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## The Dark Horizon of the Future: Opacity, Disaster, and Responsibility

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According to François Hartog, we are now living in a system of historicity focused on the present—"presentism" (2003). "Presentism" has replaced the modern system of historicity, "futurism," which generally prevailed from 1789 to 1989. Breaking from the concept of history as magistra vitae, itself belonging to "pastism," "futurism" was characterized by the predominance of the horizon of expectations over the field of experience from which it had broken. In "presentism," the two categories have merged into a perpetual present that quickly forgets the past and no longer anticipates the future. Has "presentism" become the dominant category of historical experience? I would fine-tune this thesis by saying that Western societies are also distinguished by a concern for the future. This is manifested in different ways: by the preoccupation for the fate of future generations, theorized over 30 years ago by Hans Jonas, and by being obsessed by risks. Quoting Ulrich Beck, "risk societies" are societies fixated on shortand long-term risks, and thus on the future—because risk is a future dreaded event. Societies are so preoccupied with the future because they themselves generate a large portion of these risks, and they feel as if they can effect future scenarios.

In this contribution, I would like to identify certain categories with which current societies represent the future: because the reflections and actions of groups and individuals are focused on more or less explicit categories which outline the representation of the future, the framework where future events are comprehended.

### Novelty, progress, acceleration, feasibility

First, we must go back to the representation of the future which characterizes modern times, according to the German historian Reinhart Koselleck. From the second half of

 $the\ eighteen th\ century, during\ the\ Enlightenment, representations\ of\ the\ future\ changed$ drastically. Four new categories were required to plot the future: novelty, the promise of progress, acceleration, and action. (1) The new future is actually characterized by the strength of novelty, by its unpredictability. Instead of copying the past, it constantly creates totally new events. The old model of Historia magistra vitae, which claimed that the past constituted a series of examples to imitate, has become null and void. The "horizon of expectations" broadened and broke away from the "field of experience" (Koselleck 1990a, 37-62, 307-29). For most thinkers of this era, history never repeats the past; it invents the future. (2) The category of progress replaced the category of the cycle, and persisted until at least Marx, who affirmed that history progresses, even if it is for the worst. The future is the hallmark of improvement. People expect the future to be a different experience, one that is better than what they have already been through. (3) By bringing newness, the future constantly changes the landscape of the present so that history seems to be speeding up. Sweeping changes no longer spread out over decades or centuries, but rush in instead, one after the other. The French Revolution illustrates this new experience of history. In his speech on May 10, 1793, Robespierre declared "The time has come to call upon each to realize his own destiny. The progress of human Reason laid the basis for this great Revolution, and you shall now assume the particular duty of hastening its pace" (Koselleck 1990b, 22). (4) The future conceived in this way is not a mere expectation, but a task, a mission to carry out. People think they can "make" history, that they can construct their own future. This is what Koselleck calls the category of the "feasibility" or "availability" of history (1990c, 233–47). History has become "makeable" and producible by people.

Today we are discovering that this four-part representation of the future contains an inherent contradiction that has gradually revealed itself. There is a tension between the feasibility of the future, on the one hand, and its newness linked to its acceleration, on the other. The more the future presents newness, the more it becomes unpredictable, and the less it is makeable. The more it puts pressure on the present, the more history accelerates, and the less it is controllable. In order to accomplish a task, we must have predictive knowledge of the future. To anticipate the future, we must have the time to understand the present.

#### Opacity

The first inescapable observation is that the category of the opacity of the future overrides the idea of novelty or at least competes with it. People act in a thicker and thicker fog: "all of us, individuals and institutions, must strengthen our capacity for predictions and the study of the future. But at the same time, the future has never seemed as enigmatic as it does right now" (Innerarity, 58). The future has become obscured and seems to be not only more and more unpredictable, but also darker and more foreboding. What are the reasons for this?

The sense that the future is murky stems partly from the mission, inherent to our modernity, of controlling the future. For Marcel Gauchet, modern democracy was established with the intention of "governing history" (2007, 45–8). In order to govern, we must be able to anticipate and find prospective methods. In France, a good example of this can be found in Condorcet's *Tableau historique* (1998, 10ème livre) and more recently in the *Commissariat général au plan* which was replaced in 2006 by the *Centre d'analyse stratégique*. However, the more one tries to know the future, the more one discovers that it is unpredictable, that it evades any attempt at being predicted. Knowledge increases ignorance. The more instruments capable of predicting there are at our disposal, the more we notice that the future resists them. In this way, attempts at prediction end up revealing the unpredictable. The future has surely always been unpredictable, but this has never been more greatly recognized than it is today.

However, other details may justify the idea that the future is more unpredictable than before. I will mention the large gap between our predictive knowledge and our ability to modify nature. This is Jonas's thesis. Prometheus is "definitely unchained" (1998, 15). Technological processes have become automated and develop frantically to the point where they cannot be stopped. Human freedom is confined to the beginning of the process, to the very choice of implementing new processes. The process then has its own inertia and becomes irreversible and abandons those who started it. People become not only the passive spectators of their creation, but also prisoners of the processes that they themselves have triggered. Jonas said that "technology's seizure of power" is "a totally anonymous and compelling revolution that nobody ever planned" (1998, 245). We are powerless to control technological processes because we are blind to their consequences. Knowledge is no longer what it was from antiquity to the Enlightenment, that is, synonymous with the power man has over the world. Human action has changed profoundly. With the invention of increasingly efficient techniques, human capacity to disrupt nature has become much greater than its capacity to predict the effects of its actions. The more we transform the world, the less we can predict or

We are in a paradoxical situation: "we know more on the one hand, less on the other, about the future than our pre-modern ancestors." The future is more predictable in the sense that physical developments have led to the increase in people's ability to predict. Yet it is simultaneously more unpredictable in the sense that the modern world is perpetually changing. Therefore, it is impossible to use the field of experience of the past to sketch out the future's horizon of expectations. We must "start out with the new, without being able to calculate it" (1998, 231).

The growing opacity of the future can also be explained by the phenomenon of globalization. Societies' evolutions are linked to each other, making them more complex and more unpredictable. In order to anticipate the future of a state, we must take into account the situation of many other states.

Finally, the future is unpredictable because of the acceleration of history.¹ The rather vague category of acceleration actually means that the number of political, cultural, social, technical, or scientific changes that appear in a given unit of time (years, decades,

Nora defines the "acceleration of History" as "a more and more rapid disappearance into a definitively dead past" (1997a, 23).

centuries) are continually on the rise (Rosa 2005). There is an increase of events which appear and disappear more and more quickly. Unpredictability increases from the fact that there are more new events to anticipate and that the time needed to anticipate them before their arrival is becoming shorter and shorter. Faced with a situation where the consequences of actions are often irreversible, lasting, and unpredictable, we should make sound political decisions based on rational expectations. Yet acceleration reduces the period of time necessary for such resolutions. Scarcely do new events peek over the future horizon than they are already here, crowding out events occupying the present to a quickly forgotten past. The slowness of the democratic process is ill-suited to the logic of urgency (Laïdi 2000). Thus, "torrential, exponential acceleration" (Jonas 1998, 246) imposes itself upon humankind like fate (which cannot be stopped) and constantly obscures the future. History happens too quickly for us to predict and thus create.

#### Indeterminacy

The obscurity of the future is compounded by its indeterminacy. The future is indeterminate in the sense that many scenarios are possible. Indeterminacy is not uncertainty or the absence of knowledge. Indeterminacy means that even if we manage to know several possible future scenarios, we cannot know with certainty which one will happen. At best, we can establish probabilities for each of them. It seems to me, from a formal standpoint, that the most pertinent current scientific model to describe the future conceived thusly is provided by quantum mechanics, which has overtaken the determinist paradigm (Heisenberg 2000, 150). Let us recall that Heisenberg distinguishes three periods in the history of scientific determinism. The indeterminacy of the knowledge of the present state of a particle leads to an indeterminacy of the knowledge of its future state; it renders any exact prediction of its future state impossible (Bitbol 1998, 312). However, this indeterminacy is not total since prediction is feasible in the form of probability. Quantum mechanics predicts several possibilities in observing a particle, with a rate of probability applied to each one of them. Schrödinger's equation describes the evolution of these probabilities over time. Predictability is limited, but it still exists since probabilities describe a range of future results.

This schema applies *mutatis mutandis* to the macroscopic future of human societies, with the substantial difference that the probabilities therein cannot be calculated using mathematical equations. The impossibility of completely knowing all the factors of a present situation leads to an impossibility of unequivocally determining the future. We can find several possible scenarios, but we cannot tell which one will come about. We sometimes have probabilities, even if they are difficult to establish. This indeterminacy of the future is included in the notion of risk. Risk means "a latent induced effect" (Beck 2008, 26). It is a possible consequence to a present situation, a threat, a future event that should be prevented. Concerning risks related to the chemical industry, Beck notes that

they "take indeterminable, unpredictable paths": "supposed causality still remains more or less uncertain and transitory" (2008, 50–1). And there are often several causalities at stake that converge to produce damaging health effects. Scientific estimations are therefore merely "statements of probability." Indeterminacy increases by the fact that, concerning the evaluation of risks, scientists do not always remain objective, they live in "long-term cohabitation" with the economy, politics, and ethics (2008, 53). This situation can just as easily lead to an underestimation as an overestimation of risks. Scientists whose research is funded by pharmaceutical laboratories, for example, may have an incentive to encourage the diagnosis of a pandemic in order to sell vaccines to the masses.

#### Disaster

The category of novelty, without being denied, has been challenged by the categories of opacity and indeterminacy. The landscape of the future grows even darker because the category of progress, typical of the representation of the future in modern times, was balanced out in the twentieth century by the category of disaster. It would be wrong to believe that the idea of progress has disappeared; it remains in a sober and limited form, in surgery and medicine, for example. But the future is now thought of more as a threat than as a guaranteed improvement. Hope for the *Grand soir* has been replaced by the fear of great disaster. This ubiquity of disaster, saturating the expectation horizon of Western societies, is summarized by Günther Anders's statement "Hiroshima is everywhere." In other words, "the possibility of Apocalypse may be our fault. But we do not know what we are doing" (2008, 324).

We might wonder if this declaration is excessive or merely linked to the historical context of the Cold War. Today, the threat of worldwide nuclear war has subsided, but other, real and possible disasters have taken the forefront. This category is applied to very diverse events, from economic crises to tsunamis. The risk society is "a society of catastrophe" (Beck 2008, 43, 143). A disaster is an event which is notable for the magnitude of its destructive effects, an event which has harmful consequences for a large portion of the population (nuclear explosions, chemical pollution, pandemic, etc.). The difference between a simple risk and a catastrophic risk lies in short- and long-term impacts on the population. The notion of violence and suddenness seems to make up a part of the concept of disaster. Yet there exist progressive disasters which are nearly invisible at their beginnings, such as acid rain that slowly destroys forests, or global warming that may lead to rising sea levels, forcing millions of coastal people to emigrate.

Throughout history, humanity has confronted disasters such as plagues, cholera, and earthquakes. The menacing influence of the climate is nothing new either. In the past, harsh winters, sweltering summers, and the famines that ensued have played a determining role in the history of peoples (Leroy-Ladurie 2004–9). What is new today, beyond the magnitude of the warming that has been measured, is the fact that humans

can be considered the origin of this natural threat. Arendt emphasizes that, throughout the twentieth century, the idea of production has spread little by little to nature, erasing its boundary with history (Arendt 1989, 79). Through technology, people make nature as much as they do history. Philosophers think especially about the fabrication of the nuclear bomb, which introduces a natural process the Earth has never known. But the production of a hole in the ozone layer is another way for people to (involuntarily) change nature. Supported by the vast majority of current scientific work on the subject, the discovery of the direct link between the use of greenhouse gases and global warming squares with the idea of people's possible control over the natural history of the Earth because we hope we can undo anything we have done.

The category of disaster plunges our present era into gloominess, of which the Cormac McCarty's novel The Road is but one reflection among many.2 The future abounds with multiple possible disasters: ecological, terrorist, nuclear, epidemiological, health, humanitarian, financial, airline, climatic, etc. We can also add to this list the innumerable disasters cleverly sensationalized and broadcast by the media, like the accident that trapped 33 Chilean miners underground for several weeks in September-October, 2010, attracting more journalists than the attacks on September 11, 2001!3 It is not easy to determine the criteria for calling an event a disaster. These criteria are partially determined by the media, which often favors one disaster over another. In France, even the legal term "natural disaster" is difficult to define absolutely. It may be declared when a specific region is struck by an extraordinary weather-related or geological natural phenomenon (storms, floods, avalanches, landslides, earthquakes, etc.). But this situation is left to the discretion of the authorities, and sometimes leads to heated debate, especially when it comes to financial issues related to insurance indemnities. The category of "natural disasters" is actually not natural, in the sense that its application adheres to meticulously studied scientific, legal, and media processes.

I would like to emphasize here that the category of disaster is balanced out by "feasibility," which continues to increase in power. The future darkened by various threats of disaster can be modified and changed, in addition to being "feasible" and "changeable" by people. Randomness and fate are replaced by risk, something which can be considered and removed. Future disaster is "a fate that we can *choose* to distance ourselves from"; "it means acting *as if* we were dealing with a particular destiny, in order to better divert its course." We must "predict the future in order to change it" (Dupuy 2004, 63, 161). What is "changing the future," if not exerting lucid influence on the course of events and on certain aspects of the history of the world—helping us to guide and make future history? The future is "a pathway with many forks" and can be described in the form of alternatives, like a decision-tree (184). It is represented as an arborescence of more or less probable possibilities.

At the time of the Lisbon Earthquake in 1755, we did not usually think of disasters as something caused by people. Today, we tend to think the opposite, that nearly all

disasters imply human responsibility and can, therefore, be foretold. The boundary between natural and human disasters (those caused by human activity) becomes vague. The watchword is to "predict disaster," meaning both to anticipate and to avoid it, acting upon its causes or at least its effects. There are very few disasters for which people can be freed from any liability.

The Chernobyl nuclear disaster in 1986? This was the result of a culmination of malfunctions (such as a lack of any confinement enclosure) and human error (safety procedures were not carried out).

The tsunami in 2004? Until proven otherwise, humans are in no way responsible for the movement of tectonic plates. But in reality, we can always set up measuring instruments, alert systems, and seismically retrofit houses and other structures. So, in a certain respect, even if we cannot foretell the causes, we can at least anticipate the effects of this kind of disaster.

Global warming? Greenhouse gases are responsible for the rise in observable temperatures, and as a result, their decrease should prevent future disaster.

In a very different way, economic disaster is also worth mentioning, that is the subprime crisis of 2008. These financial instruments were originally meant to reduce risks. These types of mortgages were granted to persons with low borrowing capacity and were effectively transformed into marketable securities. Banks shared these risks with other financial institutions that bought the securities. But securitization had the inverse effect of extending risk, with a domino effect: the accumulation of the borrowers' personal bankruptcy sullied the accounts of the banks, which had bought up these debts on a massive scale, etc. So was this disaster unavoidable? For certain economists, the subprime crisis showed instead that "our system effectively makes us 'firefighting arsonists,' constantly putting out the fires we ourselves set" (Giraud and Renouard 2009, 19). Bank managers are even more responsible for the crisis, as reported by certain specialists. The President of the Central European Bank, Jean-Claude Trichet, thus made his concerns public on several occasions in 2006, 2007, and 2008.

These economists believe that, if we cannot abolish capitalism completely, we can and should still "reform" it: "it would be fitting to choose, together, which type of capitalism we want to develop for the future. This choice falls within the responsibility of democratic debate, but certainly not any economic fate whatsoever (whether it be the so-called market laws or laws of history)" (Giraud and Renouard 2009, 317).

#### Responsibility

The last category of the future I would like to bring up is that of "responsibility," something very difficult to define. Even though the future may be obscure, indeterminate, and menacing, we can act upon it, remove catastrophic scenarios, select options that are judged as preferable. In short, we are responsible for this future.

Hans Jonas was the first to highlight the importance of this responsibility for future generations. The ignorance inherent to human action is the fate of our modernity. This

On a different note, we could cite numerous blockbuster movies which depict the end of humanity by disasters of exceptional magnitude. The latest one, to date, is Roland Emmerich's 2012.

<sup>3</sup> I would like to thank Dominic Desroches for this commentary about the media's response to disaster.

The gap between the strength of predictive knowledge and the ability of doing leads to a new ethical problem. Recognizing this ignorance then becomes the other slope of the obligation of knowing and this recognition then becomes part of the ethics that must teach ever more necessary self-control of our excessive power. (1998, 33)

This type of analysis probably inspired the principle of precaution. When in doubt, it is best to envision the worst-case scenario. Other authors have used dialectical reasoning: it is precisely because the future has become more uncertain, indeterminate, surprising, and inventive that it leaves room for human decision and action. A predicted future, one that is planned out in advance, would not leave the slightest room for initiative (Innerarity 2012; Gauchet 2007, 126-7).

If we place this thesis in a historical perspective, we could say that the category of responsibility has taken the place of the "feasibility" of history, which, during the twentieth century, was marred by totalitarian regimes. At the dawn of the twentyfirst century, the future no longer resembles the one that began in modern times. Let us look back at the four categories put forth by Koselleck. Acceleration has become synonymous with opacity, novelty has been taken over by indetermination, progress has been eclipsed by disaster, and feasibility has been transformed into responsibility. People do not design and produce history like they could a product for sale, but they are responsible for it in an especially prospective manner insofar as these decisions may affect the future course of events. This forward-looking responsibility is collective and political, even if political decisions then translate into individual and private actions. It is an answer to the increasing gloominess of the future.

#### Bibliography

Anders, G. 2008. Hiroshima est partout. Paris: Seuil.

Arendt, H. 1989. "Le concept d'histoire." In La Crise de la culture. Paris: Gallimard.

Beck, U. 2008. La Société du risque. Trans. L. Bernardi. Paris: Flammarion.

Bitbol, M. 1998. L'aveuglante proximité du reel. Paris: Flammarion.

Condorcet. 1998. Esquisse d'un tableau historique des progrès de l'esprit humain. Paris: Garnier-Flammarion.

Dupuy, J. P. 2004. Pour un catastrophisme éclairé. Paris: Seuil.

Gauchet, M. 2007. L'avènement de la démocratie. I. La révolution moderne. Paris: Gallimard.

Giraud, G. and C. Renouard (eds) 2009. 20 propositions pour réformer le capitalisme. Paris:

Hartog, F. 2003. Régimes d'historicité. Présentisme et expérience du temps. Paris: Seuil. Heisenberg, W. 2000. "Physique de l'atome et loi de causalité." In La nature dans la physique contemporaine. Paris: Éditions Gallimard.

Innerarity, D. 2012. The Future and its Enemies: In Defense of Political Hope. Trans. S. Kingery, Palo Alto: Stanford University Press.

Jonas, H. 1998. Le Principe Responsabilité. Trans. J. Greisch. Paris: Flammarion. Koselleck, R. 1990a. "Historia magistra vitae". De la dissolution du 'topos' dans l'histoire moderne en mouvement' et 'Champ d'expérience' et 'horizon d'attente': Deux catégories historiques." In Le Futur passé. Contribution à la sémantique des temps historiques. Paris: Éditions de l'EHESS. 37-62.

— 1990b. "Le futur passé des Temps modernes." In Le Futur passé, Contribution à la sémantique des temps historiques. Paris: Éditions de l'EHESS.

— 1990c. "Du caractère disponible de l'histoire." In Le Futur passé, Contribution à la sémantique des temps historiques. Paris: Éditions de l'EHESS.

Laïdi, Z. 2000. Le sacre du présent. Paris: Champs-Flammarion.

Leroy-Ladurie, E. 2004, 2006, 2009. Histoire humaine et comparée du climat (t. 1, Canicules et glaciers, XIII<sup>e</sup>-XVIII<sup>e</sup> siècles ; t. 2, Disettes et révolutions ; t. 3, Le réchauffement de 1860 à nos jours, avec le concours de G. Séchet). Paris: Fayard.

Nora, P. 1997. Lieux de mémoire. t. 1. Paris: Gallimard.

Rosa, H. 2005. Beschleunigung, Die Veränderung der Zeitstrukturen in der Moderne. Frankfurt: Suhrkamp.