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## CRISIS MANAGEMENT IN FRANCE AT A TIME OF DECENTRALISATION

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### Summary

The case of crisis management in France, in the throes of decentralisation, is particularly instructive, but complex: it enables us to observe the problems posed by crises and their management - which generally lead to the redistribution of power between a centralised State, local authorities, media, industrial groups, citizen pressure groups and major public figures - in the context of a politico-administrative system which is itself subject to profound mutations - centralism increasingly giving way to decentralisation.

The study of recent French crises justifies the idea that the problems connected with crisis management is likely to further accentuate this tendency: we have recently observed disturbances in the classical models for the operation of power, caused in particular by the occasionally brutal interventions of local politicians at the scene of the crisis. This dynamic tends to outlast the crisis, reinforcing the existing tendencies. A country which is well known for the strength of its central government is in the throes of the diversification of strongholds, at the same moment that crisis phenomena result in breaks which are often difficult to control. It is time to reflect on the adjustments to be made, the challenges to be faced, the assets to be preserved. On one point there is full agreement: the classic points of reference in power sharing are subjected to significant tension.

In France, crisis management has traditionally been the responsibility of the State. One defers spontaneously to its role as guarantor of public safety, which whenever endangered, obliges the State to exercise its regal rights fully, the foundation of its legitimacy. In the framework of the French administration, which has long linked centralisation and territorial control, it is the responsibility of the Préfet, senior local representative of the State, to cope with any major event. Under normal conditions he supervises the activity of local bureaux of the majority of national administrative bodies. In times of crisis he is called upon to act as their overall director. The implementation of emergency measures (Plan ORSEC - ORganisation des SECours) empowers him to bring together the heads of local bureaux of national agencies in a specific emergency organisation, mobilising the energy of the public sector and other parties, both public and private, to deal with any exceptional situation. In the person of the Préfet, the State long appeared as the body endowed with the authority and the means necessary to organise emergency aid, manage the crisis and ensure that normal conditions were restored.

This tradition, in which the State has also always been taken to be the major actor and which perfectly reflects French political culture, has in fact very little legal justification. The legislator has repeatedly underlined that for questions of public safety, the responsibility of local elected representatives was predominant, disregarding the changes brought about by urban concentration, the appearance of major hazards, and less specifically the growing complexity of contemporary society. Before decentralisation, this distortion between the letter of the law and reality was of little significance; elected representatives, both great and small, generally deferred to the Préfet, and through him to the State in the case of a disaster. The Préfet was entitled to intervene as soon as an event effected more than one commune. Since the beginning of the decentralisation process, whose effects are now fully noticeable, the responsibility of local representatives, and particularly in large towns, has become more informal. Thanks to means which they now control fully and increased political influence, they have moved to the front of the stage, not only in normal circumstances but also in times of crisis.

Nevertheless, throughout the decentralisation process, and ever since its conclusion, as the power of local representatives has increased, we have been constantly reminded of the preeminence of the Préfets. It has indeed been reinforced: a recent law (1987) gives the Préfet overall command as soon as emergency measures are announced by a local authority. A source of contradiction is consequently apparent and it seems appropriate to investigate its actual effects by studying a number of recent crises.

## I. Two crises: Nantes (1987) and Nîmes (1988).

Several of the crises, which have occurred over the last few years, have raised questions about the real role of the State in cases of major technological accidents or natural disasters. This is particularly the case with the Nantes crisis (October 1987), which was caused by an industrial accident (GILBERT, 1988) and the crisis in Nîmes (October 1988) which was the result of a natural disaster (GILBERT, ZUANON, 1990)

### *Nantes*

On the morning of October 29 (9.15 am) workers in a warehouse close to the Loire noticed smoke coming from a stock of fertiliser delivered the day before. Having failed to master the fire, they called the Nantes fire brigade, informing them of the product's code number (15.8.22) and the presence of toxic smoke. The duty commander at Nantes fire station sent a first detachment and tried in vain to identify the product by consulting technical data sheets (the code 15.8.22 had in the mean time been transformed into 15.822, and the officer mistakenly took this to be a danger code, rather than a compound code).

The first detachment to arrive on the scene was commanded by a fireman with a rural background. Accompanied by the warehouse foreman, he entered the building without taking any particular precautions. He easily identified the product concerned (NPK fertiliser, frequently used in farming), noted the presence of other potentially dangerous, but correctly insulated products (a stock of ammonium nitrates, a PCB based transformer and a diesel fuel tank). Although he knew that ammonium nitrate had caused other disasters (Brest and Texas City in 1947), these products nevertheless worried him less than the nature of the incident itself: a fire producing neither flames nor heat, and whose smoke did not rise. In addition the officer was afraid of causing a secondary disaster (polluting the Loire) by using large amounts of water as other firemen had done in previous incidents (Lyons and Basel, in particular).

The duty commander called to the scene of the incident - the one who could not identify the product - found himself faced with an apparently worrying problem. Unable to enter the warehouse filled with smoke and recalling the critical remarks made during a recent course on industrial hazards, this graduate officer started to consider the possibility of a major accident. Like his subordinate, he decided to avoid using large quantities of water immediately. Taking into account all the potential hazards, and particularly those posed by the ammonium nitrates, he gave instructions to inform the appropriate authorities

of a possible hazard for the population of explosion and asphyxia. He stressed that the operation was likely to be lengthy. It was at this point that the Préfecture (Préfet's headquarters) moved into action (10.30 am).

On the site, the brigadier fireman took command of operations. He took stock of the results of the measures taken by an anti-pollution unit (high concentration of nitric acids in the atmosphere above the warehouse (50 ppm); traces of chlorine) and found himself confronted with the opinions of two "experts" - to this day they have not been identified - in complete disagreement: one recommended the use of large quantities of water, the other was against this. After flying over the incident in a helicopter and realising how large the cloud was, he was given the advice, thanks to the Anti-pollution unit, of a third expert whom he knew, and who strongly recommended the immediate use of water. The necessary measures were taken, and after solving a number of technical problems, maximum operational pressure was obtained at the beginning of the afternoon, which enabled the firemen to take control of the situation at 4 pm.

In the mean time, starting at 10.30 am, a crisis unit was set up at the Préfecture, without any direct contact with the scene of the incident. The group which formed spontaneously was made up of heads of department used to handling public order problems. Aware of the risks of explosion, they decided that this and the fire were the responsibility of the fire brigade, whereas it was up to them to deal with the cloud. They took a number of confinement measures around the site and followed the movements of the cloud with the help of the meteorological services.

At the end of the morning the prefect took command of the unit. The only information they had concerned a fire, involving a stock of ammonium nitrates, source of the cloud presumed to be toxic. At midday they were joined by an "expert", a university lecturer from the Pharmaceutical faculty, who also happened to be one of the leaders of the local ecology movement. She was worried by the risks of intoxication to which the population was exposed. At 12.15 pm the Préfet was given the advice of the state experts (DRIR - Regional Directorate of Industry and Research, responsible for the application of the Seveso directives {translator's note}) who were not familiar with the establishment, which at first sight did not appear dangerous. One of them, a quarry specialist, was worried by the risks of explosion on account of the presence of ammonium nitrates. Measures were taken to interrupt rail traffic in the vicinity of the site and carry out the evacuation of a 1 km radius area around the site.

Shortly before 1 pm a message arrived at the Préfecture, via the Anti-pollution unit and the fire brigade, informing them that in certain communes down wind of the site the "toxicity level has risen to 5 ppm in several communes covered by the cloud, subsequent to a release of highly toxic nitric acid". After consulting health and safety guidelines, based on average exposure levels in a working environment, the university lecturer became alarmist, expressing her fears for the health of children, old people, and those with respiratory problems. The state experts finally admitted that the risks were not negligible, while the immediate thoughts of the Préfet went to the effects of gas attacks in the Great War. He consequently considered the evacuation of the communes downwind of the site and set this in motion after being given the go ahead by the cabinet at the Ministry of the Interior, against the advice of the Civil Defence, which is dependent on the same Ministry, and which recommended confinement.

At 2 pm the "plan Orsec" was set in motion, and at the same time the population was informed by various means (police, gendarmerie, but above all local radio) of the communes to be evacuated and those acting as reception centres. From 2.30 / 3 pm onwards the evacuation proceeded without encountering any major problems, either individually, by public transport (Conseil Général - County Council) or with the help of the army. At the same time, in line with "plan Orsec" procedure, the Préfet assembled the heads of the local bureaux of national services. A first meeting, held standing up, brought together departmental heads and in many cases their assistants, who not having any particular decision to take, elaborated theories as to the causes of the event and advanced possible remedies. The use of Canadair planes was suggested, as is the case for forest fires in the south of France; others recommended encasing the warehouse in a mixture of sand and mud, a direct reference to Chernobyl. At 3.30 pm a smaller meeting, seated this time, was held. Those present learned from an engineer, despatched from the scene of the incident, that the product involved was NPK, a relatively innocuous substance, and not ammonium nitrate as had been thought. After a somewhat heated exchange between the various experts, the restricted group reconsidered the situation. At 4 pm the Préfet was informed that the firemen had the situation under control. He decided to interrupt the meeting and to hold a press conference, the first of the day. Further meetings with the media were held later in the afternoon and early evening.

Later that night the Préfet decided to interrupt the evacuation, and the next day, after a meeting with the principal heads of the administration, the "plan Orsec" was called off (7 am). In all, between 30 and 40,000 people were evacuated on October 29 between 2.30 and 6 pm, most using private cars, the remainder on public or military transport.

## *Nîmes*

The crisis at Nîmes is of a completely different type: it resulted from a natural phenomenon (exceptionally heavy rainfall) and lasted longer, for "normal conditions were restored" a week after the disaster which occurred on the morning of October 3 1988.

Despite numerous warning signs in the course of the night of October 2/3 auguring an exceptional situation, almost all the departmental heads in Nîmes were caught unawares by the torrential floods. Heavy storms are frequent in this part of France, and the various bodies to whom breakdowns were reported were slow to realize the catastrophic nature of the situation.

In consequence, all of these bodies were not only paralysed but cut off from each other. The Nîmes fire brigade, who succeeded in alerting the neighbouring departments before losing contact, undertook emergency aid in the immediate proximity. The emergency medical services (SAMU) attempted to do the same with help from the army. The other emergency services (police, gendarmerie) were unable to react. Isolated, the Préfecture had neither personnel nor means. However the Préfet was able to alert a unit (Codisc) at the Ministry of the Interior who, from Paris, assembled an emergency force (helicopters based in the south of France). To complete the picture, the divisional heads at the town hall were also confined to their buildings.

During the initial phase of emergency aid (aid given in the immediate proximity by the emergency services but also by local residents, then aid orchestrated from Paris), the organisations responsible for running the electricity and telecommunication networks mobilised the necessary means at a national level and prepared to intervene as soon as the water-level began to drop. This started at 1 pm. The various public bodies involved acted in accordance with their own contingency plans, as did the fire brigade, who arranged for reinforcements to be brought from neighbouring departments.

At the beginning of the afternoon, despite the falling water levels, the Préfecture remained isolated. The various operational participants (emergency services, public networks, army), a majority of whom were unaware that the "plan Orsec" had been declared in the middle of the morning, continued to act on their own initiative, and only a small number of those in charge went to the Préfecture to take part in the job of coordinating operations. The Préfet, who was theoretically responsible for handling the

crisis, found himself in the predicament of a general without an army, and what is perhaps worse, without an enemy: deprived of information, the State's number one representative and director of operations had no overall perception of the situation. The situation deteriorated even further for this high-ranking civil servant, when he was forced to devote his full attention to receiving the Minister of the Interior, who suddenly announced his arrival. He had to leave the Préfecture at the precise moment when a crisis unit was finally assembled, which coincided with the arrival of the Mayor of Nîmes, who had until then been unable to reach the town. Consequently at the climax of the crisis, it was the Mayor who was the most important public figure at the Préfecture.

The Minister of the Interior further contributed to the ambiguity of the situation by going to the town hall first, where the mayor was not to be found, before going to the Préfecture where a coordinating meeting was held at the end of the afternoon. In line with standard French practice, the roles seem to have been shared out: the town hall was given responsibility for problems linked with the reception of disaster victims (food and lodging); the State took charge of organising the material means required to restore normal conditions gradually. But this arrangement was relatively short-lived for after the Mayor's return to the Town Hall, the population flocked there, requesting not only assistance but also, and indeed above all, information concerning missing persons. On Monday evening, tens, even hundreds, of people were unaccounted for. The Town Hall did its best to answer these requests, while at the same time its services attempted to find accommodation for disaster victims and passing visitors.

During the evening the Préfecture restricted itself to providing a hot-line, and postponed further action to the following day. On the other hand, the Town Hall became a point of reference for the population, and for all the services offering assistance on their own initiative: the public networks, the fire brigade, emergency medical services and even the army found a rallying point there during the night of October 3/4. The mayor went so far as to entrust law and order related missions to the army, because the State services (police, gendarmerie) were for various reasons unable to fulfil their role. This practice is quite unusual in France.

The reversal of roles which occurred during the evening of the disaster was decisive. The Préfecture, which had access to the State's heavy plant, and the large workforce constituted by the army, gradually did become a centre of coordination during the period following the disaster. But it was forced to accept a sort of joint management, for the Town Hall itself was able to draw on numerous resources. In the course of the

night of October 4/5 the Nîmes Town Hall abandoned any reference to its usual organisation and set up an ad hoc emergency service (Nîmes Solidarité), which enabled it to integrate a variety of aids; assistance from companies with concessions in Nîmes (water and street-cleaning in particular), from other large towns, from charities, and finally contributions from all over France. The town's administrative services increased in number tenfold, without this posing any major logistical problems.

Although state control was implemented, largely in the form of a daily coordinating meeting at the Préfecture, Nîmes Town Hall established itself as a major centre of crisis management. This was reinforced by the fact that from the start it was the principal source of information for press and media. In the habit of entertaining close links with journalists, the mayor of Nîmes, and his staff, made a point of supplying them with the information they requested. Even though the Préfecture operated along the same lines, it had neither the means nor the experience to satisfy media demands. The best example of this was the television programme organised by a national network on the Thursday evening. It was prepared in close collaboration with the Town Hall and aimed to stimulate response at a national level. The upshot was that the Mayor emerged as the main actor in the crisis. The image projected was that of a town whose return to normal conditions owed more to diverse forms of solidarity than to the State, whose representatives were absent, excepting for the Préfet who made a brief appearance.

Right up until the end of the crisis the Town Hall played a leading role, while the State restricted itself to occasional reaffirmations of its prerogatives (in particular in terms of law and order). One of the consequences of this situation was that all the actions undertaken were subject to an overall objective fixed by the Mayor, which was a return to normal service on all the networks by Monday October 10. This directive occasionally disturbed the work of large State bodies (electricity, telecom) who would have preferred less hurried approach. There was even a mini-crisis over the questionable quality of drinking water.

## II. Analysis of the crises at Nantes and Nîmes

The two crises differ in many respects. The first one was caused by an industrial accident, the second one by a natural disaster; the first one was handled according to standard procedure, with the Préfet at the centre of operations, whereas the second one was managed in an unusual way, with a major politician taking the place of the local State representative. But despite these differences both crises have effected the same local,



politico-administrative system and offer valuable lessons on the latter's capacity to cope with this type of situation, and in particular on the abilities of the various parties involved.

The first lesson to be drawn concerns the politico-administrative body's ability to mobilise resources in order to (1) cope with the incident immediately, (2) identify it and (3) find the appropriate solutions, both in technical and media terms, required to restore normal, or at least socially acceptable conditions.

In neither case does the phase covering emergency assistance present major problems. In Nantes the fire brigade intervened very rapidly, as did the medical services. The police, unfamiliar with the harbour area where the incident occurred, were a little slow. As there were no casualties no special operations were required, but the initiative of those to arrive first on the scene is impressive (firemen, ambulance), for while waiting for the police to arrive they decided to halt road traffic. In addition it should be noted that the emergency medical service, accompanied in France by doctors, ensured that the workmen, who had fought the fire using extinguishers and shovels, were identified and rapidly transferred to the hospital. In Nîmes, considering the nature of the disaster, which had not been anticipated, emergency assistance functioned fairly well. The fire brigade and the Préfet succeeded, in different ways, in alerting their regional and national correspondents, which made possible the intervention of helicopters by mid-morning. These means, added to local interventions carried out not only by the emergency services but also by more traditional groups (Nîmes public works department for instance) and by the population itself, were sufficient to limit the repercussions of the disaster. The death toll of 9 is not excessive, if one takes into account the extent of the disaster (it should be noted that a number of the casualties were caused by typical carelessness). In general emergency services were correctly implemented, both in Nantes and in Nîmes. In the second case the State played an essential role compensating local failings.

The problem of first aid, which seems essential when drawing up plans did not really pose problems during these two crises. The most significant point was the difficulty encountered in identifying the type of event. This is striking in Nantes where measures were taken to deal with a dangerous product (ammonium nitrate), which did not exist, and with a potential hazard, a poisonous cloud, whose assessment was somewhat cursory. It is equally so in Nîmes where numerous parties - and above all the Préfecture - failed to understand the reasons behind flooding in a town without a river. In Nantes and in Nîmes uncertainty was a decisive factor in the crisis.

How is one to explain the difficulty encountered in both cases understanding the event. First, there are basic, structural reasons. In the case of Nantes the first of these reasons is related to the type of activity concerned: the warehouse was not considered to be dangerous and was subject to little supervision. As far as the State experts at the Préfecture were concerned this establishment did not exist. The second reason is related to the people running the warehouse and the emergency service dealing with the problem. The business was run by a commercial undertaking which had reconverted to the sale of chemicals. Lacking any real industrial experience, it entrusted the running of the warehouse to relatively unqualified personnel. In addition the firm had no contact with local industry, and in particular with a large company producing NPK type fertiliser a few miles away. The company was not really in control of operations, nor was it sufficiently qualified. No more than the emergency service concerned, the fire brigade. In Nantes the city fire brigade is a professional body, whose abilities were fairly limited when required to dealing with an unusual chemical incident. In addition they were cut off from the state experts qualified for this type of question (the DRIR engineers). The latter are not operational and tended to consider the city fire brigade to be ill-qualified and even potential competitors in the field of "major hazards". Consequently in Nantes, as indeed in most other French towns, the security of the most dangerous industrial sites, and in particular those covered by the Seveso directive, was and still is ensured by a combination of independent means provided by the industrialists and state experts. If one considers the nature of the company's activity and the characteristics of the emergency services which intervened, it is fair to say that the warehouse effected by the fire was in a sense beyond "understanding", that it was situated in a sort of blind spot as far as the various preventive or emergency measures were concerned.

In Nîmes structural reasons also explain the difficulty understanding the implications of the torrential floods, which for many parties were "unimaginable". The local bureaux of national agencies responsible for flood prevention had set up a sophisticated, automatic flood warning system, but it did not monitor the "cadereaux", water courses whose beds are usually dry, but which fill with water every time there is a large storm. Unsupervised by the State technical services, the "cadereaux" had to a large extent been forgotten by the local population as well. Most of them have been covered over with roads in the course of urban development. As in Nantes, we find a phenomenon which cannot be grasped or "understood" and is consequently out of control.

In addition to these structural reasons, we encounter reasons more closely connected to the situation itself and consequently to the actual management of the crisis. In

the case of Nantes, the most striking feature is the separation between the handling of the incident on the site itself and at the Préfecture, which was only a few miles away. The fire brigade was in charge at the warehouse, assisted by Nantes city council technical services (anti-pollution unit, water board, etc.) and their counterparts from the Port of Nantes on whose territory the accident occurred. The majority of the members of this group were city personnel, and mostly technicians. They had difficulty coming to grips with the problem that faced them. Although they succeeded in understanding the situation (product identification and location), their approach rapidly became alarmist. For fear of causing a second disaster they refused to treat an unusual situation according to standard procedure. They allowed themselves to be influenced by "experts", whose qualifications were in no way checked, but on whom they could unload their responsibility. Only after receiving the advice of a third "expert" were they able to gather their wits, reduce the incident to a familiar phenomenon, in other words a fire, and treat it as such.

The crisis was managed at a distance at the Préfecture, and only its consequences, the cloud, were taken into account. Here again the members of the crisis unit which gradually assembled were not particularly qualified to deal with this type of problem. Nor did they take any measures to establish precisely what initially caused the accident nor what potential consequences it might have. For the most part heads of administrative bodies, more accustomed to dealing with problems of public order than with industrial accidents, their approach was passive. Their understanding of events was based on the information they received, and no attempt to verify it was made. Just as on the scene of the accident, the crisis unit allowed itself to be influenced by "experts", who interpreted the events on the basis of information that was given to them, without any real attempt at analysis and without consulting other experts. Typically no one thought of assessing the gravity of the situation in the light of its consequences. No one considered the workmen, who were, albeit involuntarily, ideal guinea pigs. And yet at midday they were known to be out of danger. At the Préfecture there was a striking inability to act on uncertainty. Throughout the day of October 29 uncertainty was taken passively. The vapour pouring out of the warehouse became a "poisonous cloud", the cause of a all the alarm. In short both at the Préfecture and on the site, understanding of the fire and the cloud was based more on constructing objects than getting to grips with reality.

Similarly in Nîmes the level of uncertainty was in no way reduced at the climax of the event (the morning of October 3), as most of those involved did not understand what caused the sudden flooding. The flood was suffered physically, materially and intellectually. It was frequently compared with "the Flood". However, unlike the crisis in

Nantes, the uncertainty related to the event did not persist throughout the crisis, for it cleared as the water level dropped. But it was replaced by another, equally traumatic uncertainty regarding the material and human consequences of the disaster. Neither the State administration, nor the town council succeeded in establishing an overall view of the situation, and more particularly accurate information on the number of casualties. Both parties, and above all Nîmes town council devoted considerable energy on the evening of the disaster and throughout the following day to dealing with the problem of missing persons. All those who were relocated and casualties were accounted for and yet this did little to dispel the rumours which persisted throughout the crisis. In view of the extent of the disaster numerous inhabitants of the town refused to believe that only 9 lives had been lost. The authorities, (Préfecture, army) were immediately suspected of hiding corpses. Just as in Nantes, those managing the crisis locally had considerable difficulty coping with uncertainty.

The technical solutions adopted to restore normal conditions were comparable with the way the event was understood and its immediate consequences. This is particularly true in Nantes where the crisis was very short. Both at the scene of the incident and at the Préfecture, the parties involved chose solutions dictated by the means available, rather than adapted to the specific nature of the problem. Reducing the accident to a "fire" finally enabled the fire brigade to intervene in the usual way. The perception of a "poisonous cloud" made possible large scale evacuation. This was relatively easy to accomplish because of the availability of the inhabitants own cars and coaches (public transport and army vehicles). The solution of inundating the warehouse was finally taken without ever really establishing the root of the problem, for the NPK was forgotten and replaced by the ammonium nitrate. Similarly it was decided to evacuate the local population without establishing the real causes of the accident nor its possible consequences. On each occasion action compensated a lack of knowledge.

In Nîmes the problems appeared rather differently, as the crisis lasted a whole week. By answering the most urgent requests (information of missing persons, relocation of the homeless, etc) Nîmes town council became the centre of crisis management on the first night of the disaster. However the improvised solutions did not constitute an entirely satisfactory response to the atmosphere of uncertainty. This is illustrated by the virtual paralysis of council services, the day after the flood, who were completely taken up with the problem of missing persons and answering the growing rumours. Only on Wednesday, after the decision to restructure the council organisation completely, did it become possible to integrate the various parties whose support would make possible the

gradual repair of the town. Only then did it become possible to get to grips with the event. By dividing Nîmes up into sectors and by fixing a time limit for the following Monday, the Mayor established his power over space and time. "Nîmes Solidarité" was not only a technical structure, but also a war machine designed to restore points of reference, time limits, in short normal life to a devastated urban environment. This return to normal life which was extremely rapid, was accompanied by considerable media attention, ensuring that what was being done was fully visible. In the case of Nîmes the close connection between the technical and media management of the crisis contributed to the return to normal life.

Contact with the media, which is a further factor in crisis management, was more problematical in Nantes. On the scene of the incident the journalists were turned back, which forced them to obtain information indirectly. The journalists who arrived at the Préfecture at noon had to wait till 2 pm (implementation of "plan Orsec") before being given any information. From then on they were used, and particularly those representing local radios, as a relay for broadcasting evacuation instructions. Communication policy in fact hardly went beyond this, and in the course of the afternoon journalists had great difficulty obtaining further information. More complete information was only forthcoming, for them and their Parisian counterparts, at the press conference held at the end of the afternoon, once the incident was in fact considered to be under control. This restricted media policy obviously reflected the problems the crisis unit encountered when attempting to understand the situation. It should be noted that local radios in the Nantes area spontaneously took charge of answering the population's phone calls (hotlines, videotext bulletin board), managing in fact a public information service. It should also be noted that the local journalists at the Préfecture also took charge of the reception of their colleagues from Paris, and thus avoided the development of the disaster scenarios the latter were expecting. In short, the local journalistic community tended to control rather amplify the crisis.

### III. Problems in crisis management in contemporary France

In the crises at Nantes and Nîmes, no real problems arose administering emergency assistance. The problems arose identifying the causes of the accident and the disaster. The national agencies were unable to reach an objective understanding of the situation and turn it into an effective instrument of crisis management. Confronted with events of considerable uncertainty, they became increasingly helpless. This is mainly attributable to the difficulties encountered implementing crisis prevention or management policies to cope

with the majority of risks generated by urban concentration and technological development. How, for example, should they take into account possible interactions between one risk and another? In general the policies concerning public safety - prevention, crisis management - are based implicitly upon visible risks, treated as "monuments" (hence the concentration on the establishments covered by the Seveso directive). Consequently, there is no real, overall policy covering the large industrial estates which nonetheless form homogeneous units. Nor, and this could form the basis of a different approach is there any attempt to constitute "risk basins" forming coherent and manageable units. An important crisis such as the one in Nantes was thus provoked by an extremely simple incident which did not occur in a big plant but in an ordinary warehouse which, accordingly escaped the attention of effective technical and administrative control. In the same way, the Nîmes crisis was provoked by an event which had also slipped through the net.

The difficulty the local bureaux of national agencies have in coming to terms with "major hazards" is due to both the growing complexity of large urban areas where these risks accumulate, and the modest means available to these services for setting up genuine policies to guarantee public safety (GILBERT, 1989). Decentralisation has therefore done little but aggravate the growing divide, in national agencies, between ever increasing public risks and the means available to cope with them.

The difficulties encountered at present by national agencies are also attributable to their own organisation. The dispersal of ability and know-how in the field of prevention, is easily apparent at a national level where about ten ministries share available human resources. At a local level the problems are similar, with in addition those specific to the area. The Ministry of Environment, for instance, has no local bureaux. Policy on industrial risks is consequently applied by a regional service which is partly dependent on the Ministry of Industry. The separation between crisis prevention policy and crisis management policy, which is the responsibility of the Ministry of Industry, observed at a national level, is echoed by separations at a local level. The service responsible for monitoring hazardous industrial installations, which we mentioned earlier (the DRIR) is not intended to intervene at times of crisis, because it is not operational. This incoherent arrangement leads to conflicts of responsibility, as we stressed before between engineers familiar with industrial practice and fire men who over the last two decades have constantly attempted to extend their field of activity. The conflicts between professions, between corporations recur throughout local administration and further contribute to its segmentation.

Decentralisation has only served to aggravate the difficulties encountered by local bureaux of national agencies when organising themselves to cope with major hazards. The legislator's hesitations are the cause of major disturbances. For instance it entrusted the management of fire brigade and emergency service personnel and equipment to the Departmental Councils (Conseil Général) but left the Préfet in command. The director of these services is consequently caught between the authority of the Conseil Général, which supplies the means to operate and that of the Préfet who gives the orders at times of crisis. Consequently in a crisis, as was the case in Nîmes, the head of a service is at odds to know where he stands between the two power structures. The situation can become even more complex when, as is often the case in large urban areas, the main part of the emergency services (the fire brigade) is under the authority of the Town Council. Even if, as it is laid down in the guidelines for crisis management, the city fire brigade should be under the authority of the Departmental head of fire and emergency services, in practice they tend to display pronounced independence, as was the case in Nantes. This division, noticeable in emergency services, is also obvious in the field of expertise when local organisations have developed their own services, or can draw on, directly or through contractors, abilities to rival those of the State. In both crises, whether air (Nantes) problems or water (Nîmes) problems are concerned, questions of expertise soon arose in the technical and scientific management of the crisis, without it really being possible for the Préfet to act as arbitrator.

In Nantes and in Nîmes a gradual transfer of the centre of technical and scientific crisis management was noticeable. At Nantes the attempts to manage the crisis, under the supervision of the Préfet, showed how difficult it was to take control of the situation once the initial emergency stage was passed. It also turned out that he was not really capable, in spite of the support he received from the local bureaux of national agencies, of mobilising and coordinating the expert advice which could have given him an objective approach to the situation. The decision to evacuate seemed to be dictated more by the availability of means than a real assessment of the situation. And, this was despite the fact that there existed locally - especially among the large manufacturers in the Nantes urban area - the possibility of understanding an accident which was rapidly tainted with uncertainty and compared to recent major disasters in the chemical industry in France and abroad (Lyons, Basel, and Bhopal).

In the case of Nîmes, the Town Council's ability to organize an emergency administration quickly, and to integrate the aid and means coming from extremely varied

sources, contrasted noticeably with the obvious difficulty the Préfecture had in coping with this fairly disorganised influx of men and materials. The Nîmes crisis stands out as a turning point, illustrating the extreme flexibility local council bodies can achieve, quick to set up exceptional procedures, and the inflexibility of the national agencies working or trying to work according to "standard" practice.

Admittedly we cannot draw any final conclusions from these two examples. However serious they were, their extent was limited and they cannot be considered as "major crises". Nonetheless, they have a test value and prove that contemporary complexity, which every major agent has to face in times of crisis, is more easily apprehended and accepted by local organisations than by national agencies. These organisations, who lack the necessary resources to develop policies capable of replacing those of the State, in the field of major hazard prevention, nevertheless do not hesitate to manage exceptional, crisis situations with exceptional measures. By taking short cuts between hierarchies, by multiplying transversal networks, by often showing a great practical sense, local organisations seem to be better adapted than the State to cope with crises.

The example of what happened at Tours (pollution of the Loire, June 88) is there to remind us that their ability to control this type of event is limited, and that like others they suffer some of the specific consequences. But they do seem less helpless when faced with the uncertainty caused by these crises and consequently more capable of developing strategies related to these situations where confusion, disorder and loss of points of reference are basic elements. In short, local organisations, especially major towns, come out on top, not because of their ability to handle crises in the place of national agencies, but because they admit the difficulties encountered coping with these crises and the need to draw on - without making previous assumptions or following standard procedures - flexible and varied means and on "do it yourself" solutions. We are confronted with a form of cultural revolution, which deserves our attention, because it signifies an acceptance of the exceptional and consequently a limit to any policy of crisis prevention or management aiming to avoid it. A revolution which collides headlong with the prevalent administrative culture in France, not to mention the political culture.

Another factor tends to increase the changes in the relationship between local State administrations and local authorities in times of crisis - or between the Préfet and leading local politicians at a more personal level: the ability of local politicians to take account of the demands of modern communication and occupy the centre of the stage. This, in fact,



does not represent a radical change in the relationship between the principal actors in any given area. Before decentralisation, it was accepted that under normal circumstances, the top State representative stayed out of the public eye, leaving the local leading citizens to enjoy the limelight, even if the latter had only a small role in determining local public policy. In times of crisis, the "powers" of these citizens were "suspended" while the Préfet, using his regal powers, took control of the situation. However, the relationship between "the Préfet and the leading citizens" was such that the latter were never really excluded and could reappear on the public scene if needed; all the more so as the Préfet traditionally restricted declarations to the press to the "bare essentials".

The changes in this respect have been rapid, as well we know, and nowadays any public figure is obliged to "communicate" with the press in normal circumstances and especially in times of crisis. This function seems so important that it is even sometimes confused with the whole process of crisis management. Local politicians have taken to establishing relationships with the mass media, leading local politicians have their own press service or even communication services, in the broader sense of the term, responsible for public relations in general. For the mayors of some large towns, this relationship with the media has become the basis of their policies. Image production is so important for these towns that entire local policies are built around them. The mayor of Nîmes for example, concentrates on promoting his town by "selling" its image and thanks to this hopes to develop its economic and cultural activities. Concurrent with this change which, has steadily increased, since decentralisation, in the major cities of France and also in numerous less important local authorities, the Préfets have gradually lost the meagre means of expression which they had. More than ever, in normal circumstances, they are expected to step down in favour of local politicians, who are now fully responsible for their decisions. And when, in times of crisis they have to intervene publicly, they are hindered by their lack of media experience, by the almost non-existent human and material means adapted to this type of communication and by an approach which is particular to their professional body which, in this field as in others, incites them to show reserve. There again, there is a growing difference from what leading local politicians can achieve with the media.

In the case of the Nantes crisis, the Préfet retained some of his prerogatives, as local politicians were either absent or accepted the traditional rule whereby, under similar circumstances, there is only one official source of information: the State, via the Préfet. However the Préfet made restricted use of the powers granted to him, and journalists had serious difficulties obtaining information both at the scene of the incident and at the

Préfecture. In the case of Nîmes, the town council's ability to handle relations with the media was a decisive factor in the modification of the power structure that occurred. The mayor of Nîmes, used to dealing with the press, mobilised personnel at the very heart of the crisis to deal with receiving and escorting journalists, and thereby quickly became the main spokesman, the Préfet playing only a secondary role in this field.

Faced with these changes, the Préfets are still relatively ill prepared, even though they are nowadays encouraged by their Ministry - the Ministry of the Interior - to consider communication in crises and consequently relations with the media as major factors. It is likely that, with practice in media techniques, the Préfets will modify their relationships with journalists. However, they will only be able to change certain aspects of their status which is effected by legislation and regulations and by habits induced by decentralisation. They have gradually lost their technical and scientific monopoly, both in normal circumstances and in times of crisis. They are generally unable to occupy the lime light if a politician (local or national representative, a minister or a media figure) is durably present on the local scene. Consequently the Préfet, on whom the whole weight of crisis management in the case of a disaster rests, is less and less able to fulfil effectively the role which is theoretically theirs. There is more than just a slight discrepancy between the image of the Préfet, the principal State representative exercising his regal functions, and the possibilities of action which are effectively his. Similarly, there is a growing contradiction between the position of the top local politician, who in theory plays no role in the planning of crisis management, and his ability to emerge as the manager, in technical and media terms. This is reinforced by the fact that for the populations affected by a major technological accident or a natural disaster the mayor and the town council are the immediate points of reference. Outside the circle of local officials, the Préfet is little known.

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The changes which are occurring at a local level in France, and more specifically in major towns, do not constitute a straightforward exchange of roles, a simple exchange of power between the leading local politicians and the Préfet. By taking part in technical and scientific management local political figures contribute to the modification of crisis management, by introducing a know-how which owes more to political experience - a sort of active pragmatism - than to technique and science. In other words, they reintroduce an essentially political dimension where the Préfet, guarantor of the knowledge of power and the power of power, would have tended to install the State in all its majesty. Similarly, by accepting the contemporary dialogue imposed by mass-media, politicians break with the

reserve and secrecy which were traditionally linked to the exercise of power in a crisis. By aiming for "transparency", they contribute to a radical change in the image of a politician's role in such situations. In this respect, when faced with major crises, the power base is no longer, indeed can not be an authority which guarantees technical and scientific effectiveness, the ability to mobilise these forces to cope with any uncertainty which might arise and takes upon itself the burden of the event by making its decision in secret. There is here a fundamental change in the perception of power in France, and more specifically, of the power of the State. The prevailing idea according to which political authority ought to be concentrated on one single party in a crisis has been replaced by the idea of a de facto sharing of this function between different agents, including the State, the local council and mass media, but also industrialists (in the case of major technological accidents) and citizen pressure groups representing the population etc.

In the preceding pages we have emphasized the growing powers of major local politicians. But there are other parties who also tend to play an important role in the course of a crisis.

This is particularly the case with large industrial groups which can have significant influence on the course of events in a crisis, whether they are directly involved in the causes of the crisis or not. A few reminders will enable us to assess the potential importance of this trend, even though it is still only in its initial stages.

For instance, in Lyons, in 1986, when there was a toxic leak in the ground - although no "dramatic" intervention seemed justified - a local yoghurt factory immediately destroyed all its existing produce, at the risk of provoking a comparison in public opinion between the "seriousness" of the industrialist and the "lack of responsibility" of the public authorities (LAGADEC, 1988).

Again, during the Chernobyl affair, while major discussions were underway over the regulations to comply with for food products, several countries asked a major food manufacturer to vouch for "zero level" contamination in exported products; the manufacturer concerned replied that the idea of "zero level" contamination had no meaning, which did not further complicate the discussions. But one may appreciate the effect such an agent could have if - for competitive or image-promoting reasons for example - he decided to stop purchasing raw materials in a country or region following a nuclear (chemical or bacteriological) accident.

It is the kind of difficulty that was noticeable after the Lockerbie bomb attack on a Pan Am flight. While the authorities were trying to create an impression of security among air passengers through intensive searches before boarding, it was discovered - and given large-scale coverage in the mass-media - that IBM had just forbidden its executives to travel with American companies in the future. What weight could public declarations have faced with a similar decision by an actor of this importance.

In short, in such sensitive areas, the decisions of industrialists who enjoy a high profile (especially if it is a question of raising the odds on a "zero risk" issue) can only be a source of worry and uncertainty for central government.

Several factors give the major industrialists real advantages in such circumstances. A recent study on the initiative taken by these important groups concerning crisis management indeed shows, at least among some of them, a build up of abilities likely to be decisive (LAGADEC, 1990). We shall now review them rapidly.

First of all the acquisition of effective, warning, mobilisation and transmission systems, which public services do not always have at their disposal. For instance, highly automated and extremely simple warning systems: for example, a button just has to be pressed in a certain factory to activate automatically the mobilisation system. These systems can be linked to "data bases" capable of immediately setting up telephone conferences assembling senior management at a regional, national and international level. There are now fax machines capable of working in parallel, which is revolutionising the use of this technology. Companies also tend to equip themselves with efficient and pre-organised means of public communication: in a given group, the media services have "attaché cases" containing a log book, factory files, product files, correspondent files, and soon all this data will be available on a portable computer. For the direct use of the press, they are sometimes also equipped with basic press kits, photographs, posters, silent videos (leaving it up to the journalists to add their own soundtrack), and the means to produce tailor-made diagrams (graphic designers on call). The rule put forward by J. SCANLON is well-known: "the person who controls communication is in a position to control crisis management". The means which more and more industrialists have at their disposal obviously give them a significant advantage. But one should nevertheless look beyond simple technical tools.

Significant adjustments are also occurring in the organisation of industry, and we know that the ability to assess a potential crisis situation rapidly and mobilise effective

crisis teams is essential for the management of disturbed situations.

Monitoring systems on potential crises and risk issues have been developed which allow systematic location of risk subjects, the storage of past alerts and the way they were dealt with (thanks to the latest computer systems storage and consultation can sometimes be carried out in a few minutes from any system in the world), and the installation of "sensors" at a national and international level. As an extension of this, rapid mobilisation systems are being installed, based on simplified alert procedures with preformatted, recorded messages to avoid any data loss. The pre-alert notion has also been introduced, which allows an organisation to be put in an active wait-state until the crisis has been confirmed; sometimes mobilisation orders for management are issued, as soon as experts have detected a "political" problem and no longer just a "technical" one.

When it comes to the critical phase itself, studies have been undertaken about information research and transmission systems which would avoid rapid network saturation and intolerable pressures on the people directly responsible for dealing with the event: thus, operational systems, along the same lines as in a "Press Agency", have been defined, which clarify and organise requests for information. Studies have also been carried out and tested on the operation of crisis units, and in particular the role of managing directors in these teams; the idea behind this is that it is imperative to keep capacities of thought and strategic communication slightly at a distance from the minute-by-minute management of the crisis. Similarly the organisation of communication teams tends nowadays to separate the various functions, for instance production, despatch and monitoring of messages. The various forms of intervention (first press release, intermediary press offices, press conferences and major appearances) have also been separated, and for each phase a *modus operandi* has been established.

More generally, hierarchical systems have been simplified and the people's responsibilities increased, at all levels. The rigid principle, whereby only the authorized spokesman was allowed to express views in a crisis, has been dropped: before his arrival, the first agent on the site has a duty to inform, on facts only of course, but this radically changes the dynamics of post-accident management. Studies have also been carried out on the creation of crisis units which, while remaining focused upon the technicians' work, could integrate other participants, like doctors (in order not to be cut off from the hospitals, for instance); even bolder initiatives have been recorded such as at Sandoz, where it was decided to include an "environment" expert in the crisis team, whose role is to alert experts and decision-makers on every decision which could damage the environment. It is

consequently apparent that there is a drive to integrate broader considerations than the straightforward and immediate technical repair job.

It must be added that, for these numerous adjustments to be effectively implemented, high level jobs have been created to take charge not only of security but also of the overall preparation for crises of the numerous sub-systems which make up an industrial group; in other words a coherent approach to all acts of prevention and intervention. This integration is essential in the management of a crisis.

But the main asset is not of a technical or organisational kind: it is of a "cultural" nature. New principles of frankness, responsibility and flexibility have been developed and established at the highest levels in certain companies (for example, the principle whereby crisis training sessions must henceforward be organised with the assistance of outside agents, including journalists and politicians). The secrecy of the past is beginning to vanish, and large training schemes are being developed in this area. The company is becoming more capable of navigating in the uncertain world of the crisis. The classical reference models, heavily marked by secrecy, opposition to the outside world and inviolability of rules etc. are abandoned in favour of the valorization of the capacities of adaptation - one could say "creative bricolage or meddling" - which really are one of the essential keys to crisis management. The industrial group is, in this way, becoming more and more capable of handling the flexible logic involved in the aggregation and reconstruction which dominates the post accident phases.

It is obvious that the industrialist is more than likely to grow in importance in relation to the past, now that he has acquired such solid references (which emphasize notions of modesty, frankness, citizenship and public image markedly) and in addition the abilities of organisation and logistics (difficult to apply in systems whose basic values are rigid). As we saw in the case of Nîmes (with EDF and French Telecom) he is now able, without any great difficulty, to join forces with the flexible structures established by town councils, who are equally convinced of the need to innovate and increase flexibility.

Another essential actor: the mass media. Our aim is simply to draw attention to a new development which is expected soon: the appearance of cameras directly linked to satellites, which bring extraordinary speed and flexibility to reporting methods. Large organisations will have less and less time to react to an event. There again, quite a substantial bonus is given to those operating with points of reference such as flexibility, frankness, anticipation and initiative. But the case of Nîmes emphasized yet another aspect

of the role of the mass media, which goes beyond the strict limits of reporting: the large movement of solidarity which has also radically altered the application of classic, administrative practice for post accident procedures. The side effects of this type of reaction are sometimes significant: this only increases the challenge for the central government.

And the picture can be further complicated. Victims can display determination and a sense of organisation hitherto unaccounted for (people in charge are obsessed by the risks of "panic", which E.L. QUARANTELLI presents as one of the important myths attached to these situations). In a case like the Askarel accident in Rheims (a transformer explosion in a block of flats), the victims were able to organise themselves, gain the support of one of the finest international scientists, arrange for analyses to be paid for by a magazine and bring the affair to public attention. Similarly, "SOS Attentats" (victims of terrorism) has succeeded in making itself heard in France in the case of incidents linked to terrorism.

One could multiply examples and analyses of actors, and go so far as to include the seizing of power by isolated individuals, capable of playing the role of the "saviour" or media figure.

But the important thing to note is a new element: the intervention of actors who disturb the operation of the systems established by central administration. As each actor tends to build up his abilities in relation to large networks, the result is a remarkable increase in the complication of post-disaster operation. This new framework is likely to disturb established habits in a country like France, perhaps more than others, on account of the strength of the representatives of central power and their services.

Finally we would like to underline the need to adopt a dual approach to crises, that our Research Group is attempting to satisfy: on the one hand the study of the particular specificity of contemporary crises, which are more and more complex; on the other the monitoring of developments in the area of power sharing, which is more and more noticeable in France today. For these two paths, that we shall attempt to integrate as much as possible, it would be of interest in the future to enlarge the area of reflection to crises and situations particular to other countries; comparisons are always a source of more stimulating questions and more certain advances.

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