"Tangled up in green": the tight connection between COVID-19 and the environment

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1. COVID-19 as the first global crisis of the Anthropocene

Since the beginning of 2020 we are all involved in a global health crisis unlike any in our lifespan. The COVID-19 virus represents not only a threat for the survival of millions of people, but also a cultural and moral shock for the whole mankind. As stressed by the United Nations in a recent report "this is a human crisis", since "the coronavirus disease is attacking societies at their core". According to this UN Report "the International Monetary Fund has just reassessed the prospect for growth for 2020 and 2021, declaring that we have entered a recession – as bad as or worse than in 2009".

But economic concerns are only a part of the picture, cause COVID-19 brings also a 'democratic deficit', with governments all over the world prevailing over the legislatives powers in the management of the emergency. In such a situation, constitutional lawyers are called upon to investigate about the 'least dangerous' solutions to the crisis, balancing the need for a quick response to a dreadful virus that is imposing lockdowns and social distancing, with the reasons of democracy and of public participation to such a radical shift in our everyday routines.

If we look a bit further we will come across another important nexus: the 'entanglement' of the COVID-19 Pandemic with environment degradation and, more generally, with environmental concerns.

In fact, environmental degradation is both one of the causes and a powerful ally of the Pandemic.

At the international level, back in 2016, the UNEP's Frontiers Report stated that "around 60 per cent of all infectious diseases in humans are zoonotic" and warned that "never before have so many opportunities existed for pathogens to pass from wild and domestic animals through the biophysical environment to affect people causing zoonotic diseases or zoonoses. The result has been a worldwide increase in emerging zoonotic diseases and outbreaks of epidemic zoonoses".

Again, UNEP's 2017 Resolution on Environment and Health affirmed "the strong interlinkages between environment and health, including health inequalities", and the importance of "addressing them jointly by implementing the 2030 Agenda for Sustainable Development". More recently, in

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² United Nations, Shared responsibility, global solidarity: responding to the socio-economic impacts of covid-19, March 2020, p.1, https://www.un.org/sites/un2.un.org/files/sg_report_socio-economic_impact_of_covid19.pdf ³ Ibid.

⁴ UNEP, UNEP Frontiers 2016 Report: Emerging Issues of Environmental Concern, United Nations Environment Programme, 2016, Nairobi,

⁵ United Nations Environment Assembly of the United Nations, Environment Programme, Third session, Nairobi, 4–6 December 2017 UNEP/EA.3/Res 4, 2017; in the resolution it also explained "that human, animal, plant and ecosystem health are interdependent; emphasizes in this regard the value of the "One Health" approach, an integrated approach which fosters cooperation between environmental conservation and the human health, animal health, and plant health sectors.

the UNEP Statement on COVID-19, the executive director, while warning that "as we continue to relentlessly encroach on nature and degrade ecosystems, we endanger human health", has officially stated that "75 percent of all emerging infectious diseases are zoonotic, i.e. viruses originating from the transfer from animals, whether domesticated or wild, to humans."

From a different perspective, the current emergency introduced new elements of analysis, and several studies about the exposure to air pollution and COVID-19 mortality have been conducted, enhancing the concerns on the link between pollution and the diffusion of viruses. In Europe, and notably in Italy, the gravity of the pandemic in highly polluted and industrialized areas (i.e. Milan industrial district) confirms the evidences of these studies.

Other voices have underlined the link between the economic crisis brought by the Pandemic and environmental degradation. Adam Tooze, an historian from Columbia University, has recently suggested that "we are living through the first economic crisis of the Anthropocene".⁷

Lawyers are not very familiar with this word, but environmental lawyers know well that Anthropocene designates the contemporary geological era where humanity's ecological impact is determining a change in the atmosphere and more generally a degradation of the natural basis of life on earth. But nature has started blowing back on us in random and calamitous ways. According to Tooze "the great acceleration that defined the Anthropocene may have begun in 1945, but in 2020 we are facing the first crisis in which the blowback destabilises our entire economy". ⁸ And if the 'climate change crisis' requires to the common man an effort to watch at the overall picture (because the causal link between climate change and the natural disasters we are suffering today is less evident) "the remarkable thing about Covid-19 is that it brings the risks of the Anthropocene home to each and every one of us individually", so that people themselves "have *en masse* decided on their own response to the threat, often ahead of their governments" and "that was most dramatically reflected in the financial markets, which began a global run to safety". ⁹

In the Anthropocene, and under the garb of globalization, we will need to look closely to the relations between environment and health, environment and economics, but also to take some lessons from what has been elaborated by environmental law and policies to deal with the unpredictable risks of our troubled times.

2. Institutional strategies to deal with COVID-19: and if we looked at environmental law principles?

Environmental lawyers are accustomed to face risks: nearly every human activity implies risks for and entails (piecemeal or sudden) transformations of the environment. But not all risks are equal! In fact, the current debates on the emergency measures and on the restrictions to individual rights and liberties normally fail to take into account a basic element: we are not facing an 'ordinary' emergency, like earthquakes, floods, fires or other natural disasters, against which we have standard 'disaster management' protocols and rules. We are fighting against an unknown enemy carrying

⁹ Id.

https://www.unenvironment.org/news-and-stories/speech/executive-directors-statement-150th-meeting-committee-permanent

[†] The Guardian, see online: https://www.theguardian.com/books/2020/may/07/we-are-living-through-the-first-economic-crisis-of-the-anthropocene

⁸ Id.

with 'him' unknown and unpredictable risks. Thus, the situation we are facing is not comparable neither to the 'natural' nor to the 'political' emergencies often referred to in many constitutional texts, arising from wars, invasions, armed uprisings, terrorist attacks. All these contexts require the use of 'preventive measures' (that is to say the application of the preventive principle) against an already experienced and known 'evil'. On the contrary, COVID-19 puts us in a different scenario, because we are facing a threat we cannot see and don't know. It is not only an 'emergency', but an 'unknown emergency'.

The debates on constitutional emergencies have often used indifferently terms like prevention, preventive measures, precaution, precautionary principle, often mixing them up without accuracy. This is the case of the, otherwise interesting, debate on the so-called 'precautionary constitutionalism'. The discussion was opened by a path breaking article of A. Vermeule on precautionary principles in constitutional law, where the author attributes to the a precautionary approach "a master principle according to which constitutions should be designed to take precautions against political risks". Among the political risks associated to the precautionary principle Vermeule lists: abuse of power, tyranny (in the sense of legislative or executive dictatorship), majoritarian oppression, minoritarian oppression, and some other. The fact is that all these 'risks' are highly known and predictable (or at least foreseeable), representing possible degenerations of a democratic system. In such cases constitutional law doesn't have to take a (generic) precautionary approach against them, but a preventive approach enumerating the cases where preventive measures should be applied. We are thus in a completely different scenario with respect to what we are experiencing today with COVID-19.

To frame properly the present situation it is necessary to take a step back and recall some of the environmental law principles, and particularly to so called 'triad' of the environmental management principles traceable in European Union law: the 'polluter pays', the principle of prevention and the precautionary principle. In their historical development (in EU law, but also in domestic environmental law all around Europe), these principles articulate the stages of the evolution of the relationships between law and science in environmental matters.

'The polluter pays' principle requires lawyers and scientists to intervene when the environment has been damaged, by means of a cure aimed at restoration of the equilibrium, on the basis of a 'curative model'. Normally it cannot restore the environment damaged or destroyed but just offer a compensation (in most of the cases a pecuniary one). The principle of prevention, on the other hand, represents a step forward since it identifies the impact of human activities on the environment not as episodic and resolvable *a posteriori* (according to the curative model), but as a constant condition of individual and social action. Environmental problems should thus be dealt with in advance, by prevention, with specific procedures such as, for example, the environmental impact assessment (EIA). This preventive approach is still based on a complete trust in technical-scientific evidence as an instrument for the resolution of all environmental problems.

On the contrary, the precautionary principle intervenes at a different stage and is essentially based on the impossibility for legal or political actors to rely on objective scientific data in certain

¹⁰ A. Vermeule, "Precautionary Principles in Constitutional Law", *Journal of Legal Analysis*, Spring 2012: Volume 4, Number 1, p. 182. The thesis of this author is exposed in details also in A. Vermeule, *The Constitution of Risk*, Cambridge University Press, Cambridge, 2013.

Idem p. 184.
For a complete assessment of the genesis of this principles see N. De Sadeleer, Environmental Principles: From Political Slogans to Legal Rules, Oxford University Press, Oxford, 2002.

circumstances. In this sense it is a typical post-modern legal principle. When confronted to unknown risks one becomes aware of the incapacity of science to apply solutions to environmental (and health) problems always and in every case. This demonstrates the insufficiency of the curative and preventive models illustrated above. Here the precautionary principle plays an emergency role, requiring the public actor faced with a situation of necessity to make choices in any event, even if not supported by scientific certainty. There comes one of the main elements of the precautionary principle: the expansion of political and administrative discretion with regard to choices having an uncertain technical and scientific content. The precautionary principle brings out the changed legitimization between science and politics, placing the responsible political and administrative parties at the forefront of difficult decisions. ¹³

For environmental lawyers and managers COVID-19 represents a typical 'precautionary principle scenario'. In environmental matters (but this applies, of course, also to health problems) when there is sufficient scientific knowledge about a danger (i.e. air pollution), the preventive principle leads legislators and administrators to prevent or limit the damages to the environment. In such cases, scientific evidences facilitates the adoption of the preventive measures. But, when we face, like in the COVID-19 crisis, a situation of scientific uncertainty, we need to apply the precautionary principle. This principle does not refer to a generic 'family man' precaution, but to an anticipatory approach, normatively synthetized in the 1992 Rio Declaration on Environment and Development: "Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation." Then, what are the exact contours of this principle? Not being able to refer here to the endless bibliography on the subject, I will briefly sum up one of the best description and articulation of it,

that is the Communication by the EU Commission on the precautionary principle.¹⁴

According to the EU Commission "the precautionary principle should be considered within a structured approach to the analysis of risk which comprises three elements: risk assessment, risk management, risk communication". 15 The Commissions warns out that "the precautionary principle, which is essentially used by decision-makers in the management of risk, should not be confused with the element of caution that scientists apply in their assessment of scientific data" to conclude that the "implementation of an approach based on the precautionary principle should start with a scientific evaluation, as complete as possible". 16 Concerning the measures to be adopted, the EU also indicates an accurate shortlist. Thus, the measures based on the precautionary principle should be: "1) proportional to the chosen level of protection; 2) non-discriminatory in their application; 3) consistent with similar measures already taken; 4) based on an examination of the potential benefits and costs of action or lack of action (including, where appropriate and feasible, an economic cost/benefit analysis); 5) subject to review, in the light of new scientific data; 6) capable of assigning responsibility for producing the scientific evidence necessary for a more comprehensive risk assessment". 17

¹³ On this important function of the precautionary principle see D. Amirante, "Codification and Technical Rules in Environmental Law: Reflections on the French Experience", in A. Biondi, M. Cecchetti, S. Grassi, M. Lee, Scientific Evidence in European Environmental Rule-Making. The Case of the Landfill and End-of-Life Vehicles Directives, Kluwer Law International, The Hague, 2003, pp. 99-110.

¹⁴ European Union, Communication from the Commission on the precautionary principle, COM/2000/0001 final, dated 02/02/2000, available at: https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52000DC0001

¹⁵ Idem, p. 2.

¹⁶ Idem, p. 3.

¹⁷ Idem p. 4.

Are national states adopting this protocol for the precautionary principle? Are they evaluating the gravity of the potential risk, declaring the social acceptability/non-acceptability of the risk, taking proportional measures with respect to the risk, in a context of scientific uncertainty? Those are some of the basic questions that a comparative analysis of States' responses to COVID-19 should address. Within Europe not all the States have adopted such strategies, but we can mention the example of Italy, one of the worst affected States by COVID-19 in the old continent and the first Western country to enforce strict lockdown measures. The Constitution of the Italian Republic (1947) does not devise any rule for the declaration of the state of emergency (without taking into account art. 78 on the declaration of the state of war). The state of emergency was thus declared on January 31st on the basis of a statutory provision: the Civil Protection Code of 2018¹⁸, that allows the government to adopt "any necessary measure" within the limits of the "general principles of the legal system". On February 23rd, the first of many such measures was approved: the decreto-legge 6/2020, which has empowered the competent authorities (indicated in art. 1, paragraph 1) to adopt «every containment and management measure adequate and proportionate to the evolution of the epidemiological situation», leaving ample room for discretion. Article 2 provides that further containment and emergency management measures can be adopted, in order to prevent the spread of the epidemic: they must are adopted through the legal instrument devised by art. 3, paragraph 1: the Prime Ministerial Decree (D.P.C.M.). On such premises the government enacted several decrees, issued by the Prime Minister, which are administrative in nature and that set out in detail the rules on prohibited activities. More administrative acts have been established by individual ministries, like the *Ministry of Health*¹⁹.

Therefore, in the absence of specific constitutional provisions, all emergency measures have been taken in Italy on the basis of the law-decree 6/2020 (decreto-legge, a sort of ordinance enacted by the government in case of "urgency and necessity" on April 30th 2020, the head of government (the President of the Council of Ministers, Giuseppe Conte) has justified such measures with an explicit reference to the precautionary principle, applied after a risk-analysis offered to the government by a Technical Committee appointed on purpose. In this case the experts were not 'dictating' measures to the government, but drawing the scenario of possible risks. After some

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¹⁸ Legislative-decree no. 1 of January 2, 2018: the Civil Protection Code identifies the national civil protection authority in the President of the Council of Ministers, assigning him (art. 5) powers of ordinance and directive; the same Code then devises (art. 7) three levels of emergency, with the third level being the most severe and defined as «emergencies of national importance which, in terms of their breadth and intensity, must be addressed with extraordinary means and powers during defined and predefined periods of time».

Upon the occurrence of an emergency of national importance, acknowledged by the Department of Civil Protection, the Council of Ministers, upon proposal of the President of the Council, deliberates (art. 24) the *state of emergency of national importance*, establishing its duration, which cannot however exceed twelve months, renewable for another twelve. To deal with the national state of emergency, the President of the Council of Ministers can adopt ordinances (art. 25), in derogation from any current provision, as long as they comply with the general principles of law and European Union law.

¹⁹ In fact, Law no. 883 of December 23, 1978 – the law that established the Italian National Health System – is still a fundamental legal basis of these administrative acts, as art. 32 recites: «the Minister of Health can issue ordinances of contingent and urgent nature, regarding hygiene and public health and veterinary police, with efficacy extended to the whole national territory or to part of it comprising several regions».

²⁰ Art. 77 Cost. Ita: «When in extraordinary cases of necessity and urgency the Government adopts provisional measures having the force of law, it must on the same day present said measures for confirmation to the Houses which, even if dissolved, shall be summoned especially for this purpose and shall convene within five days. The decrees lose effect from their inception if they are not confirmed within sixty days from their publication».

Law-decree 6/2020 has thus been confirmed, modified and converted into Law no. 13 of March 5th 2020.

initial criticism coming from opposition parties, this precautionary attitude of the Italian government has been largely accepted by the public opinion.

3. The effects of COVID-19 on environment: a 'breath of air', the dangers of environmental rollbacks and the need for a 'green' economic recovery

The COVID-19 crisis has apparently produced beneficial effects on the general state of world's environment, with a sudden decrease of pollution due to lockdown measures taken by a large number of States, but it entails also many risks for the environment in the long run.

Lockdowns have determined the closing of schools, universities and of a large number of productions and commerce considered as non-essential. Industrial production has been reduced and the impact of transportation has substantially dropped, from the international flights to the everyday routine of commuters and housekeepers. All this has resulted in a considerable reduction both of carbon emissions and of global warming, a 'breath of air' for our planet. In fact, according to the International Energy Agency, world's CO2 emissions are expected to fall by 8% this year because of the global economic downturn. But there is another important effect. If, for centuries, humans have pushed wildlife into smaller and smaller corners of the planet, today nature is pushing back. Wild boars have descended onto the streets of several cities like Barcelona and Haifa, mountain goats have invaded a town in Wales. Whales are freely moving into the Mediterranean seas, while dolphins can be found in the once overcrowded Bosphorus, near Istanbul.

But how long will this positive effect of COVID-19 on the environmental state of the planet last? What will happen when the pandemic eventually and hopefully subsides? It is most likely that carbon and pollutant emissions come back quickly, and in a certain way, they are already coming back. In many countries, the urge for economic recovery induced governments to announce plans to lower environmental standards or other related measures.

In fact, global pandemics, states of emergency with the consequent national responses have repeatedly originated 'rollbacks' in environmental laws and regulations. In some cases, such legal downgrade already affected environmental policies; in others, the current situation accelerated a silent reversion to the previous regimes. In other words, we are witnessing to some attempts in using the COVID-19 as 'cover-topic' for environmental law downgrades.

The most evident example is provided by the United States, continuing on a previously established trend. As highlighted by the Environmental and Energy Law Program (Harvard Law School), currently the pattern is to delay the enforcement of already existing environmental rules, waiting for a more explicit rule to definitely erode environmental protection.²¹

The COVID-19 emergency affected this trend, especially in delaying the enforcement of environmental protection legislation. An example of this approach is the Memorandum of the Environmental Protection Agency (hereinafter EPA) issued on 26 March.²² According to the memorandum, EPA applies a discretion compliance policy due to the concerns deriving from facilities operations, the lack of technical staff and delays in scientific operations of analysis.

²² United States Environmental Protection Agency, Memorandum 'COVID-19 Implications for EPA's Enforcement and Compliance Assurance Program' (Washington 26 March 2020).

²¹ N. Popovich, L. Albeck-Ripka, K. Pierre-Louis, '95 Environmental Rules Being Rolled Back Under Trump' *New York Times* (New York 21 December 2019).

In a different way, Canada is favouring a non-compliance policy and a lack of coordination between the federal and the provincial levels of government. For instance, peculiar policies have been adopted at the federal level concerning fisheries, as per the Fisheries Management Order of 15 May (revoking the previous order of 2 April). This measure allows to carry out fishing activities without at-sea observers.²³ Another example of the Canadian attitude to non-complying with environmental legislation is the discretional policy in reporting pollution data adopted by the Province of Alberta. In this case, the Ministry of Environment and Parks postponed the date of reporting on renewable fuels standards. In the same way, during the pandemic, the Saskatchewan province issued a Temporary Enforced Policy, asking for a strict comply with environmental obligations, but with exceptions when they are reasonably practicable because of COVID-19.²⁴

This attitudes have been harshly censured by the UN Special Rapporteur on human rights and the environment, D. Boyd, stating that "these actions are irrational, irresponsible, and jeopardize the rights of vulnerable people". According to Boyd "such policy decisions are likely to result in accelerated deterioration of the environment and have negative impacts on a wide range of human rights including the rights to life, health, water, culture, and food, as well as the right to live in a healthy environment". So we are likely to face a serious 'environmental crisis' following the COVID-19 crisis.

A crucial arena to understand the direction of the economic recovery during and after COVID-19 is climate change action, the core of the environmental policies for today and for the years to come. The pandemic has delayed the UN Climate Change Conference COP26, set to take place in Glasgow in November, that has been be rescheduled for 2021. But here the good news is coming from the European Union, which appears to be firm in its commitment to keeping up the pressure on an important reduction of carbon emission, with ambitious targets set for 2030 (and a promised carbon neutrality for 2050). In fact, EU has recently announced a € 750 billion recovery plan to pull EU economies out of the deep economic downturn caused by coronavirus. At the heart of the plan, the EU proposes to raise up to € 40 billion the amount of the "just transition fund", a specific monetary tool for climate transition, aimed at moving coal-dependent regions away from fossil fuels. According to press reports the European commission vice-president, Frans Timmermans responsible for the European green deal, said the EU needed to ensure it was not putting money into the 'industries of the past'. Timmmermans declared that "for many regions and companies including those relying on coal production and carbon-intensive industrial processes, this economic crisis has raised an existential question: ... do we rebuild what we have before or do we seize the opportunity to restructure and create different and new jobs?",²⁵. The answer to this question was given by the European Commission President Ursula von der Leyen, stating that "as we now plan to slowly go back to work and to invest billions of euros to restart our economy, we should avoid falling back in old, polluting habits", concluding that the European Green Deal will be "our motor for the recovery". Von der Leyen is convinced that "by using the European Green Deal as our

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²³ Ministry of Fisheries, Oceans and the Canadian Coast Guard, 'Order related to **Section 9.1 of the** *Fisheries Act*' (15 May 2020).

²⁴ Saskatchewan Ministry of Environment, 'Temporary Enforcement Policy during the COVID-19 Pandemic', available at https://www.saskatchewan.ca/accessed 24 May 2020.

²⁵ Interview reported by *The Guardian* on 28th May 2020, https://www.theguardian.com/environment/2020/may/28/eupledges-coronavirus-recovery-plan-will-not-harm-climate-goals

compass, we can turn the crisis of this pandemic into an opportunity to rebuild our economies differently and make them more resilient."²⁶

In conclusion, in spite of the risk of an environmental/climate change regulation collapse, the impact of the lockdowns on GHGs emissions produced an expansion in the legal bias, forcing the acknowledgment of the pivotal role of previously neglected law areas. In these cases, coercively or not, legal systems must deal with environmental issues in a more pertinent way, forcing future legislative actions and not relying mere policies or soft-law arrangements. At the same time, we have to note that, globally, renewable energies have been more 'resilient' than fossil fuels during this crisis. This may stimulate more investments in this sector, considering it a priority in the future public (and private) expenditure to redress the economic system.

4. After the COVID-19 crisis: back to what?

The COVID-19 crisis has changed the world, it has changed our way to perceive reality, it has incited millions of people to reflect upon our lifestyles. We have suddenly discovered that our intrinsic fragility (inscribed in every human DNA) cannot be completely protected by technology, a flourishing economy, or any 'securitarian' approach (coming from international organisations, the State or corporate powers).

This paper is hardly the place to discuss the cultural, political and philosophical impact of COVID-19, but we can at least point out some lessons that constitutional lawyers can learn about the relations between human societies and environment.

First of all we have experienced the 'butterfly effect' coming all the way from China to every family fireside (even if the butterfly has turned into a bat). This was the final 'welcome to the Anthropocene', a refrain that buzzes in our ears since the Nobel Prize Paul Crutzen launched this new weltanschauung about the relation between man and nature in 2000.²⁷ For lawyers the Anthropocene announces the difficult transition towards a more responsible way of making and applying laws and regulations, on the premise of an integrated conception of human action and of the recognition of his belonging to the natural world. This means that constitutional law should reflect on how to translate this new consciousness into a systemic integration of environmental concerns into the 'basics' of constitutional law.

Another lesson we have learned is that environmental law principles like, in this case, the precautionary principle are at the core of an in-depth reflection on the relationship between law and science, and are able to provide strategies for action that are particularly fitted for the "age of risks" that we have entered over the last decades.

On a more general note and as an 'open' conclusion to this short paper, we can recall the words of the French epistemologist Bruno Latour inciting us not to miss this opportunity for change. By going back to 'business as usual' we will just prepare the conditions for another crisis, be it an environmental, a climatic or an epidemic one. According to Latour "we have actually proved that it is possible, in a few weeks, to put an economic system on hold everywhere in the world", so "if in January the demand to make a 90 degree turn to land on the Earth seemed like a gentle illusion, now

²⁶ Interview reported at https://www.euractiv.com/section/energy-environment/news/green-deal-will-be-our-motor-for-the-recovery-von-der-leyen-says/

²⁷ P. Crutzen, E. F. Stoermer "The 'Anthropocene", Global Change Newsletter, n. 41/2000, p. 17–18

it becomes much more realistic". ²⁸ For Latour the good news is that: "if in a month or two, millions of humans are capable of learning how to 'social distance' at the blow of a whistle, to space themselves for greater solidarity, to stay home so as not to overload the hospitals, then it is easy to imagine the power of transformation that these new protective measures have against bringing back business as usual". ²⁹ According to the statements made by the European Union leaders (and reported above) Europe is ready to play its part for a "green new deal". Will it be sufficient to 'tangle up in green' the social, political and economic recovery from the COVID-19 crisis?

²⁹ Idem.

²⁸B. Latour, "What protective measures can you think of so we don't go back to the pre-crisis production model?", articled appeared in AOC on 29th March 2020: https://aoc.media/opinion/2020/03/29/imaginerles-gestes-barrieres-contre-le-retour-a-la-production-davant-crise/; english translation available at: http://www.bruno-latour.fr/sites/default/files/downloads/P-202-AOC-ENGLISH 1.pdf