The age of the anthropocene that we have now entered requires the revisiting of the fundamental categories and the essential nature of law, as part of the "governance revolution."

Thoughts on the seminar of 1 February 2017.

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The anthropocene has two dimensions: human activity has become a new 'seismic force'; humanity today has lost control over both this force and its own destiny.

That means that we are living in an era portrayed in science fiction as 'the revolt of the robots'. 'Robot' needs to be understood in its widest sense – human productions whether technical, conceptual or institutional, which escape from the control of their creators to lead an independent existence which can go as far as to threaten the survival of the creators.

Many examples at the seminar illustrate these ideas "law has made the anthropocene possible by radically distinguishing between the all-powerful subject and its environment, hence the challenge or rethinking law that has become hostile to the human race itself." (Lucas d'Ambrosio). "Humanity appears incapable of influencing its own destiny and law contributes to this incapacity." (Mireille Delmas-Marty). The legal system as a robot that has revolted against its creators - that's an idea that can refresh our thinking about the law! This thinking also comes from the need not to allow law to become an autonomous subject on the grounds that it has created for itself an autonomous discipline with its own institutions, for this autonomisation itself stems from the revolt of the robots. *Law can only be understood as a dimension of governance*, which is the art, the institutions and the methods that a society provides itself with to regulate relationships among its members and ensure the conditions for its own survival.

As is made clear below, reflections on the changing nature of law converge in the end with those on the revolution in governance. The most obvious interface occurs at the level of management and institutions. That state and its sovereignty is the current foundation of law and governance and in both cases is what is preventing the acknowledgment of global interdependencies.

The discussions at the seminar also emphasized that it was necessary to get beyond the present contradictions of legal systems to question both the nature of society and the purpose of law.

Nature of society: it is a collective "of humans and non-humans". Non-humans are an integral part of a society just as humans are.

Purpose of the law : law does not deal solely with humans as 'subjects of law' but more broadly the interdependencies, the relationships between the different parts of society, human and non human.

This change of perspective radically shifts the centre of gravity of law, from 'human rights' to '*responsibilities derived from the interdependencies*'. The purpose of law is management of relationships. For responsibility is the corollary of interdependence.

It was observed during the seminar that environmental law provides no response to the real challenges of interdependencies. It only deals with the environment incidentally, through the necessity to manage the 'externalities' of human activity, the term itself showing that the environment is defined as *external* to society. This observation goes beyond the idea that in the words of Francois Ost 'responsibility is the hidden fact of law'. Once one accepts that the true purpose of law is management of relationships and interdependencies, responsibility exists independently of the affirmation of individual rights.

How is it that robots, which are human creations, can escape from their creator? One explanation has to do with temporality. It applies in the case of law and governance but also to 'scientific and technical logic'. Law and governance are in some respects society's rudder, a stabilising element that prevents it capsizing in the slightest squall. To be convinced of this one only has to think of the consequences of the legal insecurity that would result from over-rapid evolution of law or the general state of uncertainty that would result from a permanent instability of institutions and laws. But this instability, while not causing major inconvenience in stable societies, becomes a straightjacket in the case of societies undergoing rapid change. The hierarchical edifice of legal systems causes obscures their basic principles , which are neither thought about nor challenged, somewhat like modern computer programmes made up of so many layers that one has no knowledge of the nature and thus the limits of the 'deep layers'.

The stability of law and structures of governance, fully justifiable in a stable society, means that they escape from the control of society and are unable to meet the new needs of society. It is a well-known fact about governance: rules whose origin and purpose has been forgotten are untouchable for without knowing what their essential function is, there is a fear that if they are changed hastily, the whole edifice could be weakened.

I have shown elsewhere (La démocratie en miettes, [Democracy in pieces] 2003, Descartes et compagnie) the governance in stable societies rests on a tripod of institutions, powers conferred on these institutions, and rules. This tripod is ill-suited to the needs of a society undergoing rapid change. Another tripod is needed: common objectives, a common ethic, and problem-solving procedures. Moving from one tripod to the other does not mean that twenty-first century governance has no institutions, distribution of responsibilities or rules but simply that each of these three terms must be subject to the objectives pursued by the society, the common ethic

and must be part of the solutions that arise from the problem-resolution process. It is illuminating that Mireille Delmas-Marty, starting from her own legal framework rather than from a theory of governance, reaches astonishingly similar conclusions when referring to common values admitting of no exceptions, and arguing that law needs to be seen as a process of transformation.

So, in the loss of control over conceptual and institutional robots - conceptual robots being what Mireille Delmas-Marty calls 'logics' - logic of the State, scientific logic, technological logic and economic logic - there is firstly an effect of time. When the rate of change of these robots, formerly designed to meet needs of society, outstrips the rate of change of these same societies they escape from their control and impose on societies their way of thinking and management. This disconnect of rates of change means we think today with yesterday's ideas and manage tomorrow with institutions of the day before yesterday.

But there is a second effect of time. Just when the coming of the age of the anthropocene forces us to think of the long-term impact of our actions, on future generations or on the future and the survival of humanity; when the scale of the interactions among the actors , such as economic actors within the same production chains, should make us think in terms of shared responsibility; finally when the priority of governance should be long-term problems - the opposite direction is taken: short-term logics render us irresponsible with regard to the long term consequences of our action.

Let's take a few examples where law, governance and the economy meet.

First, accounting. As the work of Samuel Jubé has shown, company accounting initially had a vocation of assuring the long-term survival of the business. Now with 'market value' being the accounting principle imposed by international standards, accounting is limited to recording instantaneous value, ignoring the importance of human capital, individual knowledge and expertise and especially the collective expertise of the labour force, as well as the negative externalities of the impact of businesses on the environment.

Second, where responsibility is reduced to that of 'moral persons. By restricting responsibility to a legal structure that is only one among many links in the production chain it has until quite recently been possible to shift responsibility towards those who are dependent financially, technically or through the market on the entity that is unwilling to accept it. That means that there is no accounting or legal mechanism capable of dealing with the long term impact of a production chain on society and the eco-system.

Third, democracy. For over thirty years some people have been worried that just when a long-term vision is essential to retake control, democracy by opinion poll, and alternating governments – each one striving to undo what its predecessor did – is becoming a major risk to societies.

Of course 'endangering the safety of the planet' should be a forbidden act. But this has no practical application in the current state of the law of responsibility. It is not an individual, a business, or a state whose isolated action is endangering the planet. Rather, the danger is caused by the combination of these actions and their long-term effects. Therein lies the difficulty of a human rights approach to legal systems: the sum of individual rights has in all probability become incompatible with the preservation of the planet or the survival of humanity. That is why the law of responsibility does of course imply the possibility of sanctions, including penal sanctions, for irresponsible behaviours. But this needs to be within a law of responsibility that gives primacy to the interrelationships among the various actors and the long-term cumulative impact of the actors as a whole.