

God, Experts and Cataclysms

An Interview with René Favier

Tsunamis, cyclones, earthquakes – are there more cataclysms today than there used to be? And where are we to look for the causes and the culprits? If God is no longer to blame, is it the fault of the politicians or the experts? Societies seem never to have been so vulnerable to the convulsions of nature.

L'HISTOIRE – *What is a natural disaster?*

RENÉ FAVIER: A disaster is a natural event that occurs on a vulnerable territory and in a vulnerable society. It is, in a sense, the actualization of risk. Given this definition, we may ask ourselves whether a natural event that has no impact on human beings would be a disaster. The answer is 'no'. A tsunami in a sparsely populated area is not a disaster. The phenomenon in question may be a major natural event with far-reaching effects that may have a substantial impact on the landscape, but it cannot be regarded as a disaster – except perhaps when filtered through the recent conceptions of certain ecologists, who see the changelessness of the landscape as a value in itself. But, all in all, it's the presence of human beings that makes a natural event a disastrous one.

What is the difference between these and man-made disasters, such as Chernobyl?

It seems to me there's a greater sensitivity to technological disasters than to natural ones in our societies today. You've only to compare the two catastrophes that took place at Chamonix in 1999: the fire in the Mont Blanc tunnel on 24 March that caused the death of 39 people – a human disaster – and, one month earlier, the Glacier du Tour avalanche at Montroc on 9 February that killed twelve. There was much less discussion of the latter and the memory of the victims is not honoured in the same way, to the point where it seems almost to be wiped from people's minds. We may say that the human, technological disaster enables us to point more easily to a culprit. That's perhaps the reason for the emotion stirred up by that type of catastrophe. *Is it the death toll that makes a disaster?* No! The criteria for the importance accorded to a disaster are eminently subjective and depend on circumstances. Take the Asian tsunami of December 2004. The substantial death toll (almost 300,000 dead and missing) did, of course, make an impact. But the "quality" of the dead counts too. It's my impression that if there hadn't been so many tourists in Indonesia and Thailand, the tsunami wouldn't have had such an impact in the West.

And media coverage – what role does that play in the definition of natural disasters?

Media coverage is essential, as we know very well today, when that coverage is constantly expanding. We can cast quite a lot of light on this by comparing two avalanches: the one at Les Orres in the Southern Alps of 24 January 1998, when eleven

people (nine schoolchildren and two guides) were killed on a mountain trip and, the following year, the Glacier du Tour avalanche (which I've already mentioned) that destroyed houses and left twelve dead among the valley's inhabitants and holidaymakers. These two disasters are apparently comparable, yet the media coverage was totally different. In the case of the 1998 avalanche, several hundred reports were filed. And a specific vocabulary was used: this was the "Les Orres disaster". In the case of the Glacier du Tour, there were far fewer reports over a distinctly shorter period, and they merely spoke of the destructive "avalanche". How is the difference in coverage to be explained? By the fact that there were child victims at Les Orres? But there were also four children killed in the houses when the Tour avalanche occurred. It seems to me the decisive factor is the quest to apportion responsibility. At Les Orres it was possible to point to a culprit: the guide who took the children out and very quickly got the blame. In the case of the Glacier du Tour, the responsibility was much more widely shared: we might point to those administrative and technical departments that permitted building at that spot... By the way subjects are covered, the media play a role in how catastrophic events are remembered or forgotten. But media coverage isn't a new phenomenon. We can see it at work in earlier times – as early as the Middle Ages. Disasters take on significance according to the degree of resonance lent to them by the religious or political authorities. I'm thinking, in particular, of the earthquake that struck in the Pyrenees in 1660, just before Louis XIV set out for Saint-Jean-de-Luz, where he was to marry Maria Theresa, the Infanta of Spain. That was perhaps the biggest French earthquake of the modern period. The event was immediately interpreted in two different ways. The opponents of this Franco-Spanish rapprochement explained that it was God protesting against the unnatural union. Royal propaganda, by contrast, saw it as showing the king could make the earth shudder exactly as he would cause Europe to quake. Grégory Quenet has shown that there was to be no mention of any other earthquake in France in *La Gazette* (the newspaper created by Renaudot in the seventeenth century) until the 1730s. It had to be demonstrated that the king was in control of seismic forces! It's entirely as though natural disasters acquired their existence only by the goodwill of the regime. Clearly, other catastrophes were difficult to hide... After the Lisbon disaster of 1755, there was intense media coverage: every priest in his parish register and all the diarists started mentioning a host of earthquakes all over Europe. There were, admittedly, many after-shocks; but what was occurring, in the main, was a greater attention to the phenomenon. Natural disasters exist only because people speak about them. Without media coverage, there's no disaster!

How are we to classify the great catastrophes of history?

We may, of course, draw up typologies based on the kind of natural event concerned: earthquakes, volcanic eruptions, floods, avalanches etc. But these are not the most pertinent classifications in my view. I'll suggest other criteria. 1. Disasters that are of the order of myth. The Flood or Atlantis, for example. 2. Disasters that had a regional impact and have left traces in memory on that regional scale. 3. Disasters which, by contrast, had effects on a much larger scale. For example, the Tambora volcanic eruption in

Indonesia in 1815 produced an immense dust cloud that had repercussions for the climate of the whole planet over several years.⁴ Natural events that recur frequently (rises in river levels, rains such as the early Autumn rainstorms in the Cévennes) and are of a nature to pass into popular memory. 5. Conversely, “exceptional”, unexpected disasters (earth tremors or volcanic activity in areas where the possibility of such events had been forgotten).⁶ Disasters experienced as marking a historical break, either because they did actually mark a turning-point or because they speeded up processes that were already happening. The Lisbon Earthquake of 1755 is the classic example. It gave added impetus to a cultural break and crystallized a change that was already occurring: a trend toward the secularisation of thought. You can see that none of these criteria is geological or physical. For the historian, the natural disaster is a human event, a mirror held up to societies. It has to be analysed as such.

Since when have historians taken an interest in disasters?

Disasters were initially treated as a secondary phenomenon. They found a place in research into long economic cycles - particularly disasters of a climatic order (the work of Emmanuel Le Roy Ladurie comes to mind) – then in studies of mental structures (the mechanisms of fear, for example, with the work of Jean Delumeau). They’ve only more recently become an object of research for historians, as a result of external promptings: from hydrologists, seismologists and the like, who, in order to build their models, needed databases that went a long way back in time or needed to refine their maps for locating natural risks. For some fifteen years now, there have been a number of us working on disasters as a fully-fledged historical subject. What interests historians today is the relationship of societies to catastrophic events: the way they manage them or cover them in the media, the role of experts etc. And there’s one recurrent question: what changes? And what is unchanging? *What sources does the historian have for answering these questions?* For the oldest disasters, historians have two types of source at their disposal. On the one hand, the physical traces of the disaster, Pompeii being the most spectacular example! On the other, written sources attesting to public intervention – and this goes back to Antiquity – or religious texts, which is particularly the case in the Middle Ages. From the seventeenth century onwards, we have relatively abundant documentation of an administrative kind: archives of the administrations responsible for highways, watercourses or forestry and, in particular, proceedings relating to the compensation of victims. Then, from the end of the eighteenth century onwards, the press begins to speak about disasters and plays an increasing role in the nineteenth century, not to mention the more contemporary period. For more recent times there are, of course, also oral testimonies. These are direct sources. But the historian can also draw on a host of indirect sources: family record books, notarised archives and so on.

How did people explain disasters?

As with all inexplicable phenomena, people invoked divine intervention. This was particularly the case when it came to explaining a volcanic eruption or an earthquake, which seem to be the product of the earth’s darkest forces and hence difficult to

comprehend. On the other hand, explaining floods by reference to heavy rains goes back a long way. Generally, one has to be cautious and not take the documents invoking divine displeasure at face value. The wrath of God is often the way the religious authorities have of using the disaster for their own ends. In a sense, the Bible narrative is the first example of this, with the story of the Flood. Take what happens in the Middle Ages after the collapse of Mount Granier in Savoy in November 1248, which killed 1,000 people. The English chronicler Matthew Paris used the event as a weapon against the Savoyards. If God had struck them down, he said, He had done so most justly. He went on to accuse them of practising usury and even killing travellers who had to pass through Savoy. But his particular anger can be explained first and foremost by the presence in London of Savoyards in high places in the Church and at the English court following the marriage of the king of England to the daughter of Beatrice of Savoy.

During the Wars of Religion, Catholics and Huguenots both constantly exploited natural disasters against their opponents. We can see this in the case of the Lyon flood of 1570, just after the Peace of Saint-Germain, at a time when the king, who had been forced to sign the peace with the Huguenots, was finding it hard to regain control. In his account of the event, François de Belleforest explains that it was the Faubourg de la Guillotière, where many Huguenots lived, that bore the brunt of the disaster. The statement has a religious dimension (the disaster is divine retribution), but also a political one: the disaster both justifies and upholds royal policy. These texts must always be related to their contexts. We must always ask how they were read – and be very cautious in our conclusions about what the populace believed. And religious interpretations are not to be found only in ancient times. We should remember that during the heatwave of 2003, we saw religious ceremonies organized in France – in response to a call from John Paul II – appealing for divine clemency. “I invite all to join in my prayers for the victims of this calamity, and I exhort all to raise to the Lord fervent entreaties so that he may grant the relief of rain to the thirsty earth.” But it is, nonetheless, to scientists that we turn in very large numbers today to find explanations and future assurance.

Not being able to explain disasters, how did populations protect themselves against them?

Since Antiquity societies have looked to fend off particular disasters that repeat themselves regularly and could be maintained in popular memory. This was the case at Grenoble, where the terrible flood of 1219, when the lac d’Oisans broke its banks, remained fresh in the memory. For at least four hundred years, until the early seventeenth century, each time there were landslips in the Romanche valley the local authorities (the consuls of Grenoble) cleared the riverbed as soon as possible for fear that these landfalls might help the lake that had swept away the city to re-form. As early as the sixteenth century, bridges were protected when it was noticed that the water level was about to rise: they were loaded with stones or cannonballs to avoid them being swept away. The houses at Grenoble were shored up with bricks made from cow dung and plaster. And the main measure taken everywhere was to have bread baked in advance. Once the disaster had occurred, the Ancien Régime authorities were often

well aware of the measures that needed to be taken, such as prohibiting traffic in the towns for fear of making damaged buildings even more fragile. Some societies more affected than others by disasters developed what might be termed a genuine risk culture. We may cite the case of Switzerland. The writings of Christian Pfister have shown the role of disasters in the construction of Swiss identity. In the nineteenth century, the networks of solidarity that were established to bring assistance to avalanche victims contributed to shaping Swiss national consciousness. Then there is Japan, a great power that built itself up in defiance of, and in the closest possible proximity to, the gravest of natural dangers, being under perpetual threat from volcanoes, earthquakes and tsunamis. Perhaps we should enquire what the impact of those disasters has been on the vitality and cohesion of the Japanese...

Since when have “scientific” explanations been sought for disasters?

From Antiquity, great philosophers like Democritus, Plato, Aristotle, Lucretius, Seneca or Pliny have attempted to explain earthquakes in terms of physical phenomena. Aristotle saw them as corresponding to the existence of underground cavities, a theory that was taken up again in the Middle Ages and the modern era. But these causes sought in nature and physics were often mingled with theological and moral explanations. These were more often complementary than contradictory: the theological and moral arguments provided general explanations, while physics gave particular reasons. When Bishop Jean de Sassenage speaks of the Grenoble flood of 1219, he clearly indicates that its general cause is “our adversary, the devil” and its proximate cause “the breaking of the barrage holding back the Lac de l’Oisans”. What changes in the eighteenth century with the Lisbon earthquake is the growth of purely scientific explanations. Invoking God is no longer a prerequisite. In the case of floods, which were easier to understand, at least from the seventeenth century onwards, local authorities and learned men enquired into the origins of - and preconditions for - these events and attempted to give technical or scientific reasons for them. In 1651, a significant flood struck Grenoble and the whole of the South East: the bridges were swept away in the Isère and Rhone valleys etc. A number of decrees issued by the *parlement* of the Dauphiné explain that excessive deforestation caused gully erosion, which accentuated the effects of the flooding. And they, therefore, tried to prohibit that deforestation. They did not wait for warnings from the Forestry Commission engineers! What also changes in the eighteenth century is that experts and engineers genuinely intervene in the management of land and natural resources. Forestry Commission engineers play an important role from the eighteenth century onwards and, in the nineteenth, they evolve an approach critical of the ignorance and backwardness of the mountain populations who, in their view, do not know how to manage the land, who recklessly cut down the woods and have to be taught how to act properly. This leads to a change in the relationship between experts and local populations. The experts gradually come to monopolize knowledge of the vagaries of nature, while local populations are forced to cede responsibility to them.

You speak of engineers... What about the political authorities?

Even in Antiquity we find traces of the intervention of the public authorities after a disaster. At Rome the benevolent emperor is celebrated with a plaque or a bas-relief. Sometimes his name is even given to a town. In the reign of Tiberius, eight cities in the province of Asia took the name Caesarea in honour of the emperor. At Byzantium, an empire particularly hard-hit by the earthquakes in Anatolia, a twelfth-century historian John Skylitzes ranked the emperors on the basis of the aid they provided: the “good” emperors were those who had taken care of the victims and the bad those who had neglected this duty. As for the Ancien Régime kings, they were, ultimately, a tutelary power owing their subjects both bread and protection. At the end of the eighteenth century, this became a much more concrete role. When France suffered floods in 1784 and a major storm in the Ile de France in 1788, the king intervened on his own authority, before appeals had even been made to him. This was a period when the image of Louis XVI was at a low ebb and this royal action may be seen as representing a desire to restore his public image. In 1784, the king allotted three million *livres* in aid (equivalent to the entirety of direct taxes raised at the time in a province like the Dauphiné), a sum which he claimed was taken from court pensions. In the days that followed, the newspapers were full of the king’s generosity and the Intendants thanked him for his kindness to his subjects. This being said, most public assistance was provided locally. One did not look to the king for everything. Appeals for his aid were made mainly when there was a very large-scale disaster. Here again, things have barely changed in our own times, even if the intervention and media coverage have today assumed global dimensions. The tsunami of December 2004 in South East Asia provides a good illustration. The American Secretary of State Condoleezza Rice even spoke of the “marvellous opportunity” provided by the tsunami. It was, indeed, a heaven-sent chance to prove that the United States could bring aid to Muslim populations – in this case, Indonesians – provided they were not terrorists.

Who first had the idea of compensating victims?

The immediate priority is, of course, to bring help to those affected. Then comes reconstruction. Where that is concerned, it was expected of princes under the Ancien Régime that they would provide aid, which was either direct (in money or in kind) or in the form of tax relief (complex and varying from one province to another). The actual idea that the state could compensate the victims emerged in the eighteenth century. Though not without debate: should it be the poorest who were compensated, or those who had lost the most? The church authorities argued that the greatest misery had to be relieved first, whereas the administrative authorities, particularly the Intendants, stressed that such intervention was useless and was not the way to get the economy moving again. This is still a live issue today, incidentally. In the United States the Republicans are asking whether it is right economically and politically to direct funds towards the poorest victims of hurricane Katrina. It seems to have been during the Revolution that the plan for a general system of compensation for victims first appeared in France. On 6 Vendémiaire Year 6 (27 September 1797), a deputy from the Isère proposed a motion on the forms of aid to be granted to “citizens who have suffered from fires, hail or

flooding.” However, the plan came to nothing. It wasn’t until the law of 13 July 1982 was enacted that a real legislative system for compensating disaster victims was introduced.

Natural disasters may, then, have played a role in the advent of insurance?

Without doubt. The earliest example of insurance comes from Germany. In Schleswig-Holstein and the Hamburg region, forms of insurance, “friendly societies”, emerged as early as the beginning of the sixteenth century, created to deal with the risk of fire. But this is an isolated case, which has to be seen as linked to the custom the North German communities had of working together to build dikes and protect themselves.

Similarly, in eighteenth-century Alsace we find a form of tax contribution made to an aid fund that could be used by the Intendant to compensate people in the event of disasters. This was equally exceptional in eighteenth-century France and in no sense constitutes an insurance system. Here again, it was the law of 1982 that forced the insurers’ hands. Previously, they had refused to underwrite a risk they did not regard as measurable. *What has changed today? Are there more disasters?* We obviously have more information about contemporary times, which may give the impression of more frequent disasters. But the absence of data for earlier periods does not necessarily mean there were no catastrophes.

What has changed is that the regions where natural disasters occur are now ten or a hundred times more densely populated. We have only to think of present-day Pakistan. In the seventeenth century an earthquake in the Islamabad region would obviously have killed far fewer people. And, most importantly, no one would have heard about it. Moreover, the intense media coverage of disasters over the last fifty years makes them markedly more visible and that too may give us the impression there are more of them. However, this intense coverage may have opposite effects. Disasters come thick and fast: memory of the December 2004 tsunami fades as hurricane Katrina takes its place, and that in turn will be forgotten when the next disaster strikes.

It would seem communities today are more vulnerable?

This can be put down to several factors: the first is that people in the rich countries have more to lose: the technologies and goods in which our wealth consists are both more numerous and more fragile. And then there’s the pressure on land use that led us to build in areas where we clearly shouldn’t have – particularly in areas liable to flooding. Like many other places, Redon in Brittany, which suffered serious flooding in January 2001, has learned this to its cost. At the same time, some features of the built environment (roads, concreted surfaces, railways etc.) obstruct natural drainage channels and increase the risks of flooding. Moreover, we have much greater population mobility: the new arrivals who settle in at-risk areas have no local memory, whereas in the past the memory of floods, landslips and avalanches was passed down the generations. But we have also to underscore the responsibility of the authorities that allow people to build houses in these areas.

We are more sensitive to natural disasters. And less accepting of them, it seems?

Yes. An event that was once regarded as ordinary is now very readily seen as disastrous. It snows in Paris in January or it's hot in summer and it's a catastrophe. Each time we look for someone – a human being – to blame for these events. And we call for protection. For example, having been traumatized by the 2003 heat wave, the following February the authorities created a crisis unit for the heat wave that was expected in the summer of 2004. For three days in June 2005 the temperature reached 35 degrees Celsius and the 2005 heat wave was declared! We delude ourselves here. We call for a situation of “zero risk” and think all disasters – or, at least, all their negative effects – can be avoided. There's a kind of excessiveness in this quest for omnipotence.

At the same time, we rely entirely on the authorities and the experts to guarantee this zero risk. Yet, despite the advances of science, despite the data that are constantly being gathered, they can't foresee everything. As a result, we turn on them, accusing the “politicians” and “experts” of not foreseeing and anticipating the disaster, and then of not being able to manage it. And people themselves are entirely exempted from responsibility.

Is all this really very rational? In past societies, human beings, who were far from passive or resigned, tried to protect themselves against disasters with the knowledge and tools available to them, even if these were not always very effective.

Instead, today, we have a situation where all the responsibility is delegated to authorities and experts, who are – or at least claim to be – competent. And this produces a form of passivity among the populace towards government, which is expected to provide all the answers. As a result, communities today are, paradoxically, more fragile than past societies. By dint of wishing for zero risk, they are actually more exposed to danger.

Interview conducted by Philippe Joutard and H  lo  se Kalebka

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