable, its ability to disobey and not to do what its “[profile](#)” foresees. The person, categorized according to a-signifying

raw data that affects us through reflex instead of reflexivity, does not exist anymore. The very notion of person is evacuated to the benefit of a collection of infra-individual data recomposed into super-individual aggregates.

Second kind of uncertainty, the **selectivity** is also bypassed, in a movement that seems entirely democratic since non-selectivity is supposed to stand for exhaustiveness. This is reflected in the changes that big data inflict statistics, where far from being ignored as noise factors, the points that are furthest from probability are also taken into account to resonate the pattern profiles: everything is potentially useful, including noise. Hence the impression that big data also can take into account what is singular and far from the average, thus generating an infinite number of profiles so that, embodying the paradox of an industrial personalization, willing not to be profiled is like not willing oneself.

At last, algorithmic governmentality tends to suspend another source of uncertainty that is virtuality. Virtuality is here understood as the dimension of possibility, the fact for human beings not to be entirely contained in actuality, to be also inhabited by dreams, past, future and projections. This virtuality, which seems to be to individual what utopia is to collectives – his own unaccomplished – is what allows not to oppose freedom and determinism and to be free in a deterministic world.



-Transition from prevention to preemption: the impossibility to disobey

But with the transition from the penal logic of governments to a logic of intelligence driven by the algorithmic governmentality, one loses this margin of freedom and disobedience. One quits the causal system of **prevention** to enter a system of **preemption**: it comes to playing on an environment – and not on causes – to ensure that things are actualized or not, thus establishing an augmenting reality of possibility.

-Truth and subjectivation

Antoinette Rouvroy concludes her lecture on the unearthing of our contemporary passion for reality, where actuarial reality takes the form of a vortex which aspires past, future and virtualities. If [Foucault](#) defined **regimes of truth** as the sets of methods and institutions by which the individuals are committed under certain conditions to make certain acts of truth (confessions, testimonies), algorithmic governmentality seems to avoid these methods which used to go through **human language**. The occasions of subjectivation that were for Foucault confession and testimony, through which the individual could become himself, are no longer possible within this crisis of representation. It is the paradox of a vision of truth supposed to coincide with reality, as Antoinette Rouvroy points it in her last words: “despite hyper-personalization, we are nobody”.

Bernard Stiegler



Bernard Stiegler is a philosopher, academic, president of the group of reflection Ars Industrialis and director of the Institute for Research and Innovation (IRI). In his forthcoming book (*The Automatic Society*), he focuses his reflection on the social, political, economic and epistemic issues of the automatic data production and exploitation.

After having identified big data as a step of the process of grammatization and the algorithmic governmentality as an [entropic](#) phenomenon, B. Stiegler showed that they imply a re-examination of the [distinction between the fact and the right](#), and to rethink the relationships between automatism and desautomatisation, as well as between understanding and reason. He suggests considering the regimes of truth as **organologies of truth**, in so far as they are linked to the evolutions of tertiary retentions, and thus to digital technologies, whose possibilities of calculation have today to be at the service of neguentropic processes of interpretation.

-Big data: an entropic state of fact in a process of [grammatization](#)

B. Stiegler affirms that what happens with algorithmic governmentality as described by A. Rouvroy is part of a **process of grammatization**, i.e. a process of discretization and spatialization of the flows, allowing their calculability but also their interpretation.

The position of the IRI, relying on [J. Carry's work \(on 24/7 capitalism\)](#) and [F. Kaplan \(on the linguistic effects of Google\)](#), asserts that these processes are **entropic**, and then self-destructive and irrational: what emerges with algorithmic governmentality directly leads to failure. Antoinette Rouvroy's works allow us to identify **entropy factors**.

Facing such processes, the IRI defends a **neguanthropology** which should be both:

- A negative anthropology (in the sense that we speak of negative theology)
- A neguentropology (in the sense of a production of neguentropy).

- Prosthetic exteriorization and knowledge

Anthropos is one who adopts prostheses. This process of exteriorization started at the beginning of hominization and today drives to big data. Such a process arises from the fact that knowledge is only interiorized. But for knowledge to be knowledge, it also has to be exteriorized (to know a theorem is to be able to formulate its demonstration, therefore to exteriorize it).

-Big data and the question of the distinction between the fact and the right

The question of the data economy is the one of a state of fact in a grammatization process:

- This fact is here, one does not aim at forbidding big data or open data because we are de facto involved in these processes sometimes without being aware of it.
- But the question that arises is to know what we make of it.

Big data thus raise the question of the **distinction between fact and right**: when Chris Anderson maintains in "The end of the theory" (http://archive.wired.com/science/discoveries/magazine/16-07/pb_theory) that scientific theories are obsolete, this means that the difference between fact and right is outdated.

A. Rouvroy asks the question of the right: according to B. Stiegler, today this right must reexamine the distinction between the fact and the right and re-analyze the question to know **why the right is never reducible to the fact**.

-The right as a promise

The difference between fact and right is shared by mathematicians, philosophers, jurists and other rational disciplines: a judge perfectly knows that the right is not a **fact** but rather a **promise**. The right does not exist; it is always something that we commonly promise to fulfill.

The world is always unfair. The problem is not to know:

-what is the world

- but rather how we want the world to be

It then deals with **virtual**, **protentions** and **desire**.

-Foucault and the question of the regimes of truth

B. Stiegler denies that algorithmic governmentality is a regime of truth, since Foucault denies the confusion between the fact and the right.

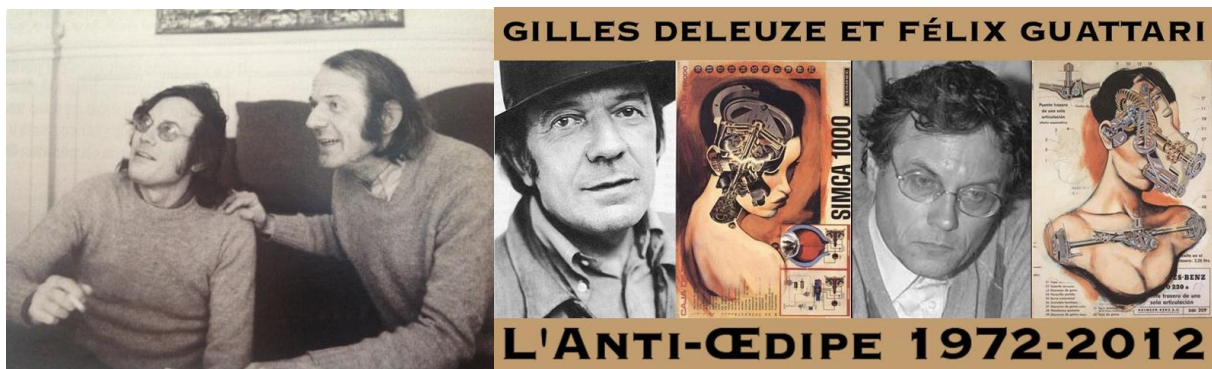
It is to understand:

- Why the digital is not a regime of truth,

-Why and how it could become one.

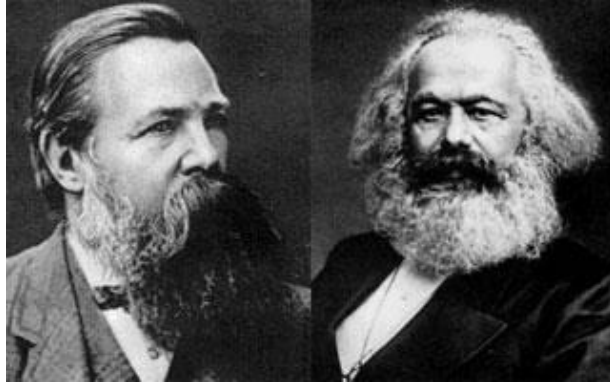
-Relying on the philosophical heritage to understand contemporary issues

A. Rouvroy gives an analysis of the digital while questioning a philosophical heritage, which should be challenged today in order to reflect on contemporary issues. These great thoughts are not lapsed by a reality which complexifies them; on the contrary, they have become more and more necessary provided one does not repeat them stupidly, but to run them and question them, as Foucault and Deleuze continued to do so during their lifetime. For example, when the **multitude** becomes the basis of algorithmic governmentality, one needs to go beyond the discourse on the multitude.



-The concept of ideology

According to B. Stiegler (*Etats de choc*), if some authors as Foucault, Deleuze, Derrida or Lyotard have criticized the Marxists' concept of ideology, another conception of ideology is possible grounded on the first development of this concept by [Marx and Engels](#) in [The German Ideology](#). The authors affirm that the human being is a technical being who, as such, is lured by his techniques. A ruling class is seizing this lure of techniques in order to dominate the lured ones. There occurs an inversion of the causes: one seeks causes among sky or ideas whereas in reality, they are to be found in the technical or organological immanence.



-Deleuze and the question of immanence and rhizome

A. Rouvroy calls into question Deleuze's and Simondon's concepts such as [rhizome](#) and [immanence](#), of which the digital appears to be the actualization. But such an actualization of the rhizomatic seems problematic: the personalist statistic of the algorithmic governmentality decomposes and doubles personalities by profiling them, and articulates these data into clusters that allow acting according to correlation calculation to result in the production of **dividuals**. In *Anti-Oedipus* and *A Thousand Plateaus*, Deleuze and Guattari affirm the necessity to think within the immanence: the immanence is being fulfilled, but it lets us with some remains which raise the problem of a recalcitrance.

-The failures: the invention of future and the possibility of knowledge

B. Stiegler prefers the notion of failure to the one of remain: the future is always invented thanks to the failures. What is interesting is failure, of which [Epimetheus](#) is the hero: Epimetheus is the god of knowledge and therefore of failure. This question is linked to the one of technic since Epimetheus is [Prometheus](#)' brother, asserting that noesis begins with technics, i.e. with the **defect of being**, the **absence of origin**.



-Digitalization and interpretation: the question of the irreducibility to calculation

According to B. Stiegler, the question is:

- not to know what is digitalizable or not (everything can be digitalized)
- but to understand what is **not reducible to calculation**.

B. Stiegler worked on the development of computational machines which are not reduced to calculation but allow interpretation: **to interpret, one needs to calculate**. The incoming data are to be interpreted, they are to be reducible to calculation, but it is necessary to make calculations in order to establish them as data or sets of interpretable data.

-The distinction between analytic understanding and synthetic reason

Kant raised this question of the relationship between calculation and interpretation, in so far as he distinguishes [understanding and reason](#):

-the understanding is **analytic**, i.e. it is transformable into calculation (calculating machine or big data), it is **automatable**;

-but the reason is not the understanding: it is what collects empirical or intuitive data in order to decide (it is the reign of ends).

-The improbable: the necessity to reason, decide and desautomate

In his paper, Anderson posed for the first time the problem of big data. He argues that it is possible to avoid theory (and then right and model), and to be limited to correlations between facts: it means that the understanding has become sufficient, that we no longer need to reason and debate.

B. Stiegler opposes to Chris Anderson's speech [Alan Greenspan's](#) one to the American senate, saying that by automating rational reasoning of all buyers and letting automation happen, we have lost our reason. The models only covered twenty years of data but it should have been necessary to infinitize the models, because there is improbable in economy. It is because there is improbable in economy that we need the reason to decide and that it must be possible to desautomate.



-Desautomation of automata

The question is not to prevent automata from developing, but to desautomate them and turn them into rational processes which should not be purely analytic, because reason processes are synthetic processes. It is to succeed in making a synthesis, and producing an agreement or a disagreement that we are able to trace, in order to isolate the point of contention, which is the common: the **common** lies in dispute and not in unanimity. It is always the dispute which produces meaning.

-The regimes of truth as organologies of truth

B. Stiegler proposes to revisit the issue of regimes of truth which is not fully developed by Foucault, sometimes deviating from Foucault. According to B. Stiegler, the regimes of truth are **organologies of truth**: the processes of production of true statements (conditions and protocols which establish what is the truth in a given field) are questions of organization between protentions and primary, secondary and tertiary retentions.

[-Primary, secondary and tertiary retentions](#)

B. Stiegler relies on the husserlian concepts of primary and secondary retentions:

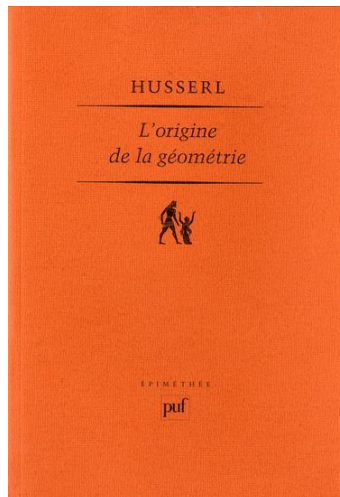
-**primary retention** is the fact to remember what just has been said and to aggregate it with what is currently being said. This process does not belong to the past but to the present, since by currently listening, the listener is being trying to remember all what has been said since the beginning of the speech.

-**secondary retentions** are of the past, things formerly lived.

The way a listener aggregates what is currently being said depends on what has formerly been lived: secondary retentions condition primary retentions. This is why, according to one's own secondary retentions, everyone hears something different in what is currently being said.

B. Stiegler adds to these two concepts the one of **tertiary retention**. [Husserl affirms that geometry was made possible by alphabetic writing](#): alphabetic writing allowed Thales to keep track, to track step by step the reasoning for himself: he can reason geometrically only because he masters step by step his reasoning, and then because he exteriorized and spatialized it: he made it a tertiary retention from which he can control himself.

The regimes of truth are linked to the evolutions of tertiary retentions.



-**Tertiary retentions, interpretation and negentropy**

Indeed, living in a world where tertiary retentions are alphabetical, one does not think the same way as in a world where tertiary retentions are ideographic. A Chinese lettered person does not think as a European lettered person since precisely he does not have a lettered brain but an ideographical one. For example, H. Ishida's interpretation of Freud is different from Lacan's ones: for him, the Freudian issue is not the language but the images. There is not one good interpretation, but only diverse and negentropic interpretations: the interpretation goes beyond what is interpreted. The digital will become negentropic as soon as it is open to interpretation by providing the necessary tools.

-Intermittence, dream, thought and technique: the issues of the 24/7 capitalism

In *24/7: Late Capitalism and the Ends of Sleep*, J. Crary describes a capitalism which deprives us of sleep time and prevents us from dreaming: to result in a round a clock consumption, it eliminates the intermittence times. Technologies overtake us, remotely control our protentions and desire in our stead: they lead to entropy.

But only the dream as ability to get out of reality allows us to think and create: the fact of thinking proceeds from getting out of the dream. Within automatism, we are in a special mental state and the technique serves to produce these mental states, these intermittence states which allow the dream and therefore the thought.



-Generalized automation and disappearance of employment: towards a new model?

In [*Où va le travail humain ?* \(1950\)](#), [George Friedmann](#) affirms that in a few decades, the work will be so much automated that there will no longer be employment (today, Belgium could lose 50% of its jobs in the next ten years). This work automation process (substitution of robots for men and falling wages with a view to competitiveness) is absolutely irrational: we need to go to another model, which still is to be produced and developed in order to be a force of proposal.

The technologies of algorithmic governmentality could allow producing an “otium of the people”, in the sense of ability to think and contemplate intermittently, in leisure. The question is to know how to **redistribute leisure time**, and digital technologies are the condition to make it.