

RISK PERCEPTION AND SOCIAL CONSEQUENCES. THE LISBON EARTHQUAKE (1755) AND ITS REFLECTION IN LITERARY AND PHILOSOPHICAL SOURCES

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Abstract: The discourse on the disaster from the mid-eighteenth century could provide us with elements of understanding about the society that produced it, placing it in the field of the history of representations since the earthquake of Lisbon in 1755 allowed the analysis of naturalists from a scientific point of view and provided the basis for a conception of scientific nature, according to which man's intervention in nature was considered legitimate. Thus, the perception of natural disasters allows for a gradual change in the position of consciousness and the change in values of man, who renounces his passivity towards nature in modern times and begins, through technical-scientific mastery, to consider himself competent and empowered in the management of risks and natural hazards. The literary account of disasters takes on a critical role, thematizing nature as a social catastrophe, and the writings of Voltaire, Rousseau, or Heinrich von Kleist, referring to the Lisbon earthquake, demonstrate the secularisation of disaster, opening the way to the concepts of risk and responsibility.

Keywords: natural hazard, risk society, risk perception, Enlightenment period, conception of nature, cultural history.

Résumé : Le discours sur la catastrophe à partir de la moitié du XVIII^e siècle pourrait nous fournir des éléments de compréhension sur la société qui l'avait produit, l'inscrivant dans le champ de l'histoire des représentations, car cette calamité a permis l'analyse des naturalistes d'un point de vue scientifique et a fourni les bases d'une conception de la Nature scientifique, selon laquelle, l'intervention de l'homme dans la nature a été considérée comme légitime. Ainsi, la perception de la catastrophe naturelle permet une modification de la position graduelle de la conscience et du changement des valeurs de l'homme qui renonce à sa passivité envers la nature dans les temps modernes et commence par une maîtrise technico-scientifique à se considérer compétent et habilité dans la gestion des risques et le management des dangers naturels. Le récit littéraire des catastrophes prend un rôle critique, en thématissant la nature comme catastrophe sociale et les écrits de Voltaire,

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Rousseau ou Heinrich von Kleist, qui se sont penchés sur le cas du séisme de Lisbonne font preuve de la laïcisation du désastre, en ouvrant la voie sur les concepts de risque et de responsabilité.

Mots clés : aléas naturels, société du risque, perception du risque, période des Lumières, conception de la nature, histoire culturelle.

Rezumat: Discursul asupra catastrofei de la mijlocul secolului al XVIII-lea ne poate oferi elemente de înțelegere asupra societății care a produs-o, plasând cercetarea în domeniul istoriei reprezentărilor, deoarece cutremurul din Lisabona din 1755 a permis naturaliștilor să îl analizeze din punct de vedere științific și a oferit baza unei noi concepții despre Natură, potrivit căreia, intervenția omului era considerată legitimă. Astfel, percepția dezastrului natural permite o modificare a conștiinței și o schimbare a valorilor omului, care renunță la pasivitatea sa față de natură și începe cu ajutorul mijloacelor tehnico-științifice să dobândească noi competențe în gestionarea riscurilor și în managementul catastrofelor naturale. Literatura pe care se bazează cercetarea capătă un rol critic, convertind natura în catastrofă socială, deoarece scrierile lui Voltaire, Rousseau sau Heinrich von Kleist, cu privire la cutremurul din Lisabona, demonstrează secularizarea dezastrului, deschizând calea spre apariția conceptelor de risc și de responsabilitate.

Cuvinte cheie: hazard natural, societate de risc, percepția riscului, perioada iluminismului, concepția despre natură, istorie culturală.

1. Introduction

The famous Lisbon earthquake of November 1, 1755, whose tremors were felt from Iceland to Morocco, and from the German states to Boston, succeeded in amplifying the multiple debates about disasters, whether moral, ethical, or scientific. How contemporaries of the earthquake used the Lisbon disaster as an object of interrogation in their philosophical arguments has been the subject of much research in recent years (Velescu 2017). It is worth noting that the concept of vulnerability and seismic risk was raised for the first time on the occasion of the Lisbon earthquake, as was the perception of natural disasters as a sociological problem, an issue, and concepts that would be taken up later in the twentieth century (Fonseca 2005, p. 110). On the one hand, there is the process of secularisation of nature, which allows the passage from divine plagues to physical phenomena, and on the other hand, there is the rise of the modern state, which prefigures the actions of man when he becomes aware of the threat and the measures of protection (Favier 2006). The „risk society”, a term coined by Ulrich Beck, Anthony Giddens, and Patrick Lagadec from the 1980s onwards (Boudia & Jas 2007, p. 318), is based on the society of the catastrophe, that is to say, a society from the past, before the nineteenth century, which had to suffer misfortunes without being able to protect itself or have access to standards of prevention. „Risk is not synonymous with catastrophe but with the anticipation of catastrophe—this is what I set up in my initial treatment of the scaffolding of risk” (Beck 2009, p. 67). This context has been brilliantly illustrated above all by the historian Jean Delumeau, whose work on fear has mapped out all the mentalities of a mediaeval society under constant threat from epidemics, God, and witches (Delumeau 1978).

Thus, the Lisbon earthquake appears as the catalytic event that put an end to this paradigm (Fabiani & Theys, 1987), leading from fatalism to action, from religious models to rational explanations, from the powerlessness of populations to the protective measures of the state.

Already in the 18th century, there were two models of interpretation of natural disasters, be they tidal waves, earthquakes, or tsunamis: on the one hand, they were interpreted as divine punishment for sins, licentiousness, or vicious behaviour of people. The theological interpretation of punishment was soon replaced by a physical-theological one, according to which natural disasters, such as the tidal wave of 1717 (Jakubowski-Tiessen 1986) or the Lisbon earthquake of 1755 (Lauer and Unger 2008), were a demonstration of divine omnipotence. In the new meaning of perdition as 'blessing', natural disasters fulfil a cathartic function. On the other hand, it was the naturalists who tried to interpret natural disasters from a scientific point of view by appealing to the laws of nature. With a new view of scientific laws, another conception of nature was established, according to which human interventions in nature would be seen as legitimate. When one starts to understand nature as a well-organised and accomplished machine, the correction of undesirable effects that appear in a natural disaster is not only seen as justified but also as ordered to avoid a foreseeable calamity for the population or at least mitigate it, for example by technical measures such as the construction of a dam. Thus, the perception of the natural disaster allows for a gradual change in the position of consciousness and the change of values of man, who renounces his passivity towards nature in modern times and begins to empower himself for risk management and natural hazard management through technical-scientific handling.

2. Disasters - journalistic, scientific, literary or philosophical subject

The secularisation of the catastrophe lies less in the rejection of religious interpretations, which is still relative in this period, than in the amplification of the tension between the feeling of fragility and the promise of the triumph of nature. The catastrophe becomes shaped into a narrative, which is one of the landmarks of its modernity. If, after the Lisbon earthquake, there is no real information at first moment, the magazines of the time try to collect details to tell the story of the event and the reactions of contemporaries in different parts of the world. These articles include scientific explanations, observations of similar phenomena, details of the victims, and rescue operations, and for the first time, this information crosses spatial and temporal boundaries. It is not only a question of making a history of an event; one can also speak of writing the history of one's reception of the event. On the other hand, the catastrophic event is constructed in such a way as to provoke intense feelings in the reader, touching his curiosity as well as his compassion.

The clear dividing lines between curiosity and voyeurism are not always very clear, and the tendency to play on the emotional aspect of the disaster is revealed by the birth of journalism that is organised around the sensational. Thus,

the strong reactions expressed against the text of the editor of the *Gazette de France*, Marin, in 1772, relating the fire of the Hôtel-Dieu as the „most magnificent and most appalling spectacle” (Pfister 2002), explain this approach. In a broader sense, we can look for the reasons for writing about misfortunes. The press discourse, despite its ramblings, finds its primary justification in its mission to inform; the other texts contain yet other considerations and fears of the humanity of an era. The experience of writing is carried out not only to inform but also to make people think, to soothe pain, to horrify, and to delight a public that unconsciously manifests the desire to explain itself and to see the catastrophe up close, questioning its safety. This is a period in which there is an awareness of the fragility of the human condition and an unprecedented desire to protect human knowledge against a possible collective catastrophe, expressed by the multiplication of the publication of dictionaries and encyclopaedias and the opening of large libraries. This anxiety about the tragic end of a civilization through a terrible catastrophe appears, for example, in the *Prospectus* of the *Encyclopaedia*: „ Que l’encyclopédie devienne un sanctuaire où les connaissances des hommes soient à l’abri des révolutions. [...] Faisons donc pour les siècles à venir ce que nous regrettons que les siècles passés n’aient pas fait pour le nôtre. Nous osons dire que les Anciens eussent exécuté une encyclopédie comme ils ont exécuté tant de choses, et que ce manuscrit se fut seul échappé de la fameuse Bibliothèque d’Alexandrie, il n’eût été capable de nous consoler de la perte de tous les autres.” (“Let the encyclopaedia become a sanctuary where the knowledge of men is safe from revolutions. Let us, therefore, do for the centuries to come what we regret that the past centuries did not do for ours. We dare say that the ancients would have produced an encyclopaedia, as they have produced so many things, and that if this manuscript alone had escaped from the famous Library of Alexandria, it would not have been able to console us for the loss of all the others”).

The direct testimonies of travellers or the reflective texts on past and present, near and far disasters by writers and philosophers of the Enlightenment herald the craze of the time to appropriate the strangeness of disaster in some way. This new attitude makes it possible to take the disaster out of the religious discourse and to adopt another approach in the form of a „culture of risk”. Writing, alongside the collection of information and testimonies, facilitates the understanding of past and present disasters, possibly to prevent future ones or to warn posterity. On the other hand, it is also a way for man to oppose the disaster and the mental ruin that befall him; one writes, therefore, to fight against fear, against despair, and against the contamination of evil that approaches madness. The disaster isolates and breaks up contacts and unions, forms of communication, because an earthquake destroys the paths and mountains, the information relays that are part of the social organisation. (Mercier-Faivre & Thomas 2008).

In *Candide*, one of Voltaire’s most savoury and biting satires, he succeeded in transforming the drama into an event, changing the degree of risk previously accepted by mankind and rendering the teleological concept of explaining natural disasters inadequate and obsolete. It is a new programme of rationalisation and

management of nature that heralds the development of the concepts of risk, responsibility, and pollution in the 19th century, the seeds of which are to be found in the reformulation of dangers and the new apprehension of fears in the Enlightenment period. The novel *Candide* is thus not limited to a polemic with the philosophical doctrine embodied by the character of Pangloss. Above all, *Candide* presents a catalogue of possible positions on evil, a representation of the world devoid of meaning, and the inevitability of evil confirmed in every corner of the world and the course of the adventures of all the heroes of the tale (Baczko 2008, p. 62). One of the most insistent messages of *Candide* is to warn against the conviction that it would be possible to build a world without evil. Even Eldorado is a parody of utopia in a happy land of nowhere. *Candide* and his companion soon flee from it because they are bored. They do not recognise themselves in an Eden where everything is good, but in a cruel world where the Inquisition is rampant and wars and fanaticism are ravaging. The only suitable attitude to get out of the dilemma in which man, by his condition, seems to be trapped is to „vivre dans la convulsion de l'inquiétude ou dans la léthargie de l'ennui” [“live in the convulsion of anxiety or the lethargy of boredom”] (Voltaire 1759). Through *Candide*, Voltaire opposes Leibniz's optimism and his idea of the best of all possible worlds. The depth of this quarrel lies in the problem of evil, which Voltaire refuses to resign himself to, adhering to a theodicy that explains that the worst evils are necessary ingredients in the order of the whole. The distinction between the 'physical world' and the 'moral world' is revealed by the idea that while theoretical reason has progressed, the moral world, which is the work of man, offers the desolate spectacle of evil and injustice. Leibniz's answer to the problem of evil asserts that evil comes from the imperfection, limitations, and obscurities that condition the existence of every created being. The creaturely condition implies before it is created, these limitations, without which the human being would have cancelled itself out in its coincidence with God. Thus, according to Leibniz, good comes from God and evil from the creaturely condition. But this evil is for the human being the condition of the good because, without this lack, there would not have been the principle of aspiration, freedom, or hope towards clarity and truth. (Hersch 1981)

Natural disasters are, therefore, for Rousseau only a part of the natural circumstances designated to solicit human perfectibility, which, in responding, engages man in the arts, sciences, and society in general. In chapter IX of his *Essay on the Origin of Languages*, Rousseau alludes to the role of natural disasters in the constitution of human societies: „Les associations d'hommes sont en grande partie l'ouvrage des accidents de la nature : les déluges particuliers, les mers extravasées, les éruptions des volcans, les grands tremblements de terre, les incendies allumés par la foudre et qui détruisent les forêts, tout ce qui dût effrayer et disperser les sauvages habitants d'un pays dût ensuite les rassembler pour réparer en commun les pertes communes. Les traditions des malheurs de la terre si fréquentes dans les anciens temps, montrent de quels instruments se sert la providence pour forcer les humains à se rapprocher.” („The associations of men are largely the work of accidents of nature: particular deluges, extravagant seas, eruptions of volcanoes,

great earthquakes, fires set by lightning and destroying forests – everything that should frighten and disperse the savage inhabitants of a country should then bring them together to repair in common the common losses. The traditions of the woes of the earth, so frequent in ancient times, show what instruments Providence used to force humans to come together”). (Rousseau 1969, p. 1060).

Rousseau prefigures a new conception of the balance between the environment and society in which human responsibility is valued (Walter 2008, p. 120).

With the Lisbon earthquake, the unfortunate accident of nature seems to belong fully to human history, so the historical break distributes accidents between a history of perfectibility and a history of self-love. Rousseau notes that earthquakes ‘in the depths of a desert’ are not spoken of because they do not harm, whereas those in cities are. (Rousseau 1969, p. 1062). The earth is a medium of human genesis. When Rousseau speaks of „particular deluges, extravagant seas” and „volcanic eruptions”, he is thinking of what frightened and dispersed men. It is a philosophy of the genesis of men, and since history is the history of man, then evil is only moral. This is Rousseau’s modernity, of which Jean-Pierre Dupuy said: „Pour que le chemin frayé par Rousseau entre vraiment dans la modernité, il suffira d’une dernière chiquenaude, faisant de la Providence ou de Dieu une hypothèse dont on peut se passer en mettant l’homme à sa place. Il n’y aura alors de mal que moral, et les hommes en seront seuls responsables”. [“For the path blazed by Rousseau to enter modernity, all that is needed is a final flick of the wrist, making Providence or God a hypothesis that can be dispensed with by putting a man in his place. There will then be only moral evil, and men alone will be responsible for it”]. (Dupuy 2007, p. 34–35).

Rousseau’s intuition certainly constitutes a break in the perception of risk. It highlights the interactions between nature and society: „Convenez, par exemple, que la nature n’avait point rassemblé là vingt mille maisons de six à sept étages, et que si les habitants de cette grande ville eussent été dispersés plus également, et plus légèrement logés, le dégât eût été beaucoup moindre, et peut-être nul”. (“Consider, for example, that nature had not assembled twenty thousand six- or seven-story houses there, and that if the inhabitants of this great city had been more evenly dispersed and more lightly housed, the damage would have been much less, and perhaps none at all”). (Rousseau 1969, p. 1061).

It is no longer God who punishes but the frenzy of human intervention in the world, which becomes counterproductive when it endangers natural balance.

„[...] car je montrais aux hommes comment ils faisaient leur malheur eux-mêmes, et par conséquent comment ils pouvaient les éviter. Je ne vois pas qu’on puisse chercher la source du mal ailleurs que dans l’homme libre, perfectionné, partant corrompu” (“[...] for I showed men how they made their own misfortunes and consequently how they could avoid them. I do not see that the source of evil can be sought elsewhere than in a free, perfected, and therefore corrupted man”). (Rousseau 1969, p. 1061).

Continuing Rousseau's reflection, Jean-Pierre Dupuy considered that „nous vivons désormais dans l'ombre portée de catastrophes futures qui, mises en systèmes, provoqueront peut-être la disparition de l'espèce. Notre responsabilité est énorme, puisque nous sommes désormais la seule cause de ce qui nous arrive”. [“we are now living in the shadow of future catastrophes, which, if put into systems, will perhaps cause the disappearance of the species. Our responsibility is enormous since we are now the sole cause of what happens to us”] (Dupuy 2005, p. 30). This new present that has fallen to us begins at the time of the Enlightenment: if religion is never entirely absent, man's responsibility for his history is born at this time („Mais que signifierait un pareil privilège? Serait-ce donc à dire que l'ordre du monde doit changer selon nos caprices, et que, pour lui interdire un tremblement de terre en quelque lieu, nous n'avons qu'à y bâtir une Ville ? „[„But what would such a privilege mean? Would it mean that the order of the world must change according to our whims and that, in order to prevent an earthquake in some place, we have only to build a city there”] (Rousseau 1969, p. 1061).

If Rousseau removes catastrophe from the order of the divine to make it the prerogative of humanity, it is in a purely catastrophist reading of human history. According to Rousseau, there are no multiple catastrophes; according to Rousseau, there is only one: the act of founding civil society, by which man loses his natural freedom and alienates himself from social life and its inequalities of possession, wealth, power, oppression, and violence. Nature is always good, but society is vicious. It is necessary, writes Jean-Pierre Dupuy, „inscrire la catastrophe dans l'avenir d'une façon beaucoup plus radicale. Il faut la rendre inéluctable. C'est rigoureusement que l'on pourra dire alors que nous agissons pour la prévenir dans le souvenir que nous avons d'elle”. [“to inscribe the catastrophe in the future in a much more radical way. It must be made inescapable. It is rigorously that we can then say that we are acting to prevent it in the memory that we have of it”] (Dupuy 2002, p. 164). In other words, the narrative of the catastrophe must make it an event that is always already accomplished so that it appears as a reality and is treated as such (Jonas 1979). Dupuy continues the work of Hans Jonas, who perceived the ethical dilemma facing humanity: „It gains self-consciousness at the very moment when its survival is in question” (Jonas 1979, p. 63). In terms of the anthropology of the imaginary, this imperative is part of what Gilbert Durand calls 'future hypotyposis' (Durand 1969, p. 408): it is a question of making the future present, of putting it before our eyes, to master it through the imagination. The disaster thus reveals the image that societies construct of themselves, the place and role they assign to men, and the values they attribute to themselves. This advent of modernity helps to disqualify public debates on divine injustice and, at the same time, to undermine the religious interpretation of the most violent phenomena of nature: Ce tremblement de terre [de Lisbonne], (...) „a eu un rôle dans l'Europe dont je ne vois d'équivalent que dans les camps de concentration nazis, à savoir - la question qui a retenti après la guerre: comment est-il possible de croire encore en la raison une fois dit qu'il y a eu Auschwitz, et que un certain type de philosophie devenait impossible, qui avait pourtant fait l'histoire du dix-neuvième siècle. Il est

très curieux que, au dix-huitième siècle, ce soit le tremblement de terre de Lisbonne qui assume quelque chose de cela, où toute l'Europe s'est dite: comment est-il encore possible de maintenir un certain optimisme fondé sur Dieu ? Vous voyez, après Auschwitz retentit la question : comment est-il possible de maintenir le moindre optimisme sur ce qu'est la raison humaine. Après le tremblement de terre de Lisbonne, comment est-il possible de maintenir la moindre croyance en une rationalité d'origine divine?" ["This earthquake [of Lisbon] (...) had a role in Europe whose equivalent I can only see in the Nazi concentration camps, namely, the question that resounded after the war: how is it possible to still believe in reason once it is said that there was Auschwitz and that a certain type of philosophy became impossible, which had nevertheless made the history of the nineteenth century". It is very curious that in the eighteenth century, it was the Lisbon earthquake that assumed something of this, where the whole of Europe said to itself: „How is it still possible to maintain a certain optimism based on God? You see, after Auschwitz, the question resounds: how is it possible to maintain any optimism about what human reason is? After the Lisbon earthquake, how is it possible to maintain any belief in the rationality of divine origin?"] (Deleuze, 1987) explained Gilles Deleuze in his lecture on Leibniz. The destruction of the Portuguese capital will have served to decouple religion from reason in matters of natural phenomena and thus contribute to sending the man back to his responsibilities, which Rousseau did not fail to do in his response to the *Poem on the Lisbon Disaster*. J.-P. Dupuy is especially concerned about the opposite tendency, that of systematic human responsibility, which sends Rousseau's metaphysics back to the Lisbon earthquake in 1755: it exonerates God from any responsibility, which then falls to man and becomes mortal. „Man, no longer look for the author of evil”, we read in *Emile*: „This author is yourself. There is no other evil than that which you do or that you suffer, and both come from you”. (Dupuy 2005, p. 64).

In Rousseau's time, the natural disaster was transformed into an event; it was no longer seen as a sign but „as a social, political, and media issue” (Mercier-Faivre and Chantal 2008), as well as „an aesthetic object that challenges the arts to compete with it” (Mercier-Faivre and Chantal 2008). Its exceptional character (unpredictable, incommensurable with human powers of action) immediately transforms us into mere passive spectators of an event that is beyond us, for which we can only feel passion, curiosity (the news item), or pity (the tragedy). This central status of the accident in our collective imagination is described by Paul Virilio in the following terms: „la catastrophe a ceci de terrible que non seulement on ne croit pas qu'elle va se produire alors même qu'on a toutes les raisons de savoir qu'elle va se produire, mais qu'une fois qu'elle s'est produite elle apparaît comme relevant de l'ordre normal des choses” [„The terrible thing about the catastrophe is that not only do we not believe that it will happen even though we have every reason to know that it will, but once it has happened, it appears to be part of the normal order of things”] (Virilio 2005, p. 84–85).

The solution proposed by Paul Virilio consists of „projecting oneself into the post-disaster,” i.e., „inscribing the catastrophe into the future” by considering it « inéluctable » [‘inescapable’] (Virilio 2005, p. 84–85). It is therefore, paradoxically, by treating the disaster as inescapable that we will be able to act in such a way as to be able to (hopefully) avoid it (Dupuy 2002, p. 164). „Instead of incriminating singular man on the moral level through sin, the contemporary societal vision indicts the collective fault inscribed in the way of life”, writes the historian François Walter, and he continues, „This is why disasters are displaced onto a register that denounces the irresponsibility of human activities”. (Walter 2008, p. 210).

By asking „whether secularisation is not ultimately one of the great myths of modernity” (Walter 2008, p. 340) and by affirming in his conclusion that „rational analysis is not superior to affective, emotional, or symbolic consideration” (Walter 2008, p. 340), we are invited to see the disaster from multiple angles: that of facts, that of models (for thought), and that of ethical, political, and historical issues (*Revue Internationale Esprit* 2008).

Rousseau proposes a new relationship to the catastrophic event and to action, marked not only by memory but by reparation, not only by precaution but by preparation: „l’ordre du monde doit changer selon nos caprices, que la nature doit être soumise à nos lois, et que, pour lui interdire un tremblement de terre en quelque lieu, nous n’avons qu’à y bâtir une ville ?” [“The order of the world must change according to our whims, that nature must be subject to our laws, and that, in order to prevent an earthquake in some place, we have only to build a city there?”] (Rousseau 1969, p. 1064).

3. Conclusions: from the representations of human security to the human condition

As a sudden break in the ordinary course of history with incalculable effects, the catastrophe attains the status of a pure event. The idea of catastrophe seems to occupy the place occupied in the 19th century by the idea of revolution. Faced with disasters (or rather, discourses on disasters), we must try to escape both lamentation and fascination, lament and amazement. Nature and politics are in fact, in each case in a different way, two dimensions present in each disaster, allowing not only to think about them but also the change towards an era that establishes the foundations of the idea of ‘security’, in the sense of the Latin term ‘security’, which comes from the contraction of *sine* and *curate*. It means the absence of trouble or worry, which corresponds to the Greek *ataraxia*. Thus Seneca can write: „The characteristic of the wise is security.” (Seneca 1873, p. 200)

This spiritual meaning of ‘security’ has been attested to in French for a very long time, as can be seen by consulting the major dictionaries. The *Dictionnaire de l’Académie française*, which, until the 1832 edition, gave the only meaning of ‘security’ as „confidence, peace of mind,” In *Emile*, Rousseau speaks of „security of innocence” and in *Nouvelle Héloïse* of „security of virtue”. It is only from the 19th century onwards that ‘security’ will mean in French, in addition to

the mental state of serenity, an absence of dangers or objective protection against possible threats.

The lesson that men have had to learn about evil since the Lisbon earthquake reminds us all too often of Peter Sloterdijk's sad observation: „The only catastrophe that seems clear to everyone would be the catastrophe that no one survives.” (Sloterdijk 2000, p. 108). The experience of disaster will never be enough to awaken people's minds, but awareness of this limitation prevents us from embarking on the morally problematic path of pedagogy through catastrophe, which leads us to hope for the advent of a catastrophe of sufficient magnitude to finally bring about a salutary awakening. The solution that Jean-Pierre Dupuy rejects more than any other is the hope that the catastrophe will only be partial, as it has been up to now in the history of humanity, and the gamble of salvation through technology (Dupuy 2002). This recent fortune of Rousseau's attitude, as well as the return of the Leibnizian theodicy in the form of nature's revenge following savage urbanisation, testifies to the contemporary incapacity to think about „systemic evil', which is neither moral nor natural. The controversy between Rousseau and Voltaire over the interpretation of the divine will about the Lisbon earthquake is also central to Heinrich von Kleist's short story *Das Erdbeben in Chili*. As Thomas Bourke points out, „The Chilean earthquake recalls the Lisbon earthquake and the scepticism it aroused in Voltaire and foreshadows the pessimism of Schopenhauer, who was to revisit the controversy between Voltaire and Rousseau on this subject and to be the first German to side with Voltaire against Leibniz's excuse for the calamities in the world, according to which evil sometimes begets good.” (Bourke 1983, p. 248).

In the face of catastrophe, truth is not enough to provoke action. It is also necessary to create conviction and avoid panic, which is what Rousseau reproaches Voltaire for. The threat is thus twofold, concerning both survival and values, in the sense that the panic resulting from a sudden awareness of the imminence of the catastrophe could lead to a relapse into barbarism in the name of survival (Dupuy 2007, p. 34–35). His approach is to 'obtain an image of the future that is sufficiently catastrophic to be repulsive and sufficiently credible to trigger the actions that would prevent its realisation, give or take an accident' (Dupuy 2002, p. 34). (Dupuy 2002, p. 213-214). One could say that the profile of our disasters reflects our condition. Man is reembraced as fragile, a core of vital capacities susceptible to impediments and injuries, a vulnerability that calls on the authorities to assume their „responsibility to protect”. Every disaster is characterised by its procession of ruptures, mourning, and separations because a disaster is always the destruction of vital links, the links that make life possible.

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